



**Ameren Illinois
Advanced Metering Infrastructure (AMI)
Annual Update
April 2021**

INTRODUCTION	3
CONSULTATION WITH THE SMART GRID ADVISORY COUNCIL (SGAC)	3
AMI PROGRAM IMPLEMENTATION STRATEGY	4
2019 AMI PROGRAM ACCOMPLISHMENT	5
2020 AMI PROGRAM ACCOMPLISHMENTS	5
ELECTRIC CAPITAL EXPENDITURES ACTUALS	16
EIMA METRICS	17
AMI TRACKING MECHANISMS	17
APPENDIX 1 – PART 466.140 DISTRIBUTED GENERATION ANNUAL REPORT	22
APPENDIX 2 – PART 466.140 DISTRIBUTED GENERATION ANNUAL REPORT – NET METERING ONLY	23
APPENDIX 3 – TIME REQUIRED FOR CONNECTION OF DISTRIBUTED RESOURCES	24
APPENDIX 4 – NON-STANDARD METERING ANNUAL REPORT	80
APPENDIX 5 – AMEREN ILLINOIS GREENHOUSE GAS EMISSION REDUCTION METRIC	86

Introduction

In accordance with the requirements of Public Acts 97-616 and 97-646, Ameren Illinois Company (Ameren Illinois) has prepared this Advanced Metering Infrastructure (AMI) annual report to outline expenditures and accomplishments achieved through December 2018. Specifically, Section 16-108.6(e) of the Public Utilities Act (Act) requires:

(e) On April 1 of each year beginning in 2013 and after consultation with the Smart Grid Advisory Council, each participating utility shall submit a report regarding the progress it has made toward completing implementation of its AMI Plan. This report shall:

- (1) Describe the AMI investments made during the prior 12 months and the AMI investments planned to be made in the following 12 months;
- (2) Provide sufficient detail to determine the utility's progress in meeting the metrics and milestones identified by the utility in its AMI Plan; and
- (3) Identify any updates to the AMI Plan.

Within 21 days after the utility files its annual report, the Commission shall have authority, either upon complaint or its own initiative, but with reasonable notice, to enter upon an investigation regarding the utility's progress in implementing the AMI Plan as described in paragraph (1) of this subsection (e). If the Commission finds, after notice and hearing, that the participating utility's progress in implementing the AMI Plan is materially deficient for the given plan year, then the Commission shall issue an order requiring the participating utility to devise a corrective action plan, subject to Commission approval and oversight, to bring implementation back on schedule consistent with the AMI Plan. The Commission's order must be entered within 90 days after the utility files its annual report. If the Commission does not initiate an investigation within 21 days after the utility files its annual report, then the filing shall be deemed accepted by the Commission. The utility shall not be required to suspend implementation of its AMI Plan during any Commission investigation.

In September 2016, the Illinois Commerce Commission ordered that Ameren Illinois' revised Smart Grid Advanced Metering Infrastructure Deployment plan to accelerate and expand its AMI deployment to 100% of its customers by 2019 was approved without modification.

The report also provides a summary of the forecasted expenditures and goals for 2012 through 2019, an update on Consumer Education and Communications, AMI metric requirements, and AMI tracking mechanisms.

¹Also, as directed in Illinois Commerce Commission Docket 14-0555, Ameren Illinois provides a calculation of reduction in Greenhouse Gases associated with its AMI deployment.

The 2021 Annual Update will serve as the final report for the Ameren Illinois AMI Deployment. Ameren Illinois will seek final acceptance from the Commission for deployment completion.

Consultation with the Smart Grid Advisory Council (SGAC)


As identified in the Introduction, Ameren Illinois presented its Advanced Metering Infrastructure Update on March 25, 2021 via videoconference to the Illinois Commerce Commission office. SGAC members present were the following:

- TBD

¹ The 2018 Greenhouse Gas calculation has not been updated due to the unavailability of specific data from MISO. Inquiries have been made to retrieve the data.

AMI Program Implementation Strategy

The four stages below summarize Ameren Illinois' high-level plan for implementing information technology hardware, software applications, and business processes to provide accurate and timely billing, remote connect/disconnect functionality and customer access to usage information. Ameren Illinois completed the delivery of its core AMI functionality in late 2015.

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 ✓

Subsequently, Ameren Illinois embarked on adding additional functionality tied to the AMI solution. The additional functionality was completed in 2016 and 2017.

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 ✓

2019 AMI Program Accomplishments

- Achieved 2019 AMI Electric Meter Deployment Goals
- Delivered 2019 Route Conversion to AMI

2020 AMI Program Accomplishments

- Tested and Enhanced AMI Architecture for Cybersecurity
- Leveraged AMI for Voltage Optimization Operations
- Enhanced and Distributed Customer, Employee, and Stakeholder AMI Communications

2019 AMI Program Accomplishments

Achieved 2019 AMI Electric Device Deployment Goals*

Ameren Illinois met the 2019 targets outlined in ICC Docket 12-0244 Re-Opening for electric meters as seen in the table below:

	2019 Cumulative Total Commitment	2019 Cumulative Total Installed since 2014	Variance
AMI Electric Meters	1,244,865	1,242,017	(2,848)

The variance for electric meter installs are due to two reasons. There were a number of customers who wanted to opt out of the AMI technology. These Non-standard metering customers were granted the right to do so through the stipulation we offered as a part of the AMI program. The remainder of the install variance was due to access issues. Ameren Illinois was waiting on customers to remedy unsafe conditions or provide access to the premise for the install.

Achieved Planned Route Conversion to AMI*

Ameren Illinois' goal for 2019 was to cutover 684 routes in 7 different operating centers.

Since the beginning of deployment in mid 2014 through December 31, 2019, Ameren Illinois has cutover 1,242,017 electric meters to full AMI functionality.

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

*Final Deployment Metrics

2020 AMI Program Accomplishments

Realized Operational Benefits from Data Analytics

Ameren Illinois has continued to leverage its Third Party Software As A Service data analytics vendor to realize operational savings. Below is a chart depicting the savings realized for 2020.

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

2020 Savings Attributed to All Analytics Leads
**Impacted by ICC COVID customer moratoriums*

Below is a chart depicting the tests that are currently in place utilizing the data from our AMI solution:

Service Type	Lead Name	Automatic Process	Brief Description
Electric/*Gas	Dead on Arrival *Exchange/New Install	Service Order Creation	Lead identifies meters that have been installed and have not communicated for 45 days
Electric/Gas	Irregular Use Work Item	Office Review	Reviews the Irregular Use Work Items to determine if the Irregular use code is valid or should be changed to normal use
Electric	Momentary Outages	Office Review	AMI multiple outages detected in a day leading to connection issues
Electric/Gas	New Meter Health	Service Order Creation	Identifies meters that have been installed and begin registering and then stop
Electric	No consumption 6v1c	Office Review/ Service Order Creation	Stuck meter review- if there has been no consumption the meter is sent out to be investigated
Gas	Proactive Stuck meter	Service Order Creation	Identifies potential stuck meters in the first 30-45 days instead of waiting for 90 days
Electric/Gas	Stuck meter test	Office Review/ Service Order Creation	Stuck meter review lead identifies meters that are slowing and potentially not stuck and voids the Work Item so no order is created.
Electric/Gas	Zero Use Work Item	Office Review	Reviews the Work Item to determine if the Zero use code is valid or should be changed to normal use
Electric	consecGap	Service Order Creation	Identifies gaps in service that potential may indicate theft at the meter
Gas	consecGap	N/A	Identifies gaps in service that potentially may indicate theft at the meter

Electric	consecStatic	Service Order Creation	Identifies static at the meter that potentially may indicate theft at the meter
Gas	consecStatic	N/A	Identifies static at the meter that potentially may indicate theft at the meter
Electric/Gas	Cut with Consumption	Service Order Creation	Consumption registering on a meter that is coded cut for non-pay
Gas	Inactive with Consumption	N/A	Consumption registering on a meter that is coded inactive
Electric	Inactive with Consumption 200	Service Order Creation	Consumption registering over 200 KWH on a meter that is coded inactive
Electric	Long Term No Consumption 400	Service Order Creation	Consumption registering over 400 KWH on a meter that is coded inactive
Gas	Long Term No Consumption	N/A	Consumption registering on a meter that is coded inactive
Electric	Meter Bypass	Service Order Creation	identifies potential meter bypass

Continued the Peak Time Rewards Program

Ameren Illinois gathered the enrollment data from our Peak Time Rewards enrollment effort and studied the effective amount of demand response Ameren Illinois could expect from enrolled customers. Ameren Illinois bid the demand response into the MISO capacity market in the September 2020 auction.

Ameren Illinois' Peak Time Rewards (PTR) tariff was effective June 1, 2018, and is being managed by Elevate Energy. Enrollment for the 2020 MISO planning year began October 1, 2019 and ended March 1, 2020. Customers who enrolled after March 1 were placed on a waiting list. Below are some statistics of the program:

- **122,500 registered participants as of March 1, 2020 deadline**
 - A waiting list for additional participants allowed new customers to join when another account dropped off
- **15.9 MW of capacity offered to MISO and cleared in the auction**
 - Includes reduction in losses and reserves made possible by our customers' load reduction
- **MISO capacity auction in Zone 4 cleared at \$5.00/MW-Day for 2020/2021 Plan Year**
 - Increase compared to the price of \$2.99/MW-Day for 2019/2020 Plan Year
- **Total program funding for 2020 = 15.9 MW * 365 Days * \$5.00/MW-Day**
 - \$29,018 received from MISO on settlement statements across the year
- **Customer credit of \$0.12/kwh of load reduction**
 - In the case of an emergency event initiated by MISO, any credits paid out to customers would be further added to the budget balance deficit into the next program year

Tested AMI Architecture for Cybersecurity

In 2020, Ameren performed two third-party penetration tests of the Ameren Illinois Advanced Metering Infrastructure (AMI) solution. These assessments were executed from the perspective of an external threat that has access on the corporate network and the other test was performed on the field network standards based stack collector. During this penetration effort, the Incident Response Team was engaged and responsive in detecting and preventing simulated attacks from the third-party contractor. Ameren Cybersecurity directly supported advanced endpoint security, which included whitelisting and Automated Threat Neutralization (application and change control) via Host Intrusion Prevention System (HIPS) to detect and alert Ameren IT of any suspicious events within the Ameren IT environments. In addition, numerous enhancements were made in 2020 to improve endpoint security and segmentation with host-based firewalls. These

investments in enhanced capabilities help reduce the attack surface and compliment Ameren's overall Cybersecurity posture in both preventing and detecting unauthorized access and other malicious events targeting Ameren's corporate network, assets, and endpoints.

