

**Kentucky Utilities Company and Louisville Gas and Electric Company**  
**Case Nos. 2020-00349 & 2020-00350**  
**Advanced Metering Infrastructure Annual Report**  
**July 31, 2024**

**I. Introduction**

In accordance with the Kentucky Public Service Commission’s Order of June 30, 2021 and subsequent order of December 6, 2021 in Case Nos. 2020-00349 and 2020-00350, Kentucky Utilities Company (“KU”) and Louisville Gas and Electric Company (“LG&E”) (collectively “the Companies”) submit their annual Advanced Metering Infrastructure (“AMI”) report.

Pursuant to Ordering paragraphs 8, 11 and 13 in the June 30, 2021 Orders mentioned above, the Companies report provides the plan and progress toward maximizing benefits in the areas of reduced meter reading expense; ability to disconnect/reconnect remotely; reduced field service costs; avoided meter costs; fuel saving from decreased customer usage; conservative voltage reduction; time of day rates; electric distribution operations; improved outage response; management and prediction of outages, overloads, and shortfalls of transmission and distribution assets; data availability to customers within 4-6 hours; innovative rate design; reduced theft and earlier detection; a detailed plan for customer engagement of its AMI systems’ as well as detailed plans regarding how the Companies identify outages, how the AMI systems will facilitate notification and communication of information with customers regarding outages, the estimated times of repair, and the AMI systems’ interaction with the Companies other smart grid investments, including the outage management system.

This report reflects data through the end of June 2024, except where noted.

**II. Quantitative Benefits**

**Reduced Meter Reading Expense**

Meter exchanges began in September 2022. Meter reading savings are reported on an annual basis. Through December 2023, there were 562k meters/modules installed. The company has captured approximately \$3.8 million in regulatory liability related to meter reading savings through December 2023.

**Ability to Disconnect/Reconnect Remotely**

Electric meters installed to date (200 amp or below) have a remote disconnect/reconnect switch operation that was integrated with existing systems and implemented in June 2024 (see Appendix I for the schedule of planned work). Consequently, remote disconnect/reconnect reporting will be provided on an annual basis and will begin with the July 2025 report. Minimal savings are expected, if any, in 2024 as the switches will have been enabled for only a short period of time.

**Reduced Field Service Costs**

Reduced field service costs are associated with remote service switch enablement because field technicians are not needed to visit each electric meter for a disconnect or reconnect. However, these savings only began after the remote service switch systems were enabled and integrated in

June 2024 (see the schedule in Appendix I). Consequently, reporting on reduced field service costs will begin with the July 2025 report. Minimal savings are expected, if any, in 2024 as the switches will have been enabled for only a short period of time.

### **Avoided Meter Costs**

Avoided meter costs are associated with not purchasing replacement meters at the same level as prior to AMI approval. Through December 31, 2023, the cost of the AMI project is offset by a reduction in standard meter costs of \$4.3 million.<sup>1</sup>

### **Fuel Saving from Decreased Customer Usage**

Meter installations began in the fall of 2022 with 25% of customers having an AMI meter at the end of December 2023. Communications encouraged customers to take full advantage of their AMI meter capabilities in order to save energy, which results in avoided fuel expense for rate payers.

On-going energy savings calculated on an annual basis are difficult to assess. However, for customers with AMI meters installed in 2022, the initial results show savings. Last year's annual report reflected LG&E and KU Residential Service customers were saving 7.24% versus an assumed rate of 0.35% on average relative to non-AMI customers (Note: Due to the annual basis for fuel savings calculations, percentage is based on a 2-month comparison). For 2023, the same subset of customers, (now with a full 12-month comparison) reflect a savings of 6.51% vs. the assumed rate of 0.35%. The Companies consider these energy savings estimates to be preliminary as the population of customers with access to interval data and the length of time customers have an AMI meter increases. In addition to having more customers with AMI meters, a full 12-month comparison will assist in balancing consumption due to weather. The Companies will continue to report on this in future annual reports.

### **Conservation Voltage Reduction**

Conservation Voltage Reduction ("CVR") is dependent upon integration with electric distribution systems. Plans are to conduct system integration with distribution systems by the fourth quarter of 2025 (See Appendix I); therefore, CVR benefits are not planned to commence until 2026.

### **Time of Day Rates**

The Companies currently have voluntary time-of-day ("TOD") rates for residential and non-residential customers with loads that do not exceed 50 kW. All non-residential customers with loads that exceed 250 kVA are already on TOD rates. AMI Meter installation began in the fall of 2022. AMI meters will provide customers with information to make an informed decision on whether a TOD rate would benefit them. The customer communication and engagement plan will let customers know about these alternative rates and how they can utilize their AMI meter to make an informed decision. Through December 2023, 35 customers with an AMI meter have moved to a residential TOD rate.

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<sup>1</sup> Avoided meter costs are reported on an annual basis aligned with the Companies fiscal calendar (January 1 – December 31).

## **Electric Distribution Operations**

Electric Distribution operations are not expected to be affected by AMI until the end of 2025,<sup>2</sup> when grid control and AMI systems are planned to be integrated. Consequently, there is nothing to report until after these system integrations occur and maybe not until 2026 or beyond when future expenditures for distribution are planned.

## **Improved Outage Response**

Important aspects of managing outages are identifying the outage area, isolating it, and then restoring service. AMI enables the Companies to know of an outage down to the individual customer as soon as it occurs without the customer taking any action. When integrated with electric distribution operations systems, the AMI system will report outages quickly and will reduce the time to accurately determine the outage location. With earlier outage detection and location, faster and more effective restoration can be achieved. This will translate into decreased crew time, overtime savings, reduced fleet costs, and lower contractor expenditures.

Integration with distribution operations began in the second quarter of 2024 and will continue through the end of 2025 (see Appendix I.); therefore, significant outage benefits are not planned to commence until the end of 2025 at the earliest and most likely not until 2026. The first report that may could have outage management benefit reporting will be the July 2026 report.

## **Management and Prediction of Outages, Overloads, and Shortfalls of Transmission and Distribution Assets**

Some distribution transformer failures may be predicted prior to failure by using AMI data for transformer load management. This earlier identification allows the Companies to move from time-based maintenance to condition-based preemptive repair or replacement of the failing transformer before it fully fails, thereby reducing the outage duration and avoiding any additional cost of an “emergency” replacement. This capability is especially important as more load is placed on the system by electrical vehicle charging which can stress transformer capacity especially during extreme heat or cold periods.

AMI data can also be used to diagnose momentary outages related to overloaded hydraulic reclosers which are not connected to Supervisory Control and Data Acquisition (“SCADA”) systems. Following weather events that cause an increase in demand, momentary outages can be plotted on a map to identify hydraulic reclosers that are operating due to load. Pockets of momentary outages that appear on the map behind hydraulic reclosers indicate a recloser that was probably operating due to load. Although the Companies have been installing intelligent reclosers since 2016 to identify these kinds of issues, there are more than 900 circuits that do not have an intelligent recloser and will benefit from the information AMI will provide. Without AMI, these operations may go unnoticed until the recloser fails altogether.

AMI can provide data for voltage management. If the average voltage of a meter is outside of the normal band, but not low enough to be considered an outage, the meter can send the voltage reading to the system operator for analysis and response. These voltage excursions will help the

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<sup>2</sup> Case Nos. 2020-00349 and 2020-00350, Exhibit LEB-3, Table 24, page A-17, The labels on Table 24 should be 2021-2030 instead of 2031-2040.

Companies identify where there may be issues in the system and can also be used to enable more advanced voltage management solutions on the distribution system.

Utilities have experienced initial success at identifying failed or failing equipment based upon information from AMI meters. Average voltage information can be used to identify transformers with windings shorted and can also identify regulators and switched capacitors that are not operating properly. When voltage information is combined with circuit data, the type of problem identified can be scripted which allows repair orders to be automatically created and dispatched. Voltages that are out of range on a single meter indicate a bad meter and a work order will be issued. Voltages out of range for multiple meters on a transformer create a repair order to swap the transformer. Voltages out of range for multiple transformers are investigated for regulator or capacitor problems.

The savings discussed above are dependent upon integration of AMI with distribution operations systems. This is planned to begin in 2025. Therefore, these benefits are not planned to commence until late 2025 or beyond. Thus, the first report that may address these benefits will be the July 2026 report.

AMI usage and demand data will be used to identify over or underutilized transformers. There is additional value in keeping larger transformers from failing due to overload or replacing them with smaller transformers. The process is very straightforward for transformers with only one customer served. The same process can be applied to smaller transformers by summing the load from all the AMI meters that are connected to the transformer. This process will identify overloaded transformers and may also identify transformers that have mis-linked meters. Additionally, this can help identify distribution losses or theft.

The Meter Operations Center is monitoring various alerts including power outages and restorations. Further project activities such as Release 5 and broader business formalization of analytical data models using a newly designed and developed data warehouse will allow improved identification of outage issues and more.

#### **Data Availability to Customers Within 4-6 Hours**

The Companies are providing electric usage data within 4-6 hours to the My Meter portal for customer use and will continue to do so as AMI electric meters are installed across the service area.

#### **Innovative Rate Design**

The Companies affirm their commitment to offer innovative rate designs to ensure customers receive benefits from AMI beyond the operational savings that will be reflected in their bills following future rate cases. The Companies will explore offering residential customers a voluntary prepay option upon full deployment of AMI and plan to utilize AMI data to guide rate design and thus would not plan to offer these rates until 2026 or later when AMI data is available for all customers.

### **Reduced Theft and Earlier Detection**

The identification of theft or the failure of metering equipment resulting in under billing of a customer is dependent upon AMI meter installation and the collection and analysis of interval data. For the roughly 889k meters installed through June 2024, ~1.7k accounts with potential issues related to theft or tampering were identified for further review. There have been ~1.9k cases of equipment failure such as high-temperature events and communication issues, which were investigated and resolved by the MOC since deployment began.

### **Customer Engagement**

The Companies developed an Advanced Metering Infrastructure Customer Engagement and Communications Plan (attached as Appendix II) that includes awareness, education, and engagement phases before, during, and after metering equipment upgrades.

The fully executed plan tactics include paid awareness advertising in areas where deployment is occurring as well as search engine marketing ads in all areas of the service territories to drive customers to the Companies' dedicated website when searching for information online. Awareness ads are placed on a variety of platforms to have the widest impact possible while also remaining targeted to only the current deployment areas at any given time. Tactics include digital media, social media, online music streaming radio, and other mediums as appropriate in each area of the media market, such as outdoor and print, to build awareness of the project and explain the benefits of the technology to the customer.