Leveraged AMI for Voltage Optimization Operations

In 2020, Ameren Illinois continued the Over the Air (OTA) meter reprogramming effort of AMI Meters to make available 15 minute voltage measurement capabilities, amp, and temperature measurements, voltage sag/swell data, and ability for On Demand voltage reads (ODRs). With the correct program installed on the meters, Ameren Illinois' Voltage Optimization (VO) vendor, DVI, is able to request ODRs from a select sample meter set. The voltage data received back through DVI's VO engine is used to recommend set points for voltage regulators and Load Tap Changers (LTCs). In addition, the VO engineering team reviews AMI data to find meters that are voltage outliers which if fixed, will improve VO performance. Last, the VO team utilizes hourly AMI voltage reads as part of their evaluation, measurement, and verification effort.

Executed Remote Service Orders

In 2020, Ameren Illinois had estimated performing 337,000 remote service orders using the AMI technology. Remote service orders for electric AMI include Cut Out/Cut In for customers behind on payment, Move In/Move Out for when a premise is unoccupied for more than 24 hours, Off Cycle Meter Reads for Same Day Move In/Move Out, and other Off Cycle Reads to address billing issues exceptions and customer issues. Ameren Illinois successfully performed 327,000 remote service orders, however, due to the impacts of Covid-19, collections orders were suspended at various times to accommodate related customer moratorium efforts, thereby reducing orders.

Developed Next Generation of AMI Communications: Incorporated AMI into Normal Flow of Communications

AMI has several capabilities that can benefit customer service and allow for more tailored support, products, programs and communication. The enhanced information it provides can be used to better analyze customer usage data and explore irregularities. If an issue is believed to be at play, the utility can notify the customer and work to identify the problem. Furthermore, customers can receive feedback about electricity price signals, their energy usage and their projected monthly bill, which can help them make more informed decisions about their consumption.

Incorporating the Benefits of Smart Meters:

In 2020, the opportunity to educate customers on ways to save and learn more about the benefits of smart meters was broader. We no longer need to isolate messages based on the progression of deployment. Our customer communication efforts roll into our customer engagement communication. We are now able to speak to smart meters more broadly and continue educating customers in mediums like TV, radio, etc. The example is illustrative on how we have begun incorporating smart meters into our overall customer communications.

Segmented radio or Terrestrial radio is useful in reaching customers to build awareness and educate because local radio stations differ from city to city. Using terrestrial radio, gave us access to a present consumer who is segmented and listening. Below is a script that illustrates an integration of smart meters with reliability:

*Ameren Illinois has been installing smart meters throughout the state.
While you probably don't notice a difference day-to-day, this advanced technology is giving us the power to do more.
These smart meters allow us to detect and isolate outages faster than ever before.
Plus, they give you more ways to help control your energy usage and save you money.
And as we continue to upgrade our network, your smart meter will continue to become...well...smarter.
Now that's Energy at Work.*

Learn more at Ameren-Illinois-dot-com-slash-Reliability.

Communication Channel(s):

Our smart meter communications focuses on the benefits of the technology, and the value it brings to our customers. It empowers customers to use the technology to better manage energy usage and costs while at home or on-the-go. Social media and other digital platforms like Google Display Network (GDN, You Tube, Hulu and Pintrest) are effective mediums for reaching customers online and while streaming content that matters to them.

To better deliver a meaningful message to our customers, we added a profile layer to our existing customer segmentation complementary of lifestyle and mindset. The allows us to build customer journeys based on program and enrollment behavior. The audience profiles are as follows:

- **Audience 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. **Key Benefits Include: Control, Convenience, Energy Efficiency**
- **Audience 2** - Less extreme couponers 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**
- **Audience 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. **Key Benefits Include: Predictability > Control, Energy Savings**
- **Audience 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. **Key Benefits Include: Predictability > Control, Energy Savings**
- **Audience 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. **Key Benefits Include: Control, Convenient Conservation, Energy Savings**

Social Media and Other Digital Platforms:



Facebook

Peak Time Rewards

Impressions: 733K

IRate: 0.59%

GDN and GeoFencing



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%

You Tube



Production:
Broadcast, :30 spots

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

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

Third-party Communications:

Our work with Elevate Energy continues. This year the marketing efforts helped Ameren Illinois surpass the 120,000 enrollment mark. Each year, the enrollment for the Ameren Illinois Peak Time Rewards program increases even though the rewards or the bill credit fluctuate with the MISO capacity market. Customers continue to find value in the program.

Peak Time Rewards participants continue to be a key target audience for Power Smart Pricing. The May 2020 promotion conducted with the Ameren Illinois Energy Efficiency team yielded better enrollment results with 1,220 new enrollments in Power Smart Pricing. This is the first time that a smart thermostat was offered to customers free of charge and used as an incentive to enroll in Power Smart Pricing.

The table below compares the email campaign's overall delivery rate, unique open rates, unique click through rates, and click-to-open-rate to the utility industry benchmarks established in the Questline 2019 Annual Benchmark Report. The delivery was slightly below industry benchmarks, but not dramatically so.

airz Email

TWO GREAT PROGRAMS THAT HELP YOU SAVE

Peak Time Rewards
ACTIVATED

Power Smart Pricing
ENROLL TODAY!

<First Name>, you're already on Peak Time Rewards where you can earn bill credits and help your community by shifting energy use away from high-demand times.

Now, harness the power of saving year-round with Ameren Illinois Power Smart Pricing. Sign up and you could save 15%* on your energy supply costs by taking the same simple actions to shift your energy use to cheaper morning, night, and weekend hours.

Enroll Now

Plus, for a limited time, you can receive a **FREE Greenlite airz Smart Thermostat** when you enroll! Compliments of the Ameren Illinois Energy Efficiency Program. It's full of smart features and automatically adjusts to your home and away temperatures so you can save! We'll help you register after you enroll.

HOW POWER SMART PRICING WORKS

- You'll pay the hourly market price instead of one flat rate. Hourly prices were cheaper than the flat rate 91% of the time.*
- We'll send you alerts when hourly prices are high so you can reduce your energy use.
- Maximize your savings when you shift energy use, like your washer, to cheaper hours.
- Thank you for enrolling and claiming your **FREE smart thermostat**. Find more ways to save and helpful tips at our Energy Savings Center.

Together, Power Smart Pricing participants have saved more than **\$12 million** on their energy bills!

Enroll Now

Visit AmerenIllinois.com/PSP or call 1.877.655.6028

For your eyes only. Peak Time Rewards is a program that allows you to earn bill credits and help your community by shifting energy use away from high-demand times. Power Smart Pricing is a program that allows you to save on your energy supply costs by taking the same simple actions to shift your energy use to cheaper morning, night, and weekend hours.

A, B, Control Emails

TWO GREAT PROGRAMS THAT HELP YOU SAVE

Peak Time Rewards
ACTIVATED

Power Smart Pricing
ENROLL TODAY!

<First Name>, you're already on Peak Time Rewards where you can earn bill credits and help your community by shifting energy use away from high-demand times.

Now, harness the power of saving year-round with Ameren Illinois Power Smart Pricing. Sign up and you could save 15%* on your energy supply costs by taking the same simple actions to shift your energy use to cheaper morning, night, and weekend hours.

Enroll Now

Together, Power Smart Pricing participants have saved more than **\$12 million** on their energy bills!

HOW IT WORKS

- You'll pay the hourly market price instead of one flat rate. Hourly prices were cheaper than the flat rate 91% of the time.*
- We'll send you alerts when hourly prices are high so you can reduce your energy use.
- Maximize your savings when you shift energy use, like your washer, to cheaper hours.
- Looking for more ways to save? Visit our Energy Savings Center for more helpful tips.

Enroll Now

Visit AmerenIllinois.com/PSP or call 1.877.655.6028

For your eyes only. Peak Time Rewards is a program that allows you to earn bill credits and help your community by shifting energy use away from high-demand times. Power Smart Pricing is a program that allows you to save on your energy supply costs by taking the same simple actions to shift your energy use to cheaper morning, night, and weekend hours.

Direct Mailer

TWO GREAT PROGRAMS THAT HELP YOU SAVE

Peak Time Rewards
ACTIVATED

Power Smart Pricing
ENROLL TODAY!

<First Name>, you're already on Peak Time Rewards where you can earn bill credits and help your community by shifting energy use away from high-demand times.

Now harness the power of saving year-round with Ameren Illinois Power Smart Pricing. Sign up and you could save 15%* by taking the same simple actions to shift your energy use to cheaper morning, night, and weekend hours.

HOW IT WORKS

- You'll pay the hourly market price instead of one flat rate.
- We'll send you alerts when hourly prices are high so you can reduce your energy use.
- Maximize your savings when you shift energy use, like your dishwasher, to cheaper hours.

LEARN MORE AND ENROLL TODAY

AMERENILLINOIS.COM/PSP | 877.655.6028

*Savings based on an age-adjusted savings compared with the lowest Illinois residential flat rate for January 2007 through December 2019. Savings are not guaranteed. Individual savings vary based on customer usage and market conditions.

LEARN MORE AND ENROLL TODAY

ONLINE: AMERENILLINOIS.COM/PSP
CALL: 877.655.6028

Use your account number to enroll.
account number

TOGETHER, POWER SMART PRICING PARTICIPANTS HAVE SAVED OVER \$12 MILLION ON THEIR ENERGY BILLS!

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.*

Media Partnerships to Support Customer Education:

In the early days of AMI Deployment, educating media about the value that smart meter brings was key. Over the 5 year meter deployment, Ameren Illinois delivered a message that AMI was going to be transformational, and it was part of our overall infrastructure improvements. The last year of deployment 2019 and the subsequent year of 2020, there has been little to no media attention given to the concerns of privacy, health or safety related to smart metering.

ISEIF Grantees:

The Illinois Science and Energy Innovation Foundation continues to support regional non profit organizations with grant dollars to help:

- Citizens Utility Board - They continue traditional outreach focused on energy education in conjunction with a utility clinic. This year virtual events were held called, Coffee with CUB.
- Elevate Energy – Virtual events were held offering greater access to community resource coordinators.
- Faith in Place – Virtual community outreach events to use and engage Green Teams at Houses of Worship.
- Kindling Group- Producing docuseries that highlight the green economy.
- Midwest Energy Efficiency Alliance – Continue to support realtor training as virtual lunch and learns using their smart grid training module and toolkit.

Future State: We continue to share the many ways that smart meters empowers customers to make positive changes to the way they use energy. It's about lifestyle, comfort and efficient use of energy to save money and the environment. In 2021, we are beginning to incorporate the benefits of smart meter into social media venues like Pinterest. Ameren Illinois does not have a Pinterest page. Through a partnership with Rural King, we are able to reach customers with a DIY, savings mindset.



It's a smaller piece of the pie when you think about the larger tactics we have at play in the market (such as broadcast television and YouTube campaigns), but 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.

Below are a few performance metrics that show our enthusiasm for using this platform:

- While we did not see any indication that COVID-19 impacted performance negatively across any of our campaigns, some tactics, such as Pinterest, increased in performance in the early months of COVID-19. This makes sense as saving energy (and therefore, saving money) is top of mind during economic uncertainty.
- 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.
- The account is improving year over year as we increase brand equity on the platform and find ways to optimize our content for the audience. Pinterest use is up in 2020, and based on the estimated outlook of Pinterest users in the U.S. through 2022 via Statista, the platform is growing, and trends show it will continue to grow.
- 52% of millennials are using Pinterest. Millennials currently buying homes (Forbes reports they are the largest share of home buyers for the last 5 years), this is an ideal place to capture those who are looking for ways to make improvements to their homes. This could also capture a new group of Ameren Illinois customers who are first-time home buyers and/or new movers, and could be looking for ways to lower higher utility bills in the larger space.

Electric Capital Expenditures Actuals

Overall, the Ameren Illinois variance for 2020 was primarily due to completing the ICC S.B. 1652 AMI requirement for Interoperability.

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	\$3.8	\$10.0	(\$6.2)
*Filed in ICC Docket 12-0244 Re-Opening			

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											

EIMA Metrics

As outlined in the MAP-M metric plan, the following are the results for the 2020 year end AMI related EIMA metrics:

1. Estimated bills: 66,462
2. Consumption on inactive meters: 2,294,681 kwh
3. Uncollectibles: \$20,029,448

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).

AMI Tracking Mechanisms - 2019

In its approved AMI Plan, Ameren Illinois proposed to track the following information. All information is as of December 31, 2020.

1. Percent of support system installed
100% of the AMI support systems and applications are installed
2. Percent of 2-way network installed
98% of the two way network was installed
3. Number and percent of AMI meters installed
1,242,017 meters installed, 100% of planned meter installations

AMI Tracking Mechanisms - 2020

4. Number of customers able to access the Web Portal and Web Portal usage statistics
1.2M residential customers are able to access the web portal
677,774 AMI, AMR, and Legacy customers accessed the web portal in 2020
5. Number of customers eligible for peak time rebate tariff in 2020
919,515
6. Number of customers signed up for peak time rebate tariff in 2020
121,520
7. Number of customers on PSP, RTP, or other real time rates
Number of customers on Ameren Illinois' Power Smart Pricing (PSP) Program = 13,465
Number of customers on an Ameren Illinois' Real Time Pricing (RTP) Program = 959

In addition to the above tracking mechanisms, Ameren Illinois has voluntarily agreed to track additional items. As stated, the work and activities described below are a voluntary undertaking on the part of Ameren Illinois. Recognizing changing circumstances that may affect the propriety of tracking the subject information, or where provisions of the enabling statutes are no longer operative, Ameren Illinois reserves the right to modify, delete, or add to any of the provisions described below, and the right to terminate any or all of the undertakings.

1. All data is as of December 31, 2020 unless otherwise stated. The number of residential and small commercial customers taking service from Ameren Illinois sponsored time variant or dynamic pricing tariffs, segmented by residential and small commercial customers, and by the specific dynamic or time variant rate. A residential customer is defined as a customer taking service under DS1. A small commercial customer is defined as a DS2 customer with usage of 15,000 kWh or less annually for the prior calendar year.

Type of Tariff	# of Accounts
Residential – Power Smart Pricing	13,465
Residential – Ameren Illinois RTP1	154
Small Commercial - RTP	204
Total Residential and Small Commercial RTP Accts	13,823
Other Non-residential RTP	601
Total Hourly Price Accts	14,424

2. The estimated peak demand reduction in MW resulting from customer participation in Ameren Illinois' Peak Time Rebate Program was reduced by 15.9 MWs. Estimated peak demand reduction is defined as the average estimated load reduction during the previous calendar year's Peak Time Rebate curtailment events.
3. The following by customer class (DS1, DS2-Small Commercial, DS2-All Other, DS3, DS4):
 - a. Number of AMI meters installed: 1,071,982

Customer Class	Meters
DS1	945,128
DS2 – Other	47,499
DS2 – Small Commercial	76,032
DS3	2,001
DS4	451
DS5	345
Other (Test Meters)	109
No Active Customer	417
Total	1,071,982

- b. Number of AMI meters communicating through the AMI network and network accessed data used for billing.

Customer Class	Meters
DS1	937,353
DS2 – Other	50,531
DS2 – Small Commercial	71,297
DS3	1,868
DS4	435
DS5	342
No Active Customer	139
Other	105
Total	1,062,070

4. The number of AMI metered customers with a consumer device registered to receive information from the AMI meter. Ameren Illinois will also provide a list, by device type, of the consumer devices that have been certified as capable of receiving information from its AMI meters.

21 customers registered consumer devices to receive information from the AMI meter in 2020.

5. As applicable, the number of AMI metered customers who download data through the Green Button Initiative format a minimum of one time from inception through the calendar year.

725 AMI customers downloaded their Green Button data in 2020

6. The number of AMI meters that are replaced prior to the end of their manufacturer expected 20-year useful life. The high level cause of the meter replacement will also be tracked in one of four categories – 1. Communication related, 2. Metrology related, 3. Remote switch related, 4. External physical damage not caused by the meter. Ameren Illinois will also note those internal meter malfunctions (categories 1 – 3 above) that cause a non-momentary disruption of service to the customer.

Failure Type	2014	2015	2016	2017	2018	2019	2020	Total
1.Communication	1	136	947	724	293	160	2,997	5,258
2. Metrology	6	29	179	113	175	12	2,553	3,067
3. Remote Disconnect	0	3	1	68	49	0	332	453
4. Damaged Meter	0	47	14	19	7,692	2	2,468	10,242
Total	7	215	1,141	924	8,209	174	8,350	19,020

- Ameren Illinois will add the most current Part 466.140 Distributed Generation Annual Report as an attachment to its annual AMI Plan Update.

See Appendix 1.

- Ameren Illinois will segment from the most current Part 466.140 Distributed Generation Annual Report those customers taking service on the Net Metering Tariff and add this document as an attachment to its annual AMI Plan Update.

See Appendix 2.

- The total known distributed generation capacity in kW connected to the Ameren Illinois distribution system based on the Part 466.140 Distributed Generation Report and divide that capacity value by the total Ameren Illinois system peak demand.

The total known distributed generation capacity in kW connected to the Ameren Illinois distribution system is 150,956 kW of Ameren Illinois' peak demand during 2020 of 1,951 MW

- The time required to connect distributed resources to the grid. The clock will start upon receipt of a complete application from the customer. An application is considered complete when all required documentation, information, application fees, etc. have been received and application can be forwarded to engineering. The clock will end when an appropriate Ameren Illinois electric meter is installed and / or appropriately programmed to accommodate the distributed resource.

See Appendix 3.

- The number of formal ICC complaints, informal ICC complaints and other complaints related to AMI deployment, broken down by type of complaint and resolution.

From January 2020 through December 2020, there were 6 informal ICC complaints related to AMI.

	Complaint	Resolution
1.	Customer states AMI meter causes problems and does not want it, but does not want to pay NSM fees.	AMI was installed 2/2019. Customer was advised NSM charges would be billed if they did not want AMI. AMI was NOT removed.
2.	Upset about AMI pole and antenna in front of his house.	Equipment was relocated.
3.	Complaint regarding NSM charges	Customer enrolled in NSM and being charged monthly.
4.	Customer paying NSM fees, but bill had been estimated 3 months in a row.	NSM fees were credited for months bill was estimated.
5.	Electronic interference from AMI meter.	Equipment in question not owned by AIC.
6.	Did not want meter exchanged to AMI. She is 91 and did not want anyone inside her home during the pandemic.	AIC will wait until pandemic is "over" to exchange meter.

There were no formal ICC complaints filed as a result of AMI.

12. The reduction in gasoline consumption from the reduction in manual meter reading miles, and converted to a reduction in greenhouse gas emissions based on formulas provided by CUB / ELPC / EDF.

There was no reduction in gasoline consumption for Ameren Illinois manual meter reading truck miles. 28,735 gallons were consumed from 2019. The increase in gasoline consumption converted to an addition in greenhouse gas emissions is 462,455 pounds of CO₂ or 255 metric tons of CO₂.