The Companies' website includes a searchable deployment map so customers can find out when meter exchanges will be coming to their area of the service territory and frequently asked questions (FAQ's) are regularly updated online for customers to find answers they seek. Informational articles, presentations, and printed flyers and fact sheets highlight the customer benefits of the project, reinforce the safety of the technology, and explain the elements of the project that are currently underway. These are offered to interested customers by dedicated AMI Ombudsmen and the customer-facing employee base.

The AMI Ombudsmen also attend community meetings, engage with community leaders and organizations, and field questions from stakeholders and customers alike during both the awareness and the education phases of the project. These employees are responsible for a maintaining a high level of customer satisfaction and their roles include:

- managing customer expectations during the deployment of AMI meters in a specific area
- establishing mutually beneficial dialogue and building strategic relationships with community leaders and organizations
- researching and resolving complex and escalated customer complaints/inquiries; and
- serving as leaders in furthering the adoption of the AMI strategic plan

In addition to the AMI Ombudsmen, the Companies' Key Accounts Managers work closely with their non-residential clients to ensure a smooth meter upgrade process with the least impact to their business operations.

Also, during the education phase, the critical direct customer notifications are executed that include emails, letters, postcards, text messages and automated outbound calls notifying customers of the approaching installations in their zip codes. The timing of these notifications is approximately four weeks prior to each customer's scheduled service date, with reminders two weeks prior and a final reminder the week prior. This tiered strategy is intended to provide customers with clear and accurate information to prepare them for and facilitate the installation of their new AMI metering equipment, provide opt-out information for those customers who choose to opt-out of receiving an advanced meter and to minimize the inconvenience to the customer by offering appointments, where necessary.

During the meter exchange, technicians who have been fully trained on the importance of both safety and creating a positive customer experience approach each premise and attempt a friendly exchange with the account holder prior to the meter exchange procedure, alerting the customers of the event and providing further information. Door hangers are left with the customer after the meter exchange providing information about the My Meter tool and where to find more information.

After meter exchanges are complete, the Companies will continue to use established communication channels like Power Source newsletter, customer mailings and the advocacy of community stakeholders to engage customers by encouraging them to take full advantage of the benefits that will be available to them upon installation of their AMI meter. The Companies will encourage them to track their energy usage and avail themselves of innovative rate structures so they can make more informed decisions and change behaviors to reduce their bills, if desired. An example of one such communications piece is a promotional marketing postcard explaining the various customer benefits of the My Meter tool that is being mailed to customers after meter exchanges are complete in each area of the service territory.

With the successful launch of Green Button *Connect My Data*® in June 2023, LG&E, KU and ODP customers with AMI meters can also access the two Green Button standard energy data formats through the My Meter usage portal.

The first post-meter-exchange customer satisfaction surveys were performed in the first quarter of 2023 and continue at the end of each subsequent quarter. The purpose of the surveys is to collect feedback on customers' experience, gauge the effectiveness of advance communications, monitor the performance of contractors, and ensure operations comply with expectations. Overall, customers show satisfaction with meter exchanges, with Q1 2024 results remaining strong with an overall satisfaction of 4.45 on a 5-pt. scale.

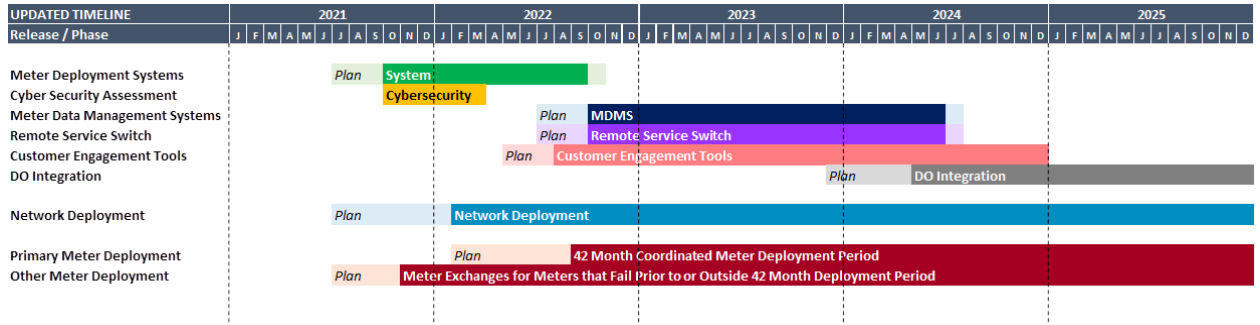
To support our employees during this project, the Change Management and Training teams prepare employees for the future-state so they can best serve our customers. A Change Agent Network of employees was established to facilitate top-down and bottom-up communication and change within the organization. The Change Agents are AMI ambassadors who help filter information out to the different areas of the business. Employee news articles keep the wider employee base informed about the status of the project and customer talking points are frequently updated and shared to assist employees in fielding questions from customers, neighbors and friends about the AMI technology and the deployment schedule.

During and after full deployment, the Companies will continue to work to identify opportunities that engage customers and third parties, and to enhance the customer experience and improve community relations.

### **III. Outage Management**

AMI meters can do much more than just provide usage and billing data. They act as a coordinated group of sensors throughout the service area. In that capacity, they can be used to provide various types of information the Companies can use to prevent and handle power outages and validate restoration.

# APPENDIX I





# Advanced Metering Infrastructure Customer Engagement and Communication Plan



**PPL companies**

**Original – October 2020**

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Updated 7/6/2023

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## Introduction and Background

The LG&E and KU Advanced Metering Infrastructure (AMI) will consist of new digital meters to replace existing electric meters for customers, new communication modules for gas meters in areas of combined electric and gas service, and a new two-way system that will allow for wireless communication between the meters and the utilities. Initially, AMI will require a significant investment in the meters and supporting infrastructure that will, over time, lead to cost savings from reductions in operational expenses associated with reading meters and service connections/disconnections/reconnections.

In addition, there are many short- and long-term benefits to the customer experience. For example, the new service will allow for enhancements in outage detection that will lead to faster and more efficient power restoration, especially when combined with automated controls that already are being installed in electric distribution. Moreover, the new meters will capture more detailed and real-time energy usage information that can:

- help customers become more informed about their usage patterns and behaviors; and
- help LG&E and KU develop and offer new programs and rate options, both of which offer the potential for lower energy bills and greater customer satisfaction.

AMI provides customers new data, tools, and control over their energy consumption. A robust customer engagement strategy is the key element in engaging customers to take advantage of the benefits AMI offers. Without robust customer communications, education, and support before, during and after deployment, the Companies are likely to encounter customer concern, resistance, and low adoption of advanced capabilities. Consequently, the Companies are committed to educating and engaging customers and other interested parties to help them understand and take advantage of the benefits of their AMI meters.

Using the Companies proven approach to communications, LG&E and KU will:

- communicate to customers the benefits of AMI; the installation process; and greater control, increased options, and improved convenience available with AMI meters.
- encourage customers, and any third parties they designate to adopt AMI meters and their associated benefits.
- establish communication channels that allows the companies to reach all customers with information about AMI meters.
- support collaboration with stakeholders to enhance customer adoption and identify opportunities for additional programs and benefits.

The LG&E and KU AMI Customer Education and Engagement Plan (Plan) reflects a customer-focused, collaborative strategy resulting from the Companies' research, customer surveys, experience with participants in the LG&E and KU voluntary Advanced Metering System (AMS) Opt-In Program, collaboration with third-party stakeholders, and benchmarking with peer utilities. LG&E and KU developed an education and engagement strategy that:

- ensures customers receive messages consistent with their preferences,
- ensures third parties receive messages that enable them to educate and engage with their constituents, and
- encourages customers and third parties to participate in discussions with the Companies about customer preferences and options.

The Plan was developed through a collective and holistic process involving the Companies and various stakeholders. LG&E and KU gained insights into how best to communicate with their customers about

AMI meters while promoting and installing meters through their voluntary AMS Opt-In Program. In addition to anecdotal feedback LG&E and KU received from participants, the Companies reached out with surveys inviting customers to share direct feedback and comments. To further shape the Plan the Companies drew upon the expertise of industry professionals, research, and benchmarking from other utilities of similar size that have deployed AMI meters system wide.

Various studies of third-party customer satisfaction surveys showed a connection between strong, proactive customer communications and positive customer experiences with AMI programs. With this in mind, LG&E and KU developed this comprehensive Plan to educate customers, as well as community stakeholders, throughout the duration of the deployment and after customers' AMI meters are installed to encourage participation and support of AMI and future programs.

The Plan includes providing customers a robust offering of information on a variety of topics, including:

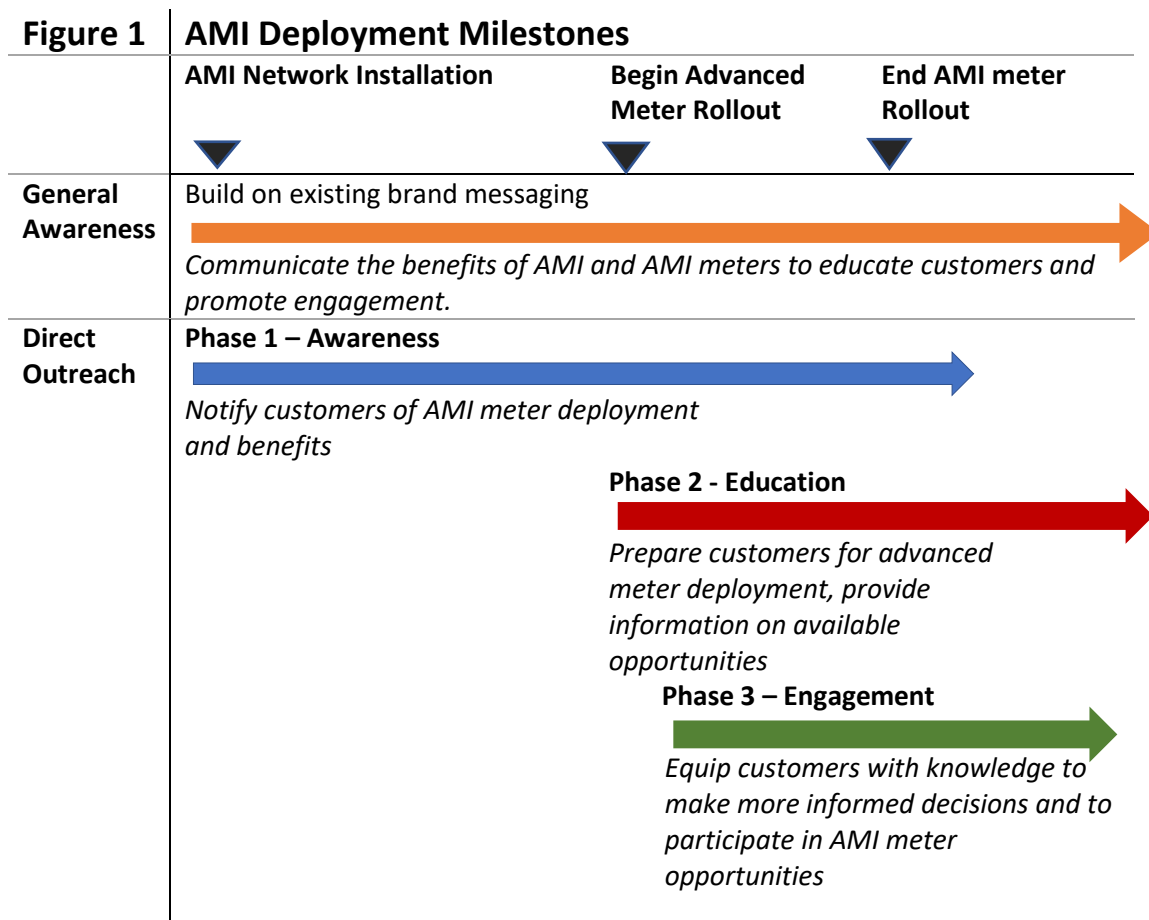
- how an AMI meter works
- the meter installation process
- new tools and features available through AMI
- the online dashboard My Meter which provides features, tools, and ways to help manage energy use