13. The annual combined load factor for all its AMI metered customers, and its entire system annual load factor. Annual load factor is defined as total consumption in MWH divided by the hourly peak demand at the time of system peak in MW multiplied by 8,760 hours per year.

The Ameren Illinois overall system annual load factor is 61%. For AMI metered customers in 2020 that had a full year's worth of AMI data (approximately 1 million service points), the load factor is 57%.

14. The number and percentage of 12 kV distribution circuits using data from AMI meters as part of a voltage/var control scheme.

There are 313 circuits (19.7%) 12kV/13.2kV distribution circuits using data from AMI meters as part of a voltage optimization scheme.

Ameren Illinois has not agreed to any additional tracking mechanisms at this time, but will continue to consider additional tracking mechanisms as appropriate in the future.

Appendix 1 – Part 466.140 Distributed Generation Annual Report

2021								
Annual Report of								
Ameren Illinois Company d/b/a Ameren Illinois								
Pursuant to Part 466.140								
of the 83 Illinois Administrative Code								
<=10 MVA Distributed Generation Annual Report								
Requests for Distributed Generation Interconnection								
	2018-2019 Data		2019-2020 Data		2020-2021 Data		Totals as of 2-10-21	
	(as of 2-10-19)		(as of 2-10-20)		(as of 2-10-21)		Requests Received*	
	Completed	Under Review	Completed	Under Review	Completed	Under Review		
1) Requests Received	569	1439	1561	605	2975	739	9218	
Level 1	513	293	1428	474	2862	655	7232	
Level 2	56	1105	133	130	113	81	1906	
Level 3	0	0	0	0	0	0	1	
Level 4	0	41	0	1	0	3	79	
							Requests Approved*	
	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>
2) Requests Approved	573	9155.4	1724	30073.0	2444	131850.5	5919	196257.1
Level 1:	517	3578.4	1591	15056.0	2185	19848.8	5238	45308.2
Solar	517	3578.4	1591	15056.0	2185	19848.8	5148	44761.4
Wind	0	0.0	0	0.0	0	0.0	50	246.0
Both	0	0.0	0	0.0	0	0.0	40	300.8
Level 2:	56	5577.0	133	15017.0	259	112001.7	680	146148.9
Solar	56	5577.0	133	15017.0	259	112001.7	654	141250.7
Wind	0	0.0	0	0.0	0	0.0	17	4629.3
Both	0	0.0	0	0.0	0	0.0	9	268.9
Level 3:	0	0.0	0	0.0	0	0.0	0	0.0
Level 4:	0	0.0	0	0.0	0	0.0	1	4800.0
							Requests Denied*	
	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>
3) Requests Denied	0	0.0	0	0.0	0	0.0	0	0.0

Note:

Level 1 = The new Level 1 threshold is 25 kVa and not 10 kVa – the threshold as of January 20, 2017, increased the Level 1 criteria to 25 kVa.
This report includes generators <10KVA prior to that date, and <25KVA subsequent to that date.

Level 2 = Lab certified interconnection equipment with nameplate capacity less than or equal to 2MVA.

Level 3 = Distributed generation facility does not export power. Nameplate capacity is less than or equal to 50kVA if connected to area network or less than or equal to 10 MVA if connected to a radial distribution feeder.

Level 4 = Nameplate capacity rating is less than or equal to 10 MVA and the distribution generating facility does not qualify for a Level 1, 2 or 3 review, or the distribution generating facility has been reviewed but not approved under a Level 1, 2 or 3 review.

* - Total column reflects totals from the inception - April 1, 2008 to current.

Appendix 2 – Part 466.140 Distributed Generation Annual Report – Net Metering Only

2021 Annual Report of Ameren Illinois Company d/b/a Ameren Illinois								
Requests for Distributed Generation Interconnection (Net Metering Customers Only)								
	2018-2019 Data (as of 2-10-19)		2019-2020 Data (as of 2-10-20)		2020-2021 Data (as of 2-10-21)		Totals as of 2-10-21	
	<u>Completed</u>	<u>Under Review</u>	<u>Completed</u>	<u>Under Review</u>	<u>Completed</u>	<u>Under Review</u>	<u>Requests Received*</u>	
1) Requests Received	569	659	1561	604	2970	731	7982	
Level 1	513	293	1428	474	2862	655	6929	
Level 2	56	366	133	130	108	76	1053	
Level 3	0	0	0	0	0	0	0	
Level 4	0	0	0	0	0	0	0	
							<u>Requests Approved*</u>	
	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>
2) Requests Approved	573	9155.4	1724	30073.0	2431	107200.5	5597	157488.6
Level 1:	517	3578.4	1591	15056.0	2185	19848.8	4986	44082.3
Solar	517	3578.4	1591	15056.0	2185	19848.8	4971	43998.5
Wind	0	0.0	0	0.0	0	0.0	11	54.5
Both	0	0.0	0	0.0	0	0.0	4	29.3
Level 2:	56	5577.0	133	15017.0	246	87351.7	611	113406.4
Solar	56	5577.0	133	15017.0	246	87351.7	603	113191.7
Wind	0	0.0	0	0.0	0	0.0	3	72.3
Both	0	0.0	0	0.0	0	0.0	5	142.4
Level 3:	0	0.0	0	0.0	0	0.0	0	0.0
Level 4:	0	0.0	0	0.0	0	0.0	0	0.0
							<u>Requests Denied*</u>	
	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>	<u>Customers</u>	<u>kW</u>
3) Requests Denied	0	0.0	0	0.0			0	0.0

Note:

Level 1 = The new Level 1 threshold is 25 kVa and not 10 kVa – the threshold as of January 20, 2017, increased the Level 1 criteria to 25 kVa. This report includes generators <10KVA prior to that date, and <25KVA subsequent to that date.

Level 2 = Lab certified interconnection equipment with nameplate capacity less than or equal to 2MVA.

Level 3 = Distributed generation facility does not export power. Nameplate capacity is less than or equal to 50kVA if connected to area network or less than or equal to 10 MVA if connected to a radial distribution feeder.

Level 4 = Nameplate capacity rating is less than or equal to 10 MVA and the distribution generating facility does not qualify for a Level 1, 2 or 3 review, or the distribution generating facility has been reviewed but not approved under a Level 1, 2 or 3 review.

* - Total column reflects totals from the inception - Feb 10, 2012 to current.

Appendix 3 – Time Required for Connection of Distributed Resources

2021 Annual Report of Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
Customer #	Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days
1	60
2	345
3	490
1	20
5	39
6	72
7	95
8	435
9	354
10	231
11	201
12	47
13	495
14	495
15	492
16	276
17	444
18	163
19	70
20	224
21	283
22	77
23	439
24	439
25	283
26	232
27	458
28	458
29	518
30	4
31	4
32	132
33	73
34	50
35	302
36	159
37	159
38	171
39	219
40	70
41	148
42	551
43	259
44	126
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
45	161
46	549
47	549
48	491
49	468
50	475
51	606
52	470
53	280
54	128
55	85
56	86
57	532
58	535
59	520
60	489
61	545
62	74
63	575
64	602
65	427
66	190
67	189
68	104
69	560
70	606
71	559
72	608
73	567
74	567
75	615
76	2
77	552
78	572
79	0
80	208
81	565
82	572
83	575
84	549
85	549
86	616
87	575
88	653
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021 Annual Report of Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
89	632
90	632
91	576
92	576
93	577
94	573
95	579
96	38
97	579
98	579
99	579
100	153
101	651
102	59
103	584
104	583
105	634
106	587
107	22
108	311
109	143
110	98
111	575
112	641
113	33
114	157
115	252
116	97
117	145
118	643
119	603
120	644
121	644
122	164
123	164
124	570
125	449
126	625
127	633
128	837
129	784
130	644
131	855
132	89
133	244
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
134	648
135	437
136	218
137	200
138	104
139	52
140	221
141	617
142	351
143	351
144	351
145	660
146	502
147	180
148	714
149	85
150	501
151	189
152	182
153	153
154	737
155	204
156	172
157	393
158	768
159	223
160	238
161	238
162	736
163	739
164	73
165	82
166	211
167	28
168	693
169	749
170	711
171	215
172	777
173	948
174	227
175	852
176	170
177	853
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021 Annual Report of Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
178	88
179	771
180	676
181	771
182	136
183	773
184	181
185	777
186	867
187	683
188	683
189	783
190	785
191	187
192	786
193	542
194	164
195	720
196	794
197	308
198	857
199	799
200	82
201	858
202	887
203	859
204	800
205	860
206	898
207	861
208	301
209	237
210	303
211	155
212	155
213	807
214	809
215	826
216	323
217	157
218	128
219	83
220	281
221	270
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
Customer #	Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days
222	883
223	814
224	106
225	13
226	435
227	372
228	91
229	844
230	96
231	335
232	110
233	147
234	109
235	521
236	70
237	297
238	39
239	371
240	843
241	523
242	844
243	302
244	218
245	787
246	609
247	18
248	20
249	14
250	151
251	23
252	182
253	47
254	96
255	182
256	77
257	182
258	74
259	26
260	104
261	34
262	71
263	20
264	68
265	14
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
Customer #	Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days
266	46
267	100
268	75
269	46
270	23
271	122
272	88
273	23
274	182
275	90
276	114
277	64
278	114
279	147
280	14
281	27
282	64
283	106
284	90
285	64
286	99
287	30
288	56
289	23
290	114
291	51
292	23
293	91
294	128
295	32
296	28
297	30
298	72
299	134
300	21
301	13
302	35
303	34
304	27
305	17
306	71
307	13
308	64
309	82
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021 Annual Report of Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
310	33
311	75
312	25
313	64
314	48
315	35
316	133
317	127
318	47
319	68
320	18
321	121
322	24
323	24
324	21
325	40
326	77
327	35
328	257
329	51
330	18
331	90
332	78
333	52
334	52
335	52
336	93
337	71
338	35
339	39
340	67
341	65
342	92
343	144
344	104
345	74
346	52
347	32
348	254
349	111
350	42
351	189
352	65
353	120
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021 Annual Report of Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
354	52
355	67
356	35
357	92
358	34
359	11
360	10
361	50
362	89
363	45
364	49
365	56
366	118
367	54
368	47
369	41
370	49
371	35
372	25
373	21
374	152
375	60
376	132
377	35
378	40
379	102
380	17
381	31
382	82
383	36
384	139
385	79
386	31
387	62
388	7
389	24
390	175
391	25
392	52
393	102
394	49
395	138
396	63
397	230
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
398	67
399	108
400	92
401	171
402	42
403	161
404	67
405	92
406	67
407	67
408	92
409	48
410	17
411	116
412	38
413	43
414	60
415	64
416	34
417	67
418	45
419	32
420	169
421	121
422	32
423	309
424	106
425	24
426	19
427	48
428	14
429	77
430	77
431	10
432	46
433	59
434	13
435	92
436	17
437	37
438	127
439	48
440	107
441	59
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021 Annual Report of Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
442	176
443	115
444	167
445	57
446	14
447	79
448	36
449	37
450	52
451	69
452	133
453	265
454	138
455	132
456	55
457	59
458	180
459	35
460	45
461	257
462	186
463	189
464	133
465	36
466	6
467	11
468	29
469	95
470	62
471	75
472	126
473	49
474	45
475	58
476	171
477	27
478	44
479	27
480	64
481	49
482	70
483	5
484	78
485	133
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
486	70
487	153
488	31
489	83
490	62
491	55
492	74
493	116
494	105
495	51
496	116
497	24
498	69
499	24
500	75
501	123
502	71
503	98
504	162
505	18
506	37
507	92
508	22
509	55
510	21
511	18
512	49
513	7
514	35
515	194
516	42
517	70
518	185
519	69
520	113
521	141
522	107
523	125
524	40
525	44
526	28
527	129
528	71
529	19
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
530	145
531	82
532	40
533	107
534	62
535	24
536	69
537	42
538	42
539	22
540	99
541	79
542	34
543	83
544	56
545	34
546	120
547	19
548	135
549	134
550	62
551	63
552	120
553	28
554	222
555	26
556	64
557	47
558	145
559	47
560	29
561	161
562	76
563	161
564	218
565	42
566	180
567	36
568	23
569	76
570	19
571	41
572	64
573	22
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
574	36
575	146
576	48
577	37
578	53
579	83
580	47
581	17
582	38
583	52
584	177
585	120
586	77
587	30
588	37
589	89
590	30
591	194
592	42
593	91
594	91
595	159
596	57
597	128
598	37
599	82
600	83
601	16
602	43
603	70
604	52
605	82
606	143
607	54
608	6
609	35
610	55
611	38
612	55
613	44
614	11
615	145
616	49
617	45
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
618	48
619	38
620	44
621	128
622	35
623	14
624	126
625	128
626	59
627	21
628	30
629	17
630	126
631	41
632	185
633	50
634	22
635	88
636	36
637	64
638	91
639	35
640	7
641	65
642	92
643	16
644	55
645	26
646	143
647	44
648	154
649	14
650	14
651	36
652	51
653	18
654	94
655	31
656	41
657	27
658	48
659	83
660	108
661	55
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
662	137
663	31
664	97
665	67
666	50
667	20
668	66
669	70
670	55
671	38
672	20
673	87
674	57
675	9
676	61
677	70
678	56
679	56
680	41
681	172
682	138
683	167
684	51
685	48
686	62
687	89
688	57
689	22
690	32
691	12
692	7
693	11
694	55
695	94
696	211
697	11
698	51
699	112
700	101
701	64
702	50
703	12
704	61
705	98
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
706	164
707	38
708	105
709	15
710	145
711	63
712	20
713	63
714	21
715	87
716	21
717	131
718	102
719	99
720	99
721	74
722	62
723	57
724	54
725	54
726	49
727	39
728	33
729	21
730	16
731	29
732	160
733	148
734	59
735	118
736	38
737	165
738	91
739	74
740	17
741	63
742	178
743	186
744	165
745	97
746	74
747	6
748	45
749	34
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
750	41
751	151
752	27
753	32
754	68
755	12
756	71
757	41
758	12
759	47
760	71
761	20
762	55
763	76
764	96
765	36
766	8
767	173
768	62
769	13
770	72
771	64
772	138
773	119
774	20
775	24
776	64
777	24
778	41
779	54
780	143
781	161
782	43
783	24
784	13
785	76
786	8
787	83
788	29
789	21
790	148
791	87
792	111
793	171
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
794	79
795	52
796	234
797	25
798	34
799	20
800	28
801	25
802	30
803	50
804	71
805	173
806	30
807	64
808	43
809	20
810	15
811	23
812	154
813	55
814	182
815	21
816	71
817	78
818	56
819	50
820	108
821	33
822	36
823	66
824	88
825	77
826	41
827	10
828	25
829	70
830	11
831	25
832	56
833	55
834	132
835	12
836	55
837	32
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
838	183
839	49
840	60
841	54
842	54
843	20
844	15
845	99
846	85
847	54
848	49
849	84
850	50
851	55
852	37
853	85
854	86
855	68
856	76
857	37
858	55
859	43
860	22
861	55
862	56
863	91
864	101
865	59
866	94
867	23
868	39
869	86
870	28
871	49
872	39
873	183
874	63
875	18
876	112
877	40
878	50
879	31
880	40
881	44
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
882	96
883	49
884	49
885	28
886	216
887	140
888	54
889	67
890	49
891	8
892	68
893	28
894	41
895	86
896	35
897	63
898	62
899	103
900	15
901	19
902	103
903	41
904	35
905	225
906	46
907	66
908	8
909	15
910	59
911	99
912	98
913	92
914	18
915	85
916	92
917	68
918	69
919	48
920	63
921	35
922	35
923	30
924	35
925	25
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
926	36
927	74
928	89
929	75
930	16
931	51
932	65
933	52
934	70
935	69
936	40
937	377
938	27
939	56
940	155
941	9
942	57
943	69
944	52
945	36
946	183
947	32
948	92
949	15
950	92
951	72
952	37
953	8
954	44
955	49
956	57
957	54
958	54
959	57
960	46
961	54
962	203
963	18
964	62
965	116
966	54
967	174
968	76
969	41
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
970	222
971	77
972	69
973	88
974	36
975	76
976	100
977	41
978	54
979	8
980	54
981	55
982	15
983	82
984	56
985	48
986	246
987	83
988	149
989	69
990	66
991	108
992	39
993	71
994	57
995	78
996	71
997	22
998	63
999	65
1000	74
1001	42
1002	20
1003	25
1004	33
1005	85
1006	70
1007	123
1008	65
1009	41
1010	85
1011	86
1012	41
1013	86
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021 Annual Report of Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1014	22
1015	71
1016	45
1017	36
1018	162
1019	41
1020	36
1021	195
1022	44
1023	19
1024	68
1025	48
1026	46
1027	50
1028	71
1029	33
1030	33
1031	61
1032	19
1033	185
1034	160
1035	126
1036	19
1037	195
1038	160
1039	95
1040	112
1041	22
1042	55
1043	69
1044	67
1045	37
1046	64
1047	67
1048	93
1049	60
1050	75
1051	149
1052	224
1053	136
1054	82
1055	64
1056	64
1057	93
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1058	71
1059	49
1060	36
1061	64
1062	36
1063	50
1064	64
1065	558
1066	59
1067	101
1068	207
1069	28
1070	47
1071	78
1072	56
1073	330
1074	96
1075	29
1076	34
1077	30
1078	18
1079	85
1080	41
1081	18
1082	44
1083	97
1084	7
1085	56
1086	35
1087	60
1088	49
1089	62
1090	25
1091	22
1092	78
1093	20
1094	57
1095	7
1096	53
1097	7
1098	78
1099	36
1100	7
1101	7
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1102	22
1103	47
1104	64
1105	25
1106	92
1107	68
1108	25
1109	129
1110	111
1111	38
1112	24
1113	59
1114	160
1115	85
1116	28
1117	39
1118	37
1119	29
1120	126
1121	48
1122	105
1123	83
1124	27
1125	65
1126	59
1127	121
1128	40
1129	19
1130	14
1131	57
1132	61
1133	66
1134	127
1135	28
1136	44
1137	30
1138	85
1139	76
1140	24
1141	66
1142	24
1143	36
1144	30
1145	80
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1146	27
1147	57
1148	67
1149	70
1150	7
1151	81
1152	28
1153	28
1154	71
1155	71
1156	44
1157	145
1158	61
1159	49
1160	127
1161	44
1162	26
1163	34
1164	72
1165	44
1166	43
1167	100
1168	146
1169	128
1170	34
1171	64
1172	73
1173	36
1174	41
1175	22
1176	111
1177	23
1178	31
1179	47
1180	39
1181	39
1182	294
1183	72
1184	60
1185	55
1186	78
1187	46
1188	23
1189	31
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1190	19
1191	36
1192	73
1193	32
1194	65
1195	32
1196	61
1197	31
1198	313
1199	36
1200	61
1201	91
1202	90
1203	107
1204	182
1205	46
1206	81
1207	52
1208	39
1209	36
1210	225
1211	47
1212	58
1213	192
1214	42
1215	56
1216	58
1217	35
1218	36
1219	67
1220	169
1221	80
1222	67
1223	33
1224	62
1225	6
1226	35
1227	121
1228	33
1229	131
1230	30
1231	82
1232	67
1233	96
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
Customer #	Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days
1234	47
1235	57
1236	223
1237	33
1238	59
1239	112
1240	51
1241	76
1242	23
1243	29
1244	24
1245	39
1246	37
1247	53
1248	60
1249	58
1250	26
1251	185
1252	35
1253	45
1254	70
1255	224
1256	32
1257	26
1258	39
1259	43
1260	58
1261	113
1262	93
1263	103
1264	66
1265	28
1266	22
1267	20
1268	41
1269	174
1270	41
1271	30
1272	14
1273	41
1274	98
1275	174
1276	89
1277	42
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1278	33
1279	89
1280	34
1281	113
1282	106
1283	42
1284	37
1285	129
1286	87
1287	129
1288	104
1289	37
1290	89
1291	66
1292	190
1293	144
1294	28
1295	30
1296	99
1297	60
1298	30
1299	44
1300	49
1301	42
1302	53
1303	33
1304	43
1305	22
1306	38
1307	18
1308	67
1309	68
1310	59
1311	90
1312	89
1313	77
1314	126
1315	128
1316	134
1317	149
1318	149
1319	149
1320	317
1321	95
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1322	27
1323	92
1324	42
1325	40
1326	116
1327	155
1328	99
1329	31
1330	33
1331	35
1332	42
1333	43
1334	49
1335	118
1336	52
1337	20
1338	27
1339	73
1340	72
1341	98
1342	115
1343	128
1344	119
1345	112
1346	74
1347	74
1348	62
1349	20
1350	41
1351	44
1352	55
1353	31
1354	56
1355	41
1356	74
1357	253
1358	223
1359	185
1360	133
1361	98
1362	62
1363	70
1364	64
1365	51
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1366	142
1367	37
1368	16
1369	26
1370	29
1371	34
1372	31
1373	26
1374	22
1375	112
1376	217
1377	139
1378	103
1379	80
1380	49
1381	51
1382	67
1383	109
1384	213
1385	139
1386	129
1387	118
1388	22
1389	1
1390	21
1391	28
1392	26
1393	26
1394	20
1395	23
1396	50
1397	44
1398	47
1399	58
1400	57
1401	68
1402	64
1403	77
1404	20
1405	134
1406	43
1407	69
1408	71
1409	124
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021												
Annual Report of												
Ameren Illinois Company d/b/a Ameren Illinois												
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***												
<u>Customer #</u>											<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>	
1410											112	
1411											103	
1412											106	
1413											83	
1414											88	
1415											85	
1416											18	
1417											18	
1418											20	
1419											19	
1420											28	
1421											28	
1422											21	
1423											36	
1424											36	
1425											43	
1426											30	
1427											45	
1428											48	
1429											46	
1430											310	
1431											185	
1432											149	
1433											23	
1434											139	
1435											144	
1436											48	
1437											110	
1438											92	
1439											76	
1440											43	
1441											75	
1442											77	
1443											66	
1444											64	
1445											32	
1446											46	
1447											47	
1448											52	
1449											51	
1450											49	
1451											50	
1452											50	
1453											22	
Assumptions:												
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)												
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)												
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.												
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)												
5. Time is represented in actual days, not business days.												
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.												