The overarching objective of the Plan is to inform customers of the benefits of AMI meters and promote engagement post AMI meter installation. The Companies have an unwavering commitment to customer service and satisfaction and implementing the action plan laid out in the Plan will ensure a positive customer experience before, during and after a system-wide rollout of an AMI.

While communications tactics will be triggered based upon AMI deployment in geographic areas as part of the multi-phase strategy, the overall campaign will reflect two positions:

- **General Awareness:** Raise customers' and stakeholders' awareness of our AMI meter rollout and educate our audiences about the benefits of modernizing our system (with specific emphasis on the role AMI meters play).
- **Direct Outreach:** Target and engage affected customers with direct communications (pre- and post-rollout) to:
  - set expectations about the installation process (what to expect),
  - how the meter works,
  - how customers benefit from AMI, and
  - the tools, information and features they can access to gain the most benefit from their new AMI meter.

Figure 1 below depicts the timing of these two positions based upon AMI deployment milestones and the multi-phase approach of the Plan discussed further below.



In executing the Plan, LG&E and KU will encourage adoption of the capabilities of AMI meters and provide customers with resources that allow them to manage their energy usage and costs. During and after full deployment, the Companies will continue to work to identify opportunities that engage customers and third parties, and to enhance the customer experience and improve community relations.

***History of Strong Customer Education and Engagement***

At LG&E and KU, the customer experience is one of our highest priorities. Employees understand and recognize the importance of ensuring a positive experience with every customer interaction. In addition, they appreciate knowing that their efforts to hold down costs and maximize performance also contribute to a positive customer experience. The Companies understand that a robust customer education and engagement plan is paramount to the success of AMI and to ensuring a positive customer experience.

In 2015, the Companies established Customer Experience Action and Advisory committees to develop and implement strategies that enhance the customer experience. Internal leaders representing all lines of business comprise each committee. Through regular communication, including strong internal messaging, a corporate website and mobile app available to all employees and contractors, the committees emphasize the importance of positive customer interactions. The committees advise all departments throughout the Companies on what, when, and how to communicate effectively with customers. The

committees are key to continuing the Companies' outstanding customer satisfaction and will be utilized to assure AMI messaging resonates with customers.

Prior to developing the Plan, the Companies conducted numerous surveys among customers to gauge their awareness and understanding of AMI meters. In addition, the Companies surveyed participants in their voluntary AMS Opt-In Program to gauge awareness and engagement. Survey results and industry research drove the development of a multi-phased communication approach. The Plan focused on three phases – Awareness, Education and Engagement – that built on the Companies' prior "Empowering Possibilities" messaging phase which launched in early 2019. As future corporate messaging transitions and is launched, the AMI customer communications will continue to align with future corporate messaging.

### *Understanding Customer Needs, Priorities and Expectations*

A successful plan must focus on understanding and anticipating the needs, priorities and expectations of customers. To that end, LG&E and KU reached out to existing advisory groups for feedback and insights into customer preferences and an understanding of AMI meters and their associated infrastructure. Respondents to our surveys provided the following insights into customers' preferences, awareness, and perceptions about AMI meters:

- **Overall Awareness:** In a brand favorability survey conducted among residential customers in April 2018, nearly 25% indicated they were familiar with the Companies' AMS Opt-In Program. When asked to describe their overall feelings about advanced meters, 45% of those surveyed indicated they felt extremely or very favorable while 37% indicated they were somewhat favorable. Extremely favorable and very favorable responses were higher among customers in Eastern Kentucky with 57% expressing favorable feelings. Generation X customers were far more likely to have favorable feelings about advanced meters (58%) than Baby Boomers (40%) and Millennials (39%).
- **Sources of Knowledge:** Customers who participated in the April 2018 brand favorability survey were asked to indicate their sources for general news and information. Three-fourths of them (75%) cited television; more than half (54%) indicated general internet; and over half (51%) cited social media. When asked for preferences for how to receive company news and information, more than half (56%) said email; 42% said a flyer with the bill; and 37% said direct mail. Other sources – LG&E and KU website, television, social media, print or digital customer newsletter – were also mentioned.
- **Feelings About Advanced Meters:** In a survey conducted from August 24 to September 8, 2020, among customers who participate in the voluntary AMS Opt-In Program, more than half the respondents expressed satisfaction with the program. Customers who are most satisfied with the program mentioned ease of use and the ability to look at detailed data and usage trends to help make informed, energy-saving decisions as reasons for satisfaction.

### Customer Education and Engagement Plan

LG&E and KU recognize the importance of engaging all market segments as well as the challenges in reaching every customer. To that end, the Plan includes customized approaches for all customers, including low income, seniors, high usage customers, customers with plug-in electric vehicles, and customers with private solar systems. The Plan, which was shaped by feedback from our customers, informs and engages customers throughout the various phases of implementation. LG&E and KU will reach out to customers to obtain feedback about their experience and adjust communication messages and channels based on customer feedback and preferences.

There is no “one size fits all” approach to communicating with customers. Customers will select the messaging methods they prefer. One of the Plan’s strengths is that it allows flexible, scalable, and measurable communications as the customer evolves and becomes more engaged. The Companies utilize tools and data that analyze which communications are most effective for educating and engaging each customer segment. The result of this analysis informs the Companies to adjust plans, communication channels, and messages to resonant with customers.

In addition, the Companies’ proprietary online customer panel is a resource to share draft communication pieces and gain direct customer feedback.

### ***Multi-Channel Communications***

The Companies are committed to customer service and satisfaction, and they plan to ensure a positive customer experience before, during and after a system-wide rollout of an advanced meter infrastructure. The overarching objective of the Plan is to inform customers of the benefits of advanced meters and promote engagement post advanced meter installation.

LG&E and KU will use a diverse range of methods to educate and communicate with customers about:

- the Companies’ plans to deploy advanced meters system-wide
- the installation process, and
- the benefits afforded by advanced meters and the supporting infrastructure

The Companies approach to communications includes using a variety of communication channels to distribute information. This may include but is not limited to, direct mail, emails, bill inserts, bill messages, outdoor signage (e.g., billboards), newspapers, radio, television, corporate website (e.g., information and videos), brochures/flyers, etc. In instances where there are key stakeholder groups (e.g., low-income agencies), the Companies will also provide education and materials to the groups to prepare them for any questions they may receive.

The Plan involved a three-phased approach that built on the Companies’ existing “Empowering Possibilities” campaign. Empowering Possibilities was a territory-wide campaign that served as an introduction and the foundation that gives all LG&E and KU customers a broad sense of the future of the energy industry, its landscape and new technologies that benefit customers and add value to the communities served by the utilities. AMI messaging to customers will continue to transition and align with future corporate messaging. For more information about the original campaign, please see Appendix A.

### ***Phase 1: Awareness***

The Awareness Phase occurs prior to the installation of a customer’s advanced meter. The Awareness Phase will include customized messages aimed at notifying all LG&E and KU customers of the Companies’ plans to deploy AMI system-wide and emphasizing the high-level benefits to customers and to LG&E and KU. The Companies will ensure customers from urban areas to more rural settings receive the messages.

When interacting across multiple channels, customers recognize the messages easier and awareness increases. Messaging around the Awareness Phase will begin soon after receiving approval for full deployment.

During this phase, messaging will emphasize AMI technologies along with benefits and opportunities to give customers more control, choice and convenience. Other messages will provide information, resources and assurance to customers who express concerns over safety, privacy and security.

### *Awareness Objectives*

- Educate all LG&E and KU customers about the Companies' plans for system-wide deployment of new advanced meters.
- Explain the reasons LG&E and KU are making this investment, with a focus on customer benefits, "What's does it do for them?"
- Educate LG&E and KU employees with a strong focus on those who have direct customer interaction so they can fully and effectively discuss the benefits and specifics of AMI with customers.
- Start to inform elected officials, media, and other stakeholders (e.g., low-income advocacy groups) generally about AMI, the benefits, and the implementation process.

### *Phase 2: Education*

The Education Phase would begin as the Companies approach meter installation in a specific area. Stakeholder communications will generally begin approximately six weeks before any advanced meter installations in an area. Direct customer communication will begin approximately four weeks prior to scheduled installation; additional communication will be deployed to each customer approximately two weeks prior to scheduled installation and again the week of the installation. The focus is on educating customers on the deployment process and the benefits of an advanced meter.

### *Education Objectives*

- Educate LG&E and KU employees with a strong focus on those who have direct customer interaction so they can fully and effectively discuss the benefits and specifics of the initiative with customers.
  - Prior to the beginning of deployment, customer-facing employees will be trained on the process, provided detailed information about the schedule, and key points about the advanced meter and the capabilities it provides customers.
- Follow up with elected officials, media, and other stakeholders (e.g., low-income advocacy groups) regarding the deployment process and timeline.
  - Approximately six weeks in advance of deployment in a specific area, the Companies will use a variety of communication channels to ensure all stakeholders are aware of the deployment schedule and the advantages of an advanced meter. This includes but is not limited to, local news interviews, newspaper articles, phone calls, etc.
- Inform and educate all LG&E and KU customers about the Companies' plans for system-wide deployment of new advanced meters.
  - The Companies will send three direct communications to customers prior to the installation of their advanced meter (i.e., two emails and/or letters and a postcard and one automated telephone call and/or text message – dependent upon each individual customer's contact information on file).

### *Messaging Initiatives*

The Education Phase will focus on AMI meter benefits and emphasize control, choice and convenience. Each deployment area will receive multiple messages through three distinct initiatives:









- 1) **Schedule and Deploy:** Provide customers with clear and accurate information to prepare them for and facilitate the installation of their new AMI meter and gas AMI module (only applicable to LG&E electric and gas customers), and inform customers of opt-out process, and address other concerns.
- 2) **Opt-Out Coordination:** Further, educate customers on advanced meter benefits and the opt-out process.



- 3) **Minimize Inconvenience:** Find ways to address concerns customers have about any inconveniences that may occur as a result of their advanced meter installation.

*Schedule and Deploy*

Specific information will be presented to the seven segmented audiences listed in the stakeholder column in the table below as a notification prior to advanced meter deployment. Given experiences with meter replacement, the Companies have decided that the most effective deployment notification should be delivered to customers approximately four weeks before their advanced meter is scheduled for installation. The initial communication will be followed by two additional communications – one approximately two weeks prior to scheduled installation and the other the week prior to installation. Doorhangers will be left the day of installation. See the table below, which depicts customer communications prior to AMI meter installation.

~6 weeks prior	~4 weeks prior	~2 weeks prior	Week prior to installation	Day of Meter Installation
<p><b>Stakeholder Communications</b></p>  <p>KYPSC Local Officials Low Income Agencies Medical Alert Special Needs Key Accounts Media</p>	<p><b>Customer Notifications</b></p>  <i>or</i> 	<p><b>Customer Notifications</b></p>  <i>or</i> 	<p><b>Customer Notifications</b></p>  <i>or</i> 	<p><b>Customer Notifications</b></p> 

This initiative will conclude when LG&E and KU inform the customer that the advanced meter has been installed and will seek to assess the customer’s satisfaction with the process. This will be done through the following actions:

- LG&E and KU will leave a door hanger on the door to notify each customer when their new advanced meter has been installed. The door hanger has instructions for accessing and registering their online account via the My Meter portal and how/when they can begin to use the functionality.
- Customers who have registered their email address with LG&E and KU will receive an email or letter notification after their new advanced meter has been installed. The communication piece includes instructions for accessing the My Meter portal.
- The Companies will periodically execute customer satisfaction surveys to assess the deployment and installation processes.

### *Opt-Out Coordination*

LG&E and KU will focus their opt-out campaigns on decreasing the number of customers who decline to allow the Companies to install an AMI meter by proactively alleviating typical concerns through awareness and education. For those customers who choose to opt-out even after reviewing the information, LG&E and KU will provide a clear opt-out process.

Opt-out information will be included in the letter/notification customers receive. Customers who wish to opt-out will be instructed to call LG&E or KU. Opt-out coordination will be handled by employees specifically trained to provide customers with accurate and up-to-date information regarding advanced meters and the available opt-out process. Front-office employees and other individuals who will be handling customer contact and meter installations will receive information about opt-out processes.

### *Minimize Inconvenience*

Consistent with each phase, LG&E and KU will design communications that are aligned with successful examples the Companies have employed in their voluntary AMS Opt-In Program, other large-scale company projects, and materials used throughout the energy industry.

LG&E and KU materials will be clear, concise, non-technical and segmented based on customer demographics. Appendix B contains samples of materials LG&E and KU have used along with drafts of materials LG&E and KU would use.

### ***Phase 3: Engagement***

The Engagement Phase starts when a customer receives an AMI meter and access to the tools necessary to better understand their energy consumption as well as optional rates available to them. The objective of the Engagement Phase is to assess and use insights gathered from customer surveys concentrating on the post installation user experience, focus groups and outreach experience to refine and promote new customer opportunities and future offerings. These activities will facilitate greater customer interaction with the Companies' programs, increase access to energy efficiency tools and information, and provide for other energy management opportunities offered by the Companies and other innovative third-party vendors.

A campaign will be developed to promote the information and benefits customers can access after their AMI meter is installed via the online My Meter portal. Additionally, LG&E and KU will highlight tools and features to customers via periodic notifications. This approach has proven to be extremely helpful during the existing voluntary program.

For example, in early 2019, the Companies launched a monthly email update to AMS Opt-In Program participants<sup>3</sup>. Each update offers information about existing – or new – tools and features available to customers via the My Meter portal. Not only have LG&E and KU seen strong open rates and interest in the email updates, but engagement on the portal increases significantly in the days after an email update is deployed.<sup>4</sup>

LG&E and KU have tools in place to increase customer engagement, and the Companies are investing more and more in digital channels. These digital channels will have the ability to gather and store customer preferences for the delivery of personalized, timely, effective, and educational communications. These communications will allow customers to make smarter energy decisions. Paired with information

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<sup>3</sup> A history of these communications can be viewed at <https://lge-ku.com/advanced-meter/roadmap>

<sup>4</sup> See Appendix D

the Companies gather from the advanced meters, the engagement tools will allow LG&E and KU to transform their relationship with their customers by proactively providing new usage insights to customers.

### *Engagement Objectives*

- Educate customers about online resources and how to access My Meter.
  - The Companies will use multiple communication channels to engage the customer (e.g., bill messages, bill inserts, corporate website, videos, etc.)
- Make it easy for customers to select energy management tools and energy efficiency offerings that are available to them based on their personal preferences.
  - For example, written materials and videos that explain each feature and how it can be used to accomplish an individual's goals.

### *Messaging Initiatives*

The Engagement Phase provides digital experiences while still recognizing that many customers prefer non-digital channels. Outreach programs will provide education materials through social and traditional channels to enhance face-to-face outreach from LG&E and KU personnel. The Engagement Phase is a long-term, holistic approach that leverages several digital and non-digital channels to engage and educate customers.

### *The Digital Experience*

Among the digital channels used for ongoing customer engagement is the My Meter portal. LG&E and KU will create added value for customers by providing access to personalized and useful energy usage data. The portal enables customers to leverage this information to gain insights into how they use energy and then turn those insights into action. Specifically, the My Meter portal:

- Provides customers with an easy, intuitive method to view their energy usage in near real time.
- Provides a customized and personalized experience anywhere, anytime and on any device.
- Provides customers the ability to download usage data in various formats, including Green Button format, which is the national standard.
- Provides improved analytical capabilities to better understand customer behavior and empower customers with tools to make informed decisions.
- Provides the ability to overlay additional data, including weather, price and comparisons to other Advanced Meter customers in the customer's zip code and throughout the LG&E and KU service territory all in graphical format.
- Utilizes a customer analytics engine that leverages advanced meter usage data to provide customers with insights and energy savings tips as well as personalized action plans to conserve and save.
- Provides customers with proactive alerts associated with projected billing, home energy use, and customized thresholds set by customers (energy use or projected cost).
- Provides the ability for customers to set markers for dates when they make certain energy improvements so they can monitor to gauge the effectiveness of their actions.

My Meter portal functionality is tailored to specific customer segments (residential, small business, large commercial) and optimized for viewing on multiple devices (e.g., desktops and tablets). The portal integrates with the LG&E and KU corporate website, which means customers experience seamless access via a single sign-in process. The multi-channel experience extends to

the front office, which allows LG&E and KU customer service employees access to the same data screens as the customer.

The end result of the My Meter portal is a low-effort, high-satisfaction digital customer experience that drives increased customer adoption. With “customers first” as the guiding principle at LG&E and KU, the My Meter portal sets the Companies’ direction while AMI provides the platform that helps bring it to life.

### *Personalized Data Insights*

An important element of customer engagement is personalization. Traditional utility communications have been largely one-size-fits-all. LG&E and KU are committed to using a software platform that sends information that is relevant to each customer’s unique situation. The information takes the form of periodic energy reports for customers, customized with information ranging from new plots to energy saving tips to benchmark comparisons. The tips can be further refined based on publicly available non-utility information about the customer, such as the age of the customer’s house. In addition to the My Meter tools listed under the Digital Experience, below are even more tools integrated into the My Meter portal that LG&E and KU will employ to increase customer engagement:

- A user-friendly, interactive visualization tool will allow customers to analyze their energy usage trends through a series of views. Customers will be able to see their data by different time periods (e.g., days, weeks, months, years). Customers also will be able to see their bill costs in addition to usage data.
- Personalized energy cost comparisons across the standard residential rate and the Companies’ two residential time-of-day rates so that customers can determine what rate offers the best value for them.
- A bill comparison tool will allow customers to compare their last bill to their previous bill or to the corresponding bill from the same time period the previous year. Comparing bills is a useful way for customers to track their energy use and identify possible causes for an increase or decrease in their bill. AMI data allows for a more personalized and detailed breakdown of bill differences, including the impacts of weather, rate plan changes, and peak versus off-peak usage.
- Modules highlighting the resources available on the online portal and encouraging customers to engage with LG&E and KU online.

The tools in the Digital Experience and Personal Data Insights are complementary to each other and will drive a customer journey for years after the deployment of AMI meters. See Appendix C for screen shots of some of the tools, data and information customers can access via the My Meter portal, including a direct mail piece postcard that highlights the functions of the online tool.

### *Engaging All Customer Segments*

There are customer segments throughout the LG&E and KU service territory that require special engagement efforts. Some customers may not be comfortable receiving messages through digital channels while others may not have access to online services. LG&E and KU will use a range of channels beyond digital means to engage customers. Engagement with non-digital, seniors, low-to moderate-income and non-English speaking customers will include the efforts of Customer Outreach Ombudsmen. These employees will determine which customer segments are not receiving the appropriate messages and take action to fill those gaps. Mail, community groups, events, social services, libraries, and government centers can all be leveraged as channels for reaching customers with education materials or personal interactions.

The Companies also acknowledge that there are customer segments (e.g., high usage customers, customers with electric vehicles, solar customers) within their service territory that may have opportunities to take part in additional offerings. As such, LG&E and KU will provide targeted messaging to these customers that will revolve around additional opportunities to become involved in energy efficiency, third-party offerings, or other ways to save.

Customer engagement will evolve over the course of AMI deployment through lessons learned, surveys, focus groups, and a building of awareness across the LG&E and KU service territory. More opportunities to engage across channels means customers will participate more and begin to adopt new behaviors.