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1454	17
1455	20
1456	23
1457	26
1458	26
1459	36
1460	37
1461	20
1462	21
1463	36
1464	48
1465	42
1466	43
1467	37
1468	41
1469	43
1470	43
1471	42
1472	35
1473	44
1474	32
1475	161
1476	157
1477	101
1478	102
1479	13
1480	21
1481	24
1482	22
1483	22
1484	27
1485	27
1486	79
1487	44
1488	55
1489	48
1490	48
1491	50
1492	44
1493	43
1494	42
1495	35
1496	193
1497	126
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1498	103
1499	102
1500	88
1501	73
1502	31
1503	60
1504	51
1505	56
1506	52
1507	45
1508	52
1509	51
1510	44
1511	84
1512	30
1513	34
1514	30
1515	33
1516	33
1517	70
1518	60
1519	53
1520	47
1521	47
1522	49
1523	40
1524	35
1525	29
1526	36
1527	203
1528	154
1529	84
1530	85
1531	78
1532	77
1533	79
1534	58
1535	13
1536	23
1537	23
1538	28
1539	29
1540	30
1541	30
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1542	35
1543	38
1544	43
1545	41
1546	37
1547	48
1548	105
1549	158
1550	99
1551	95
1552	99
1553	18
1554	29
1555	40
1556	29
1557	67
1558	70
1559	41
1560	45
1561	42
1562	66
1563	64
1564	249
1565	124
1566	112
1567	103
1568	72
1569	61
1570	55
1571	55
1572	42
1573	42
1574	42
1575	36
1576	37
1577	38
1578	34
1579	36
1580	33
1581	27
1582	26
1583	25
1584	19
1585	16
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1586	126
1587	111
1588	101
1589	83
1590	68
1591	62
1592	35
1593	36
1594	21
1595	16
1596	17
1597	131
1598	131
1599	120
1600	21
1601	94
1602	79
1603	72
1604	121
1605	117
1606	36
1607	9
1608	14
1609	16
1610	13
1611	27
1612	21
1613	26
1614	32
1615	51
1616	39
1617	39
1618	39
1619	20
1620	41
1621	41
1622	45
1623	50
1624	85
1625	79
1626	90
1627	95
1628	95
1629	83
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021 Annual Report of Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1630	83
1631	48
1632	54
1633	54
1634	60
1635	48
1636	61
1637	65
1638	69
1639	71
1640	79
1641	152
1642	213
1643	123
1644	41
1645	39
1646	13
1647	57
1648	32
1649	48
1650	43
1651	39
1652	48
1653	117
1654	108
1655	105
1656	105
1657	105
1658	128
1659	71
1660	34
1661	16
1662	41
1663	104
1664	105
1665	67
1666	72
1667	71
1668	177
1669	108
1670	39
1671	76
1672	58
1673	77
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1674	77
1675	93
1676	49
1677	52
1678	41
1679	62
1680	63
1681	77
1682	42
1683	44
1684	60
1685	33
1686	70
1687	22
1688	114
1689	99
1690	30
1691	23
1692	36
1693	43
1694	75
1695	34
1696	56
1697	56
1698	61
1699	47
1700	75
1701	153
1702	89
1703	68
1704	33
1705	68
1706	181
1707	39
1708	21
1709	50
1710	22
1711	78
1712	27
1713	69
1714	97
1715	47
1716	76
1717	44
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1718	44
1719	41
1720	172
1721	205
1722	68
1723	63
1724	50
1725	49
1726	49
1727	50
1728	36
1729	34
1730	28
1731	27
1732	29
1733	24
1734	34
1735	24
1736	24
1737	19
1738	50
1739	124
1740	241
1741	224
1742	163
1743	96
1744	90
1745	79
1746	76
1747	70
1748	72
1749	66
1750	66
1751	64
1752	19
1753	24
1754	54
1755	56
1756	24
1757	24
1758	23
1759	23
1760	29
1761	29
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021 Annual Report of Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1762	34
1763	29
1764	29
1765	30
1766	31
1767	30
1768	47
1769	49
1770	49
1771	43
1772	42
1773	47
1774	43
1775	38
1776	28
1777	23
1778	64
1779	93
1780	37
1781	176
1782	25
1783	71
1784	55
1785	57
1786	11
1787	86
1788	79
1789	38
1790	51
1791	50
1792	16
1793	34
1794	35
1795	16
1796	91
1797	300
1798	139
1799	128
1800	100
1801	124
1802	64
1803	70
1804	55
1805	56
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1806	55
1807	60
1808	63
1809	67
1810	67
1811	63
1812	42
1813	42
1814	38
1815	22
1816	35
1817	37
1818	11
1819	15
1820	21
1821	25
1822	34
1823	31
1824	41
1825	41
1826	23
1827	84
1828	35
1829	91
1830	28
1831	85
1832	55
1833	41
1834	110
1835	65
1836	68
1837	22
1838	42
1839	20
1840	42
1841	65
1842	17
1843	65
1844	78
1845	23
1846	36
1847	137
1848	68
1849	39
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1850	159
1851	67
1852	58
1853	35
1854	168
1855	116
1856	102
1857	90
1858	76
1859	78
1860	70
1861	51
1862	54
1863	43
1864	45
1865	44
1866	24
1867	37
1868	31
1869	29
1870	30
1871	22
1872	21
1873	24
1874	14
1875	95
1876	25
1877	49
1878	82
1879	16
1880	51
1881	24
1882	51
1883	34
1884	57
1885	31
1886	63
1887	34
1888	225
1889	32
1890	37
1891	32
1892	30
1893	41
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1894	81
1895	49
1896	58
1897	26
1898	33
1899	189
1900	66
1901	28
1902	34
1903	294
1904	70
1905	19
1906	74
1907	34
1908	48
1909	97
1910	16
1911	29
1912	29
1913	22
1914	51
1915	98
1916	116
1917	148
1918	82
1919	62
1920	189
1921	31
1922	35
1923	108
1924	58
1925	74
1926	24
1927	32
1928	61
1929	37
1930	94
1931	90
1932	169
1933	57
1934	57
1935	112
1936	65
1937	24
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1938	238
1939	104
1940	86
1941	94
1942	82
1943	77
1944	81
1945	75
1946	71
1947	56
1948	29
1949	45
1950	41
1951	38
1952	37
1953	35
1954	35
1955	30
1956	21
1957	22
1958	38
1959	35
1960	27
1961	26
1962	22
1963	24
1964	22
1965	10
1966	219
1967	133
1968	108
1969	107
1970	55
1971	59
1972	63
1973	59
1974	50
1975	42
1976	49
1977	38
1978	37
1979	41
1980	30
1981	70
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
1982	76
1983	73
1984	115
1985	14
1986	15
1987	52
1988	695
1989	41
1990	126
1991	26
1992	205
1993	217
1994	197
1995	188
1996	166
1997	160
1998	82
1999	43
2000	49
2001	57
2002	67
2003	39
2004	22
2005	33
2006	7
2007	129
2008	39
2009	42
2010	42
2011	58
2012	56
2013	36
2014	35
2015	10
2016	168
2017	21
2018	109
2019	85
2020	82
2021	177
2022	175
2023	75
2024	76
2025	65
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
2026	60
2027	60
2028	60
2029	63
2030	56
2031	56
2032	52
2033	38
2034	35
2035	6
2036	43
2037	69
2038	131
2039	6
2040	54
2041	144
2042	41
2043	56
2044	76
2045	154
2046	124
2047	110
2048	111
2049	175
2050	111
2051	85
2052	112
2053	77
2054	63
2055	67
2056	49
2057	71
2058	62
2059	69
2060	62
2061	50
2062	48
2063	48
2064	43
2065	42
2066	52
2067	(316)
2068	21
2069	2
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
2070	13
2071	18
2072	21
2073	29
2074	21
2075	33
2076	37
2077	29
2078	33
2079	29
2080	41
2081	22
2082	33
2083	44
2084	43
2085	45
2086	43
2087	46
2088	90
2089	47
2090	70
2091	97
2092	26
2093	10
2094	77
2095	10
2096	56
2097	78
2098	27
2099	129
2100	87
2101	59
2102	59
2103	59
2104	71
2105	45
2106	46
2107	46
2108	46
2109	46
2110	39
2111	43
2112	43
2113	43
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
2114	31
2115	31
2116	105
2117	35
2118	33
2119	75
2120	41
2121	67
2122	150
2123	22
2124	26
2125	34
2126	36
2127	13
2128	197
2129	47
2130	11
2131	73
2132	15
2133	34
2134	35
2135	26
2136	56
2137	71
2138	33
2139	56
2140	25
2141	73
2142	50
2143	8
2144	16
2145	129
2146	43
2147	143
2148	34
2149	113
2150	80
2151	87
2152	16
2153	66
2154	65
2155	29
2156	29
2157	29
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
2158	29
2159	29
2160	29
2161	29
2162	29
2163	29
2164	29
2165	29
2166	29
2167	29
2168	29
2169	29
2170	29
2171	29
2172	29
2173	29
2174	29
2175	29
2176	29
2177	29
2178	29
2179	29
2180	29
2181	29
2182	29
2183	29
2184	29
2185	29
2186	160
2187	160
2188	160
2189	160
2190	160
2191	160
2192	160
2193	160
2194	160
2195	160
2196	160
2197	160
2198	160
2199	160
2200	160
2201	160
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
2202	160
2203	160
2204	160
2205	160
2206	160
2207	160
2208	160
2209	160
2210	160
2211	160
2212	160
2213	160
2214	160
2215	160
2216	160
2217	160
2218	160
2219	160
2220	160
2221	160
2222	160
2223	160
2224	160
2225	160
2226	160
2227	160
2228	160
2229	160
2230	160
2231	160
2232	160
2233	160
2234	160
2235	160
2236	160
2237	160
2238	160
2239	160
2240	160
2241	160
2242	160
2243	160
2244	160
2245	160
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
2246	160
2247	160
2248	160
2249	160
2250	160
2251	160
2252	160
2253	160
2254	160
2255	160
2256	160
2257	160
2258	160
2259	160
2260	160
2261	160
2262	160
2263	160
2264	160
2265	160
2266	160
2267	160
2268	160
2269	160
2270	160
2271	160
2272	160
2273	160
2274	160
2275	160
2276	160
2277	155
2278	73
2279	124
2280	131
2281	41
2282	23
2283	95
2284	41
2285	34
2286	101
2287	92
2288	120
2289	181
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
2290	227
2291	83
2292	86
2293	59
2294	24
2295	196
2296	51
2297	52
2298	80
2299	37
2300	68
2301	68
2302	68
2303	68
2304	68
2305	68
2306	68
2307	68
2308	68
2309	68
2310	68
2311	68
2312	68
2313	68
2314	68
2315	68
2316	68
2317	68
2318	68
2319	68
2320	68
2321	68
2322	68
2323	68
2324	68
2325	68
2326	68
2327	68
2328	68
2329	68
2330	68
2331	68
2332	68
2333	68
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 3 – Time Required for Connection of Distributed Resources