#### ***Phase 4: Customer Engagement -Remote Service Switch and Complex Meters***

As of June 10, 2024, phases two and three (also referred to internally as Releases) of the project implemented system updates to allow for remote service switch capability on most installed AMI electric meters and as well as installation of AMI meters for customers on more complex billing rates.

##### *Promotion of Release 2: Complex Billing*

Residential service rates and general service rates began with meter deployment in September 2022. This release includes enhancements made to multiple systems to bill customers on more complex rates and meter configurations and installation of these meters is in progress.

This Release also includes system updates that enabled the automatic creation and routing of service orders for specific safety-related meter alarms.

Informing customers

Complex metering customer installations began June 10, 2024. Where appropriate, Key Account Managers work with impacted customers to ensure a smooth transition.

##### *Promotion of Release 3: Remote Service Switch*

Additional updates to systems and process in this release, also live June 10, 2024, allow AMI electric meters equipped with remote service switches to be turned on or off without rolling a truck when a customer notifies the Companies they are moving or wish to temporarily suspend their service. Eligible customer accounts may be remotely disconnected and reconnected when necessary.

Informing customers

Messaging to customers about the remote service switch capability is critical to assist them in understanding how this advanced electric meter functionality is beneficial and to assist them in learning new behaviors.

External communications, in customer-friendly language, include using our paid, owned and earned media to explain the benefits of remote service switch capability. Once a remote switch capable electric meter is in place, customers will no longer have to wait for a technician to visit their property - not for the monthly meter reading or to turn service on or off however, 24/7 access to the meter is still required by the Companies' tariffs.

The company will continue to engage customers and reinforce the benefits of the advanced metering infrastructure. This includes new information on the Disconnection Notice, Power Source newsletter articles, planned paid advertising campaigns, bill inserts and messaging,

Ombudsman outreach, and more. Since paid ad campaigns do not begin until Q3 2024, sample paid advertising and promotions of new remote service switch capability will be included in the next Plan update. Planned media include digital advertising, streaming radio ads and digital out of home boards. Community outreach efforts include collaboration with the low-income advocacy agencies to provide flyers and information to customers experiencing a disconnection.

Sample customer messages around the benefits of AMI electric meter remote service switch capabilities include:

Advanced meters offer customers new tools and services – at no additional cost.

Advanced meters allow routine activities to happen easily and remotely.

The burden of waiting for a utility truck to visit your home or business has been removed.

Remote reconnection of service is available all day, every day. No need for live agent assistance – customers are encouraged to utilize self-service reconnection options 24/7 to reconnect service after payment following a disconnection.

No reconnection fee will be charged on AMI electric meters when the remote process is used.

Faster reconnection of electric service after disconnection for non-payment.

Safer and more convenient – physical access to a customer’s property is not typically needed any longer to read the meter (e.g., do not have to worry about locked gates or pets in the yard).

Faster completion of scheduled customer requests, such as moving or temporary suspension of electric service.

Customer messaging has already begun in the form of updates to the Company website and Disconnection Notice changes. July Power Source for LG&E and KU customers has an article about the new capability and August bills will contain a bill insert.

### **Employees were trained and the project continues**

The AMI project's Change Management and Training groups worked for months to prepare training modules for employees whose core functions are directly impacted by these changes. These teams worked with the lines of business to create a schedule for comprehensive training conducted between May 6, 2024 and the June 10, 2024 implementation of Release 2 and 3 functionality. Internal online material is available 24/7 for employee reference and review.

The project team is already focusing on the last two phases of the project, which include Customer Engagement and integration with Distribution Operations. More on those phases of the project in the next Plan update.

### **Conclusion**

This Plan provides a framework to communicate and collaborate with customers and interested third parties in support of the Companies’ AMI initiative. While AMI and the My Meter portal provide technologies that support customer control, choice and convenience, the Plan will help customers and third parties better understand how to best take advantage of AMI.

The Companies combined research, past experiences, benchmarking, and outreach to develop the Plan. The Companies' collaborative relationship with customers, energy service companies, and other interested parties played an invaluable role in gaining extensive support for the effort. Energy data access, rate pilots, and additional AMI-enabled opportunities detailed in the Plan support security and convenience for customers and third parties. The Companies will continuously seek and benefit from feedback from interested parties to maintain a customer-centric focus as new AMI-enabled opportunities arise.

In summary, the LG&E and KU AMI Customer Awareness and Engagement Plan provides a robust framework for successful customer awareness, understanding and engagement as part of AMI deployment.

## *Appendix A – Awareness Phase*

This phase is key to educating customers and community stakeholders about system-wide deployment and build awareness of AMI benefits prior to and during meter exchanges through:

- Clearly communicating to customers the benefits of AMI; How a meter works; Explaining the Installation Process, Opt-Out Process and Fees; Promoting AMI’s Safety, Security, Control and Convenience; Tools and Features
- Robust outreach to all customer segments; tailoring messaging to reach customers who require special engagement efforts.
- Employing a variety of communication channels to reach all customers, including, where possible, outreach in each customer’s channel preference.
- Collaboration with Stakeholders to encourage customers to embrace the technology and adopt new behaviors.

### **Examples of customer-facing tactics utilized:**

Fall 2021

- Updates to corporate website
- Updates in AMP it Up! Monthly Emails to AMS Opt-In Participants
- Communicating to stakeholders the project, filing approvals, and timelines

January 2022

- Monthly Power Source News articles
- Paid Advertising - Search Engine Marketing keywords
- Begin to inform key stakeholder groups details of the project, e.g., Consumer Advisory Panel, Low-income advocacy groups, etc.

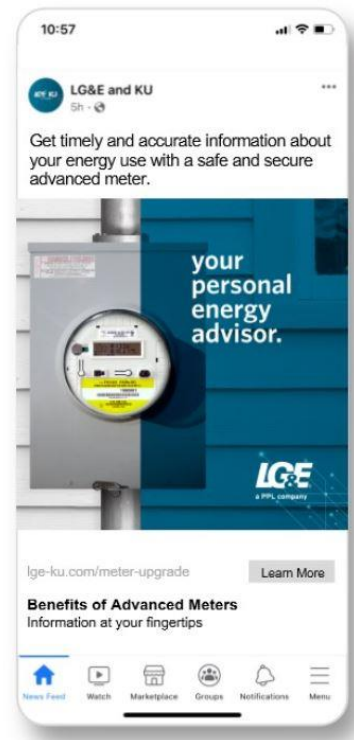
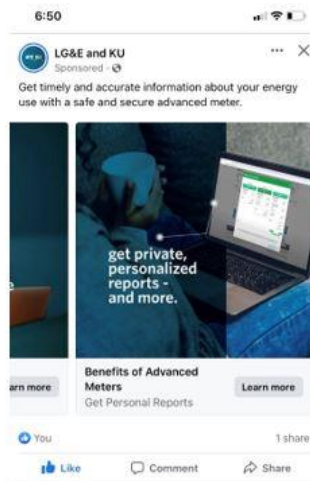
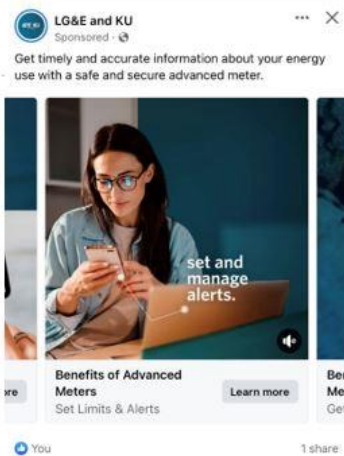
August 2022 to Current – Awareness Advertising in Market & Stakeholder Notifications

- Corporate websites live with interactive Meter Upgrade Project Map, providing customers approximate start Quarter/Year that meter upgrades are coming to their area
- Digital ads, Facebook, and Instagram ads
- Out-of-home (billboard) advertising
- Spotify radio ads where possible
- Print ads for smaller market newspapers
- Fact Sheets in English and Spanish
- Flyers, posters, and handouts in customer-facing walk-in centers and business offices until closure in June 2024. Handouts and flyers are available through our AMI Ombudsmen.
- Additional presentations to various stakeholder and advocacy groups, e.g.:
  - Consumer Advisory Panel – quarterly updates, presentations, and newsletters
  - Customer Commitment Advisory Forum – quarterly updates
  - Stakeholder outreach from AMI Ombudsmen, e.g.
    - Chambers of Commerce
    - Elected Officials
    - Mayors
    - County Judge Executives
    - Neighborhood Associations
    - Kiwanis Clubs



Post-installation surveys began Q1 2023 and are performed quarterly.

### Sample Awareness Advertising Samples



The screenshot shows the top navigation bar of the IGE KU website. It includes the logo, a menu icon, and links for 'Billing & payment', 'Start, stop or move service', 'Outages', and 'Contact'. On the right, there are links for 'Bill Pay' and 'My Account'. Below the navigation is a large banner for the 'Meter Upgrade Project'. On the left of the banner is a map of Kentucky with various regions highlighted in green and purple. To the right of the map, the text reads: 'The phased installation of new network equipment, electric meters and gas modules across the service territories began in the fall of 2022 and continues through 2025.' Below this text is a 'View map' button with an external link icon. At the bottom of the banner, a blue bar contains the text: 'Empowering a better customer experience with more tools and features — and no added costs.'

### Advanced Metering Infrastructure (AMI)

AMI will allow us to build the foundation to expand on the exceptional service we provide to our customers.

In June 2021, the Kentucky Public Service Commission approved our request to fully deploy Advanced Metering Infrastructure (AMI). The Virginia State Corporation Commission also approved the project in May of 2022 and we are excited about the prospects of bringing our customers more tools and services after meter upgrades are completed in your area.

These meter upgrades are at no additional cost to our customers. The total cost of AMI will be offset by the savings that will occur with reductions in the cost of meter reading, service requests, outage management and other automated functions that will be implemented over time.

**When will meter upgrades begin near me?**

Check our fully interactive map to see when electric meter upgrades are coming to your area at no additional cost to you — or even do a search by address to see the estimate of when the project will begin near your home or business.

[View map](#)



### Detailed and personalized energy usage data

Once installed, the new advanced meters give you access to a customized online dashboard that provides the tools, resources, and insights to better help you manage your energy usage and take steps to reduce your monthly energy bills. Soon you will be able to:

- Stay updated on your usage
- Set and manage energy usage alerts
- Learn valuable energy-saving tips

A few days after your meter is upgraded, you can register and start using your My Meter dashboard to track and manage your energy use. Learn more about My Meter's features and benefits.

[My Meter](#)

### FAQs

Select a topic category to get answers to frequently asked questions about advanced meters and the meter upgrade project.

**When will I receive my meter upgrade?**

How will you notify me before my meter is upgraded?

Do I have to be home during my meter upgrade?

Who will be performing the meter upgrades?

Will my service be interrupted when the technician exchanges my meter?

**When will I receive my meter upgrade?**

We are currently deploying advanced meters to our more than 1.3 million customers and will continue through 2025. Check out our fully interactive map above to see when the project will begin near your home or business.

The map is updated weekly, every Monday morning.

# Meter Upgrade Map available on the corporate website <https://lge-ku.com/meter-upgrade>

**LGE KU**  
PPL companies

### Meter Upgrade Project

Click the map to see when electric meter upgrades are scheduled to begin.

To search by address:

- Type the address in the search bar in the upper left-hand corner of the map.
- The map will zoom to that specific address.
- Click on the black dot to see when crews will begin to upgrade electric meters in the area.

Total Number of Meters Upgraded of 1.3M

212,527

Total Progress

Map showing service territories in Indiana, Kentucky, and Tennessee with various colored overlays indicating upgrade schedules.


## Example results from a location search:



## Appendix B – Education Phase

This phase is focused on educating customers on the deployment process and the benefits of an advanced meter.


### Sample 4-weeks Advance Notice Letter<sup>5</sup>

<p><b>Advanced Metering Infrastructure (AMI)</b> Residential Phone: LG&amp;E: 800-331-7370   KU: 800-981-0600 Business Phone: LG&amp;E: 800-331-7370   KU: 800-383-5582</p>	
<p><b>Address</b></p>	
<p>&lt;Insert Date&gt;</p>	
<p><b>Meter upgrade project</b></p>	
<p>Dear Valued Customer,</p>	
<p>In the next few weeks, trained service technicians working on behalf of LG&amp;E and KU will be in your area exchanging electric meter(s) in your property's zip code – [INSERT PREMISE ZIP CODE] – at no additional cost to you. These new advanced meters help you manage your energy use and allow us to offer new tools and services.</p>	
<p>During the meter exchange process:</p>	
<ul style="list-style-type: none"><li>• A technician from Utility Partners of America (UPA) will upgrade your meter(s). They carry photo identification, and their vehicles are marked as LG&amp;E and KU contractors.</li><li>• The meter exchange will only take a few minutes and you do not need to be present. There may be a brief disruption of power during the meter exchange. Contact UPA at 800-914-4179 if you have questions about the meter exchange.</li><li>• If you do not wish to receive an advanced meter, please visit <a href="http://lge-ku.com/meter-opt-out">lge-ku.com/meter-opt-out</a>, and fill out the form. We will contact you about the monthly charges you will incur by opting out.</li></ul>	
<p>Visit our website at <a href="http://lge-ku.com/meter-upgrade">lge-ku.com/meter-upgrade</a> to learn more about the meter upgrade process and the benefits of advanced meters.</p>	
<p>LG&amp;E and KU Energy LLC   820 West Broadway   Louisville, KY 40202   <a href="http://lge-ku.com/meter-upgrade">lge-ku.com/meter-upgrade</a></p>	

<sup>5</sup> This is a sample letter.




Sample 2-weeks Advance Notice Postcard<sup>6</sup>




**Your meter is being upgraded.**

- Stay updated on your usage
- Set and manage energy usage alerts
- Learn valuable energy-saving tips


Visit [lge-ku.com/meter-upgrade](http://lge-ku.com/meter-upgrade) to learn about the benefits of advanced meters.



**During the meter exchange process:**

 **• A technician from Utility Partners of America (UPA) will upgrade your meter.**

They carry photo identification, and their vehicles are marked as LG&E and KU contractors. The meter exchange is at no additional cost to you.

 **• The meter upgrade will only take a few minutes and you do not need to be present.**

There may be a brief disruption of power during the meter exchange. Contact UPA at 800-914-4179 if you have questions about the meter exchange.



If you do not wish to receive an advanced meter, fill out the contact form at [lge-ku.com/meter-opt-out](http://lge-ku.com/meter-opt-out). If you elect to opt-out, you'll be required to pay the fees to offset the charges associated with the manual processes required to provide your service. After filling out the online form, we will contact you about the monthly fees you will incur by opting out.

Advanced Metering Infrastructure (AMI)  
820 West Broadway  
Louisville, KY 40202

AMIP1 3/23

<sup>6</sup> This is a sample postcard.

Sample Door Hangers (Examples)<sup>7</sup>

Success!	Your attention is required.
<p>Today a technician successfully upgraded the following equipment at no additional cost to you:</p> <p><input type="checkbox"/> <b>Electric Meter</b>    <input type="checkbox"/> <b>Gas Module</b> (LG&amp;E only)</p> <p>Your new meter gives you access to the tools, resources and insights to better help you manage your energy usage and take steps to reduce your monthly energy bills. Soon you will be able to:</p> <ul style="list-style-type: none"> <li>• Stay updated on your usage</li> <li>• Set and manage energy usage alerts</li> <li>• Learn valuable energy-saving tips</li> </ul> <p>In a few days, you can register and start using your My Meter dashboard to track and manage your energy use. Visit <a href="http://lge-ku.com/mymeter">lge-ku.com/mymeter</a> to register and learn more about the features and benefits of the advanced meter.</p> <p>Visit <a href="http://lge-ku.com/meter-upgrade">lge-ku.com/meter-upgrade</a> to learn more about our project to replace all meters within our service territory.</p> <p>Today's Date <input style="width: 200px; height: 20px;" type="text"/></p>	<p>Today a technician was unable to upgrade the following equipment:</p> <p><input type="checkbox"/> <b>Electric Meter</b>    <input type="checkbox"/> <b>Gas Module</b> (LG&amp;E only)</p> <p>The technician was unable to complete the exchange because of the following reason(s):</p> <p><input type="checkbox"/> Pets                      <input type="checkbox"/> Bushes/Shrubs</p> <p><input type="checkbox"/> Obstruction              <input type="checkbox"/> Meter Inside</p> <p><input type="checkbox"/> Locked Gate              <input type="checkbox"/> Safety Issue</p> <p><input type="checkbox"/> Other: <input style="width: 150px; height: 20px;" type="text"/></p> <p>Please call <b>800-914-4179</b> at your earliest convenience to schedule a time for a technician to return. Normally, the entire process can be completed in a few minutes. You do not need to be present. There may be a brief disruption of power during the exchange. This meter upgrade is at no additional cost to you.</p> <p>Today's Date <input style="width: 200px; height: 20px;" type="text"/></p>
 <p>AMIUPA13/23</p>	 <p>AMIUPA13/23</p>

<sup>7</sup> These are sample door hangers.

## Fact Sheets and Informational Articles (Examples)<sup>8</sup>

### Privacy Fact Sheet Advanced Metering Infrastructure

#### What is an Advanced Meter?

Advanced meters give customers more timely information on their energy use. After installation, customers will also be able to access a customized online dashboard that can help them track and compare their energy usage by day, week, month or year.

While most meters record a running total of the energy used, an advanced meter can record energy usage data in 15, 30 or 60 minute increments. Generally, the meter will only transmit the usage information for a few minutes each day.

When we build out this network of advanced meters over the next several years and install the necessary supporting infrastructure, these technologies will then work together and help us more quickly detect when an outage occurs and then communicate with our system to help identify its location.

#### Will Advanced Meters keep my data safe and secure?

**YES** All customer information is confidential and only available to the customer and authorized utility personnel as needed for information such as maintenance, billing and customer service. We place the utmost importance on our customers' safety and security, and we have stringent practices in place to protect their energy usage information.

#### Are Advanced Meters capable of invading my privacy?

**NO** Advanced meters measure how much energy you use, based on time of day, not how you use that energy. Unless you install a home energy management system, advanced meters cannot tell whether the energy used is from your oven, air conditioner, or hairdryer.

Utilities adhere to strict policies, following state laws that regulate the use of personal information.



**Meter Upgrade Project**  
To empower our customers with detailed and personalized energy usage data, and to help the Companies better respond to and restore power outages, LG&E and KU will upgrade metering equipment at no additional cost to customers. For more information about Advanced Metering Infrastructure visit [lge-ku.com/meter-upgrade](http://lge-ku.com/meter-upgrade).

**LG&E KU**  
PP&L companies

### Health Fact Sheet Advanced Metering Infrastructure

#### What is an Advanced Meter?

Advanced meters give customers more timely information on their energy use. After installation, customers will also be able to access a customized online dashboard that can help them track and compare their energy usage by day, week, month or year.

While most meters record a running total of the energy used, an advanced meter can record energy usage data in 15, 30 or 60 minute increments. Generally, the meter will only transmit the usage information for a few minutes each day.

When we build out this network of advanced meters over the next several years and install the necessary supporting infrastructure, these technologies will then work together and help us more quickly detect when an outage occurs and then communicate with our system to help identify its location.

#### Can Advanced Meters affect my health?

**NO** The World Health Organization (WHO) has concluded that no adverse health effects have been demonstrated from exposure to low-level radio frequency energy such as that produced by advanced meters<sup>1</sup>.

Radio frequency signals also weaken significantly as the distance between you and the device increases. The casing of an advanced meter, as well as wall construction materials, also decreases the level of RF energy in the vicinity.

Please note that advanced meters transmit RF energy only for short periods each day. In fact, an Electric Power Research Institute (EPRI) analysis of 47,000 advanced meters installed in southern California found that 99.5% of the meters were transmitting for approximately three minutes or less daily<sup>2</sup>.

<sup>1</sup> Source: <http://www.who.int/peh-emf/about/WHOEMF/en/Pages/2006>  
<sup>2</sup> Source: Kirtley, C., An Investigation of Radio Fields Associated with the Smart Meter Issue, Palo Alto: Electric Power Research Institute, 2010

#### Radio Frequency Power Density Levels of Common Devices (in microwatts/cm<sup>2</sup>)

Radio frequency by Advanced Meters are below levels produced by cell phones, baby monitors, satellite TV's and microwaves.