2021											
Annual Report of											
Ameren Illinois Company d/b/a Ameren Illinois											
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***											
<u>Customer #</u>										<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>	
2334											68
2335											68
2336											68
2337											68
2338											68
2339											68
2340											68
2341											68
2342											68
2343											68
2344											68
2345											68
2346											68
2347											68
2348											68
2349											68
2350											68
2351											68
2352											68
2353											68
2354											68
2355											68
2356											68
2357											68
2358											68
2359											68
2360											68
2361											68
2362											68
2363											68
2364											68
2365											68
2366											68
2367											68
2368											68
2369											68
2370											68
2371											68
2372											68
2373											68
2374											68
2375											68
2376											68
2377											68
Assumptions:											
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)											
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)											
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.											
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)											
5. Time is represented in actual days, not business days.											
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.											

Appendix 3 – Time Required for Connection of Distributed Resources

2021	
Annual Report of	
Ameren Illinois Company d/b/a Ameren Illinois	
Requests for Distributed Generation Interconnection (Net Metering Customers Only)***	
<u>Customer #</u>	<u>Duration: Time from a Completed Application Until Energy Flows from Project to Grid (Live Date) in Actual Days</u>
2378	68
2379	68
2380	68
2381	68
2382	68
2383	68
2384	68
2385	68
2386	68
2387	68
2388	68
2389	68
2390	68
2391	68
2392	68
2393	68
2394	68
2395	68
2396	68
2397	68
2398	68
2399	68
2400	68
2401	68
2402	68
2403	68
2404	68
2405	68
2406	68
2407	68
2408	68
2409	68
2410	68
2411	68
2412	68
2413	68
2414	68
2415	68
2416	68
2417	68
2418	68
2419	68
2420	68
2421	68
Assumptions:	
1. The clock will start upon receipt of a complete application from customer. An application is considered complete when all required documentation, information, application fees, etc. has been received and application can be forwarded to engineering. (instructions - use Column U in spreadsheet)	
2. The clock will end based on the date when the bi-directional (dual channel) meter is installed or re-programmed. The customer is not authorized to operate the system until the application has been reviewed and approved by Engineering, an inspection and site-test completed and a bi-directional (dual channel) meter installed. (Instructions - use column AD in spreadsheet)	
3. Ameren Illinois Policy is to install a bi-directional (dual channel) meter for every distributed generation installation.	
4. It should be noted some systems will NOT have energy flow into the grid. These systems were designed for load sharing to reduce billable energy consumption (e.g. some smaller systems were installed in school science labs for educational purposes only.)	
5. Time is represented in actual days, not business days.	
*** - This represents the total # of net metering customers that completed their installations from Feb 10, 2020 to Feb 10, 2021.	

Appendix 4 – Non-Standard Metering Annual Report

Each year beginning in 2016, on or before April 1 and on or before October 1, Ameren Illinois shall file with the ICC a semi-annual report that summarizes information pertaining to Customers that have refused AMI metering. The semi-annual report shall provide (1) the number of Customers that have refused AMI metering and the reason for the refusal; (2) a description of the Company's efforts to address such Customers; and (3) identification of the Company's costs associated with providing service to such Customers. The report due by April 1 shall be included in the Advanced Metering Infrastructure (AMI) annual report filed by the Company that requires the Company to file a report by April 1 of each year "regarding the progress it has made toward completing implementation of its AMI Plan", pursuant to Section 16-108.6(e) of the Public Utilities Act.

Within 30 days after the Company files the fifth annual report described above, the Company shall file a petition with the ICC requesting authority to continue the use of this Rider and applicable charges. The petition will include the information provided in the previously submitted annual reports.

Summary

For the period of June 2014 through December 2020, 3,101 AMR and AMI customers requested non-standard metering. Due to the prior AMR medical exemption process, 8 customers have been grandfathered into non-standard metering. These customers are not included in the 3,101 and do not receive the monthly advanced meter refusal charge. There were 138 Ameren Illinois customers enrolled in non-standard metering as a result of Unable-to-Complete AMI meter deployments.

Current Ameren Illinois Non-Standard Metering Refusals

Refusal Reason	Number of Customers
Health	344
Higher Bills	13
No reason provided	1,150
Interference	7
Privacy	54
Safety	77
Unable to Complete Advanced Meter Install	1,456
Total	3,101

There are two ways for customers to enroll in Non-Standard Metering (NSM):

1. Customer Request for Non-Standard Metering

Residential Customers have the option of refusing the installation of Advanced Metering or requesting the removal of previously installed Advanced Metering by contacting the Ameren Illinois Contact Center.

The enrollment process is as follows:



2. Customer is enrolled due to Unable-To-Complete Meter installations

As stated in the Non-Standard Metering Rider, if Ameren Illinois is unable to complete an Advanced Metering installation at eligible premises for reasons including but not limited to, locked gates or doors, physical blockages of meters, or unrestrained dogs, Ameren Illinois will treat these situations as Advanced Metering refusal. Ameren Illinois will contact the customer 6 times prior to enrolling them in Non-Standard Metering.

The contact process is as follows:

Meter Exchange Minus Two Months	<ul style="list-style-type: none">Ameren Illinois Customer receives a letter notification of the upcoming meter exchange. Customer may request NSM prior to or during AMI communications via the Contact Center or during meter installation
Meter Exchange Minus One Month	<ul style="list-style-type: none">Ameren Illinois Customer receives a postcard reminder of the upcoming meter exchange. Customer may request NSM prior to or during AMI communications via the Contact Center or during meter installation
Two Meter Exchange Attempts	<ul style="list-style-type: none">Ameren Illinois or its installation subcontractor (Apex) will attempt two onsite premise meter exchanges. A door hanger will be left with the Customer that notes a successful exchange or an attempted exchange. Customer may request NSM prior to or during AMI communications via the Contact Center or during meter installation
Scheduled Meter Exchange Attempt	<ul style="list-style-type: none">Ameren Illinois or its installation subcontractor (Apex) will call the Customer to set up an appointment to exchange the meter. If an appointment cannot be scheduled, an order will be issued to local field office.
Enrollment In NSM	<ul style="list-style-type: none">The local field office will issue a letter that directs the Customer to schedule an exchange appointment within 30 days. If a customer does not schedule an appointment, the Customer will be enrolled in NSM when the local field office has availability (not less than 30 days from Customer notification letter.)
Unable-To-Complete Letter	<ul style="list-style-type: none">Customer Accounts Department sends Unable-To-Complete confirmation letter to customer

Ameren Illinois Customers with 2020 NSM Charges

There were Ameren Illinois customers who received monthly charges as a result of Non-Standard Metering through December 2020. The NSM rider includes all automated metering, both AMI and AMR customers. All customers with NSM charges are now in AMI areas.