Source: Electric Power Research Institute (EPRI), Radio-Frequency Exposure Levels from Smart Meters: A Case Study of One-Month (February 2010), California Council on Science & Technology, Health Impacts of Radio Frequency from Smart Meters (January 2010), The Health Threat from Smart Meters, Utilities Technology Council Journal (April 2010), FCC, Radio Frequency Safety (FCC, Interference - Challenging the Safety of Smart Meters, Hazards of Smart Grid Initiative, Pilot 287 Emissions Testing Summary Report V2.0, Smart Meters, Household Equipment, and the General Environment (December 10, 2010), International Agency for Research on Cancer, IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals (January 2002)

**Meter Upgrade Project**  
To empower our customers with detailed and personalized energy usage data, and to help the Companies better respond to and restore power outages, LG&E and KU will upgrade metering equipment at no additional cost to customers. For more information about Advanced Metering Infrastructure visit [lge-ku.com/meter-upgrade](http://lge-ku.com/meter-upgrade).

**LG&E KU**  
PP&L companies


### THE 411 ON AMI

**Did you know?** The "A" in AMI stands for "Advanced." After installation, you will have access to a customized online dashboard that can help you track and compare your energy usage by day, week, month or year, providing you with advanced tools to manage the energy you use and the money you spend. Visit [lge-ku.com/ami](http://lge-ku.com/ami) to learn more.



### THE 411 ON AMI


**Did you know?** The "M" in AMI stands for "metering." With AMI, the new two-way system will allow for wireless communication between your meters and LG&E. Visit [lge-ku.com/ami](http://lge-ku.com/ami) to learn more.



### WHAT IS AN ADVANCED METER?

Advanced meters provide private, two-way communications between energy companies and customers. These new meters communicate usage information to KU's secure communication network several times a day and don't need to be manually read. Data from your advanced meter is used to generate your bill and allows us to deliver a higher level of service to you.

Visit our website at [lge-ku.com/meter-upgrade](http://lge-ku.com/meter-upgrade) to learn more.



<sup>8</sup> These are sample fact sheets and informational articles.

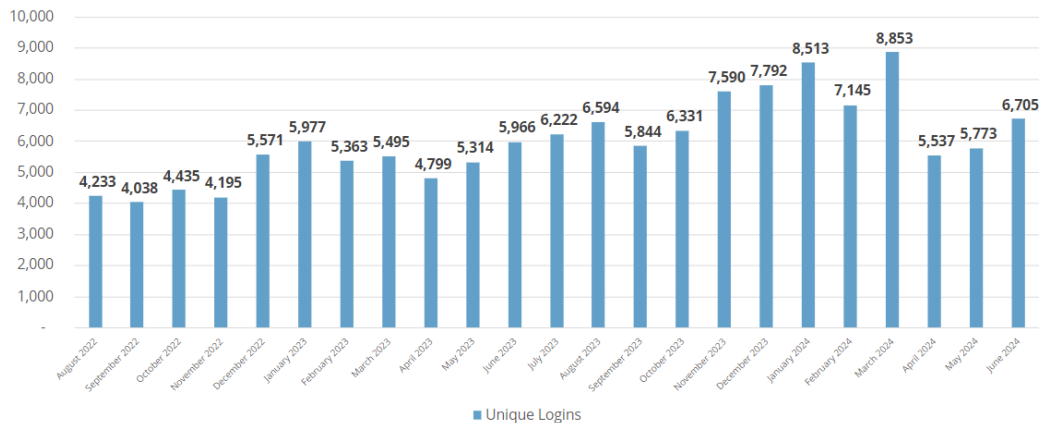
## Appendix C – Engagement Phase

This phase is focused on the promotion of the information and benefits to customers after meters are upgraded. Customers can access the My Meter online portal after their AMI meter is installed. This phase will highlight tools and features to customers via periodic notifications, as this approach has proven to be extremely helpful during the existing voluntary program. In addition, a My Meter email address has been established to field customer inquiries at [my.meter@lge-ku.com](mailto:my.meter@lge-ku.com) and emails are being sent to customers from [My.Meter@lge-ku.com](mailto:My.Meter@lge-ku.com) during the customer notifications process to reinforce the My Meter tool and resource.

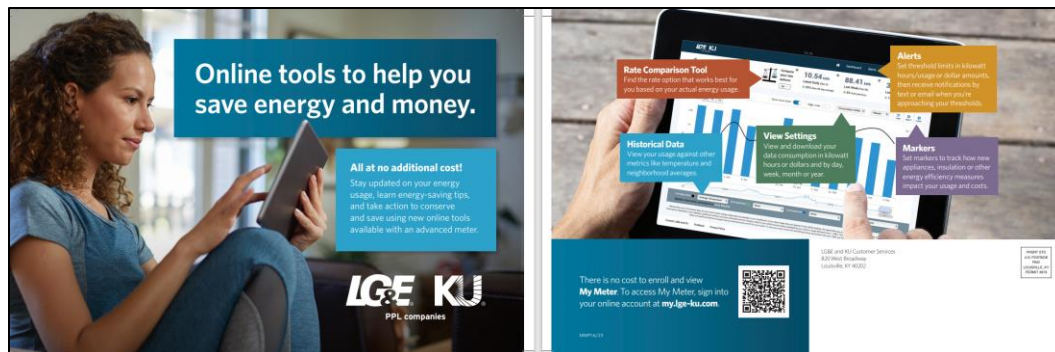
### My Meter monthly users

The number of My Meter monthly users has grown as meter exchanges are completed and customers learn more about the tools and resources available with an advanced meter. The bar chart below shows unique logins into the My Meter tool each month. Continued growth is expected after additional promotions are launched to customers following the Customer Engagement enhancements in Q4 2024.

### My Meter User Data



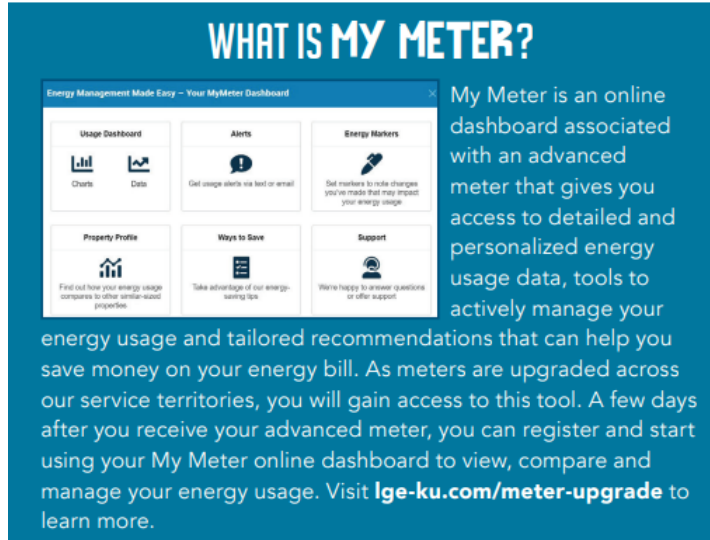
### My Meter promotional postcard via home mailing after upgrade





## My Meter promotions via customer newsletters

My Meter tips and tools are highlighted quarterly in monthly Power Source customer newsletters to continue to reinforce to customers the benefits of advanced meters as deployment continues.



**WHAT IS MY METER?**

Energy Management Made Easy – Your MyMeter Dashboard

<b>Usage Dashboard</b> Charts Data	<b>Alerts</b> Get usage alerts via text or email	<b>Energy Markers</b> Get markers to make changes you've made that may impact your energy usage
<b>Property Profile</b> Find out how your energy usage compares to other similar-sized properties	<b>Ways to Save</b> Take advantage of our energy-saving tips	<b>Support</b> We're happy to answer questions or offer support

My Meter is an online dashboard associated with an advanced meter that gives you access to detailed and personalized energy usage data, tools to actively manage your energy usage and tailored recommendations that can help you save money on your energy bill. As meters are upgraded across our service territories, you will gain access to this tool. A few days after you receive your advanced meter, you can register and start using your My Meter online dashboard to view, compare and manage your energy usage. Visit [lge-ku.com/meter-upgrade](http://lge-ku.com/meter-upgrade) to learn more.

## Green Button *Connect My Data*<sup>®</sup> made available June 2023

The Green Button initiative allows customers to securely access, download and send their monthly or incremental energy use data to third-party applications or service providers choosing from two industry-standard formats:

- Green Button *Download My Data*<sup>®</sup>
- Green Button *Connect My Data*.

These apps and service providers provide tools that can help customers manage their energy consumption. Customers can securely access and download the data at their convenience. Then, they can save it, share it, or authorize third parties to access it directly, when, and how they prefer. Green Button *Download My Data* was already available to customers with advanced meters. With the successful launch of Green Button *Connect My Data* in June 2023, LG&E, KU and ODP customers with AMI meters can access both Green Button standard energy data formats through the My Meter usage portal.

The Green Button initiative is just one of the tools and resources for our customers that will continue to roll out as the AMI project progresses.



Green Button  
**Connect  
My Data**<sup>®</sup>



Green Button  
**Download  
My Data**<sup>®</sup>

\* GREENBUTTON CONNECT MY DATA and GREENBUTTON DOWNLOAD MY DATA are registered trademarks owned by the U.S. Department of Energy.

## Usage Dashboard – Access and Home Page

Customer communications continue to encourage use of the My Meter online tool to download data, set markers, use alerts and notifications – and more. An example of this is an email to customers with more than 13 months of My Meter usage explaining how data can be viewed and downloaded from the tool.

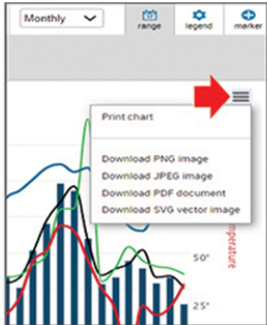
LGE KU  
PPL companies

Dear Valued Customer,

Advanced electric meters provide information, tools, and resources to help you manage your energy use when you log in to My Meter.

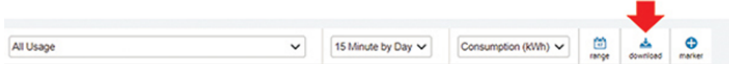
If you have already checked out the My Meter tool, you may be familiar with viewing your usage data on a chart, but did you know you can print those charts and/or download the images? Here's how:

- Click on the hamburger on the top right of the chart to see the options for downloading images.
- Or click on "Data View" to use a calendar-style format.
- With either view, you can see your 15-minute interval data for up to 13 months. To keep these details, download your data regularly.



After 13 months, daily usage information will be available; however, the detailed data for every 15-minute increment will no longer be accessible.








To save your personalized data, click the download button located between the range and marker icons.



You can also set alerts or energy markers to receive notifications in near real time or an email each week that shows changes in your energy use. To request these options and more, check out "Your MyMeter Dashboard."