Service(s)	Number of Customers
Electric & Gas	459
Gas	337
Electric	1,047
Total	1,843

Customer Refusal Method

Refusal Method	Number of Customers
Enrolled After Meter Installation	246
AMI Refusal During Deployment	652
Customer Contact Center	747
Unable to Complete	1,456
Total	3,101

Ameren Illinois' Costs Summary

Department	Cost
Meter Reading	\$805,496
Field and Meter Services	\$26,356
Deployment	\$50,474
AMI Operations	\$33,897
Customer Experience	\$12,462
Billing	\$44,654
Total	\$973,339

Ameren Illinois' Estimated Costs Descriptions

Meter Reading: Ameren Illinois incurred an estimated \$805,496 of meter reading costs for 3,101 customers who received NSM charges through 2020.

Manual Meter Reading costs:

Service(s)	#Reads	Calculation
Electric	23,122	#Reads * monthly fee = \$461,224
Gas	4,607	#Reads * monthly fee = \$91,972
Both	<u>21,025</u>	#Reads * monthly fee = \$252,300
Total	48,754	\$805,496

Field and Meter Services: Ameren Illinois incurred an estimated \$26,356 of Field and Meter Services cost for customers' meter exchanges.

Meter Exchange order costs:

#Customers	Calculation
2	#Customers * Exchange Fee 2 * \$70.00 = \$140
1**	#Customers * Exchange Fee 1(2) * \$70.00 = \$140
Total 3	\$280

#Customers	Calculation
131	#Customers * Exchange Fee 131(1) * \$73.87 = \$9,676
111**	#Customers * Exchange Fee 111*(2) * \$73.87 = \$16,399
Total 242	\$26,076

Footnote: Change in Meter exchange rate reflects July 1st 2016 increase.

**Customers who required 2 Meter exchanges

Deployment: Ameren Illinois incurred an estimated \$50,474 of Deployment costs for 652 customers who refused AMI during deployment and 1,456 Unable to Complete installs:

Subcontractor Installer Costs:

Subcontractor Rate	Calculation
\$24.29	Rate * #Customers \$24.29 * 2,078 = \$50,474
Total	\$50,474

AMI Operations: Ameren Illinois incurred an estimated \$33,897 of Operations costs for 1,456 Unable to Complete installs and 898 customers who requested NSM during meter installation or after meter installation (exchange):

Operations Support Costs:

OSR Rate	Time to Support	Cost to Support	Calculation
\$86.43	10 minutes/Customer	\$14.40/Customer	Cost to Support * #Customers \$14.40 * 2,354 = \$33,897
Total			\$33,897

Customer Experience:

Ameren Illinois incurred an estimated \$10,756 of costs for 747 customers who contacted the Ameren Illinois Customer Contact Center to request NSM.

Ameren Illinois incurred postage and labor costs of \$1,705 for all 3,101 customers who requested NSM.

Rate	Time to Support	Cost to Support	Calculation
Contact Center \$86.43/hr	10 Minutes/Customer	\$14.40/Customer	Cost to Support * #Customers \$14.40 * 747 = \$10,756
Postage \$0.55/letter	1 Letter/Customer	\$0.55/Customer	Cost to Support * #Letters \$0.55/letter * 3,101 = \$1,705
Total			\$12,462

Billing: Ameren Illinois incurred an estimated \$44,654 of cost for all 3,101 customers who requested Non-Standard metering through December 2020.

Customer Accounts department (CAD) Costs:

CAD Rate	Time to Support	Cost to Support	Calculation
\$86.43	10 minutes/Customer	\$14.40/Customer	Cost to Support * #Customers \$14.40 * 3,101 = \$44,654
Total			\$44,654

2Appendix 5 – Ameren Illinois Greenhouse Gas Emission Reduction Metric for Smart Grid Advanced Metering Infrastructure Deployment

On September 10, 2014, the Citizens Utility Board and Environmental Defense Fund (collectively “CUB/EDF”) filed a verified Petition requesting that the Illinois Commerce Commission (“Commission”) initiate a proceeding to adopt a metric for measuring reductions in greenhouse gas (“GHG”) emissions associated with Smart Grid Advanced Metering Infrastructure (“AMI”) Deployment Plans (“AMI Plans”) filed pursuant to Section 16-108.6 of the Public Utilities Act.

Following the resolution of several initial motions, Ameren Illinois Company d/b/a Ameren Illinois (“Ameren Illinois”) and CUB/EDF filed multiple rounds of testimony outlining their respective positions. On September 27, 2017, the Commission issued an Order presenting its decision on the remaining contested issues. As a part of the Order, Ameren Illinois was directed to file an unpopulated version of CUB/EDF’s “Bottom Up Approach” metric within ninety (90) days. The Commission also directed “Ameren should report on the Operational Changes Approach and Load Shape Approach in its annual AMI Updates, beginning in 2018...”

Ameren Illinois Greenhouse Gas Emission Reduction Calculations

Ameren Illinois uses the following methodology and data sources to estimate the reduction in GHG impacted by Ameren Illinois’ implementation of programs enabled by AMI. The AMI-enabled programs are listed in Ameren Illinois’ AMI Plan, as approved in Docket No. 12-0244 (on Re-Opening.) For the previous calendar year, the AMI-enabled programs include customers on real time pricing programs who have AMI meters, residential customers enrolled in Peak Time Rewards, and customers who have enabled a Home Area Network (HAN) device.

1. Reduction in Marginal Emissions Formula

Ameren Illinois will estimate the change in Marginal Emission by calculating the sum of the change in load for program participants in each hourly time interval for the calendar year multiplied by the marginal emissions rate for each associated hourly time interval.

The estimation formula is expressed as:

$$\Delta GHG(B) = \sum_{1}^{T} \Delta \text{Marginal Emissions } t$$

Where

$$\Delta \text{Marginal Emissions} = [\Delta \text{ in Program Participant Load in } t] * [\text{Marginal Emissions Rate in } t]$$

2. Change in Program Participant Load in t

To estimate the change in program participant load, Ameren Illinois will calculate for each hour (t) of the year, the usage of customers in a service class with an AMI meter that are on an AMI-enabled program and compare that against an average of customers in the service class that are not on an AMI-enabled program multiplied by the number of customers on a AMI-enabled program in the service class.

The change in program participant load stated as formula:

$$\begin{aligned} \Delta \text{ in Program Participant Load in } t &= [(\text{Average Customer Load in } t) * (\text{AMI Enabled Program Participants in } t)] \\ &- [\text{Program Participant Load in } t] \end{aligned}$$

² The 2018 Greenhouse Gas calculation has not been updated due to the unavailability of specific data from MISO. Inquiries have been made to retrieve the data.

Ameren Illinois will use data it submits to MISO for hourly settlement by rate class for the Average Customer Load in t. For the AMI Enabled Program Participant Load in t, Ameren Illinois will use data from its AMI Data Warehouse in hourly intervals with the notation of customers with AMI meters and participating in an AMI-enabled program.

3. Marginal Emissions Rate in t

To develop the estimate for the marginal emission rate in t, Ameren Illinois will calculate the marginal emission rate based on publicly available data. First, Ameren Illinois will calculate the percentage of each type of marginal generation in each hour (t) for the year from available MISO data for the Central region. Ameren Illinois will then multiply the percentage of marginal generation for coal and natural gas by the average heat rate rates for the coal and natural fuel sources that emit GHG. Next, Ameren Illinois will multiply the percentage of each marginal carbon emitting fuel source average heat rate by a GHG emission rate. Finally, Ameren Illinois will divide the formula by 1,000 British Thermal Units to keep the units consistent.

The Marginal Emissions Rate is expressed as:

$$\text{Marginal Emissions Rate in } t = (\% \text{ Fuel in } t) * (\text{Average Heat Rate of Fuel Source}) * (\text{Emission Rate of Fuel Source}) * (1 \times 10^{-3} \text{ BTUs})$$

The data for the fuel source on margin in five (5) minute increments is provided by MISO. Using the MISO margin data, Ameren Illinois will calculate the percentage of fuel source on margin for each hourly interval (t). The average heat rate by fuel source will be provided by the EPA for coal for all coal generation in the U.S. Because MISO does not differentiate between the types of Natural Gas Generation in its data sources, Ameren Illinois will calculate a weighted average of natural gas fired generation by type using EPA data for the entire MISO region and multiply it by average heat rates for all U.S. natural gas generation provided by the EPA. Finally, Ameren Illinois will leverage EPA average generation source emission data for the emission rate of fuel source.

4. Outcome of Greenhouse Gas Calculation

After compiling the data and performing the calculation, the following has been determined:

AMI Enabled Program	CO ₂ Variance from Average Customer
Peak Time Rewards	0 metric tons of CO ₂ ¹
Residential Real Time Pricing and Home Area Network	(10,066) metric tons of CO ₂
Commercial and Industrial Real Time Pricing ²	<u>185,444 metric tons of CO₂</u>
Total Reduction in GHG	175,378 metric tons of CO₂

¹Neither the MidContinent Independent System Operator (MISO) nor Ameren Illinois called a Peak Time Rewards event in 2017

²For 2017's analysis, AMI enabled Commercial and Industrial customers include Real Time Pricing DS 2 (RTP2), Hourly Supply Service DS 3 and DS 4 (HSS3 and HSS4). No Hourly Supply Service DS 6 (HSS6) customers were enabled with an AMI meter in 2017.