The Home Page, or Dashboard, is used in many of the My Meter promotions to reinforce the user-friendly and convenient tool.

Energy Management Made Easy – Your MyMeter Dashboard
×

<p><b>Usage Dashboard</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">   <small>Charts</small> </div> <div style="text-align: center;">   <small>Data</small> </div> </div>	<p><b>Alerts</b></p> <div style="text-align: center;">   <small>Get usage alerts via text or email</small> </div>	<p><b>Energy Markers</b></p> <div style="text-align: center;">   <small>Set markers to note changes you've made that may impact your energy usage</small> </div>
<p><b>Property Profile</b></p> <div style="text-align: center;">   <small>Find out how your energy usage compares to other similar-sized properties</small> </div>	<p><b>Ways to Save</b></p> <div style="text-align: center;">   <small>Take advantage of our energy-saving tips</small> </div>	<p><b>Support</b></p> <div style="text-align: center;">   <small>We're happy to answer questions or offer support</small> </div>

## Usage Dashboard – Charts



Can you tell me more about the charts?

9



Want to know more about your near real-time usage?

10



How do I compare my energy usage over time?

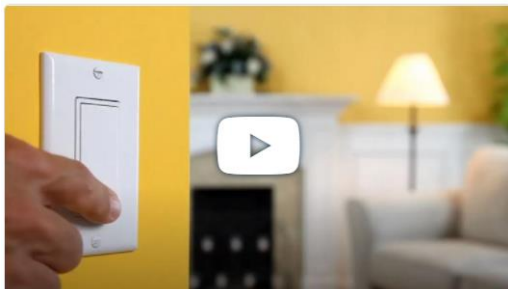
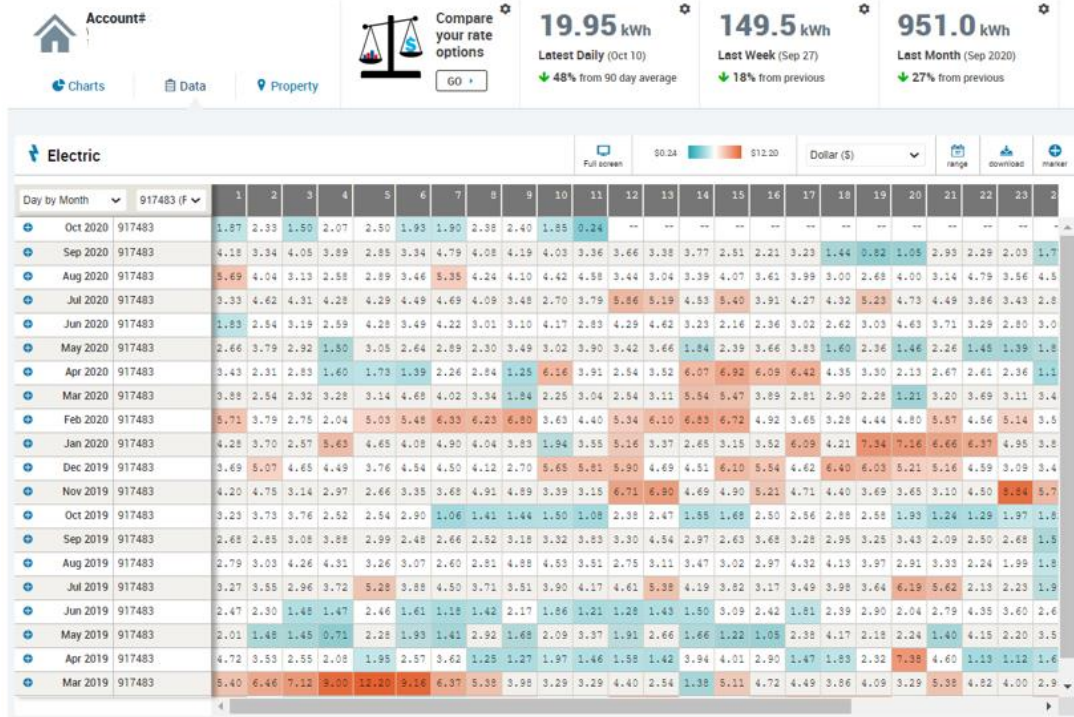
11

<sup>9</sup> <https://youtu.be/nhJ5lcEwvvk>

<sup>10</sup> <https://youtu.be/WD0N0qlA8zA>

<sup>11</sup> [https://youtu.be/tvz0\\_3PMom0](https://youtu.be/tvz0_3PMom0)

# Usage Dashboard – Data



I want to know more about the data I see in my MyMeter dashboard.



How can I use my MyMeter data to save energy in my home?

12,13

<sup>12</sup> <https://youtu.be/57f8WicBKny>

<sup>13</sup> [https://youtu.be/DeCgv\\_TTRcE](https://youtu.be/DeCgv_TTRcE)

## Alerts – Notifications

### Add Threshold Notifications ✕

**Notification Details**

Location  ▾

Service Type  ▾

Meter  ▾

---

**Threshold Details**

Notify me when  ▾ usage is  ▾   ▾

You currently average **30.4288** kWh per day , **213.0018** kWh per week, and **912.8647** kWh per month on meter **917483 ( Residential Electric Service )**

---

**Recipient Details**

Contact Method  ▾ Email

---

Delivery Method Enabled

There are no recipients for this notification. Please fill out the recipient details section and click the "Add Recipient+" button to add recipients to the notification.



**What are "alerts?"**

14

<sup>14</sup> [https://youtu.be/BP2\\_xuReeKU](https://youtu.be/BP2_xuReeKU)

# Energy Markers

The dashboard displays account information and energy usage statistics. The 'Energy Markers' section is currently empty, showing a message: "There are currently no markers for this property or service." A form is open to add a new marker, with the following fields:

- Type: Travel
- Start Date: 10/11/2020
- Start Time: --:--
- End Date: 10/11/2020
- End Time: --:--
- Description: (empty text area)

Buttons at the bottom of the form include "View All", "Cancel", and "Add Marker".



What is an Energy Marker®?

15



What is the Energy Challenge?

16

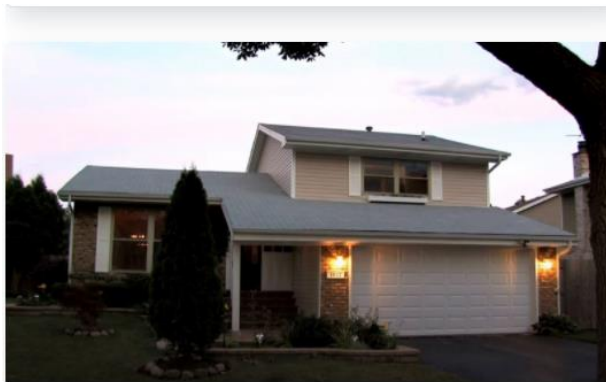
<sup>15</sup> <https://youtu.be/GIK7uxoGNpo>

<sup>16</sup> <https://lge-ku.com/node/16246>



## Property Profile

The screenshot shows the LG&E KU MyMeter dashboard. At the top, there's a navigation bar with 'Dashboard', 'Notifications', and 'Usage History'. Below this, the account number is partially visible as '059-...'. There are three energy usage cards: '19.95 kWh Latest Daily (Oct 10)' with a 48% decrease from the 90-day average, '149.5 kWh Last Week (Sep 27)' with an 18% decrease from the previous week, and '951.0 kWh Last Month (Sep 2020)' with a 27% decrease from the previous month. A 'Compare your rate options' button is also present. The 'Property Profile' section shows 'Location #: 1' and a 'Details' form with fields for Name, Primary Use, Total Sq Ft, Occupants, and Year Built. A 'Home Energy Yardstick' section explains the energy efficiency score and includes a 'SCORE' button. A 'Profile 0% Complete' section encourages users to complete their profile for better alerts. A footer contains contact information, a language selector, and version information: 'v5.1.5.3 Powered By: mymeter'.



### How do I complete my Property Profile?

17

<sup>17</sup> <https://lge-ku.com/node/16246>

## *Appendix D – Customer satisfaction survey feedback*

### Objective:

- Collect feedback on residential customers' experience with AMI installation
- Gauge effectiveness of advance communications about AMI and the meter exchange process
- Monitor the performance of contractors completing the meter exchanges
- Ensure that operations comply with expectations

### Methodology:

- Quarterly data collection among residential customers with a completed meter exchange
- This survey is administered using mixed-mode phone and online (email invitations)
- Among residential customers in the LG&E and KU territory
- Sample is provided the first week after quarter-end
- The study is conducted at the 95% confidence level

### **Results from Q1 2024 Survey:**

Overall, LG&E and KU customers were satisfied with the meter exchange (4.45 on a 5-pts scale). 5 means “completely satisfied” and 1 means “not at all satisfied.”

Those recalling the advance notifications were more satisfied with their experience than those who did not recall the advance notifications.

The Q2 2024 Survey to field in mid-July.



Appendix E – Remote Service Switch Samples

Updated Sample Disconnection Notice for a customer with an advanced electric meter:

**KU**  
a PPL company

Mailed 6/25/24 for Account # 3000-0000-1234

DELINQUENT AMOUNT DUE **\$511.85** FINAL PAY DATE **7/8/24**

App, online or phone payments made before 7 pm ET will be posted same day

Account Name: JOHN SMITH

Service Address: 123 MAIN ST GEORGETOWN KY

Payment Options (fees may apply): Mobile app - KU GO mobile app Online - ku-ku.com Phone - (800) 961-0600, press 1-2-3

Customer Service: For fastest service, use our mobile app, available at

**CUSTOMER ASSISTANCE** (Continued)

Scott County

Bluegrass CAA  
701 Stone Drive #10  
Georgetown, KY 40324  
(502) 963-9403  
www.bluegrasscommunityaction.org

**DISCONNECTION NOTICE**

Your account is past due. If the Delinquent Amount Due is not received by the **Final Pay Date**, your service will be subject to disconnection. **Advanced Electric Meters may be remotely disconnected.**

If disconnected: The ENTIRE Delinquent Amount Due must be paid and you must request reconnection through our mobile app, online My Account, or our automated phone system. For same day reconnection, requests must be made by 5 p.m. ET. Requests received after 5 p.m. ET will be reconnected next day. A reconnect fee and deposit may be required as a condition of reconnection. Advanced Electric Meters may be remotely reconnected and will not be charged a reconnection fee.

Unauthorized reconnection of service is punishable by law.

**NEED ASSISTANCE?**

You may be eligible to receive financial assistance to help you pay your bill.

Please see the back of this notice for community assistance agencies near you.

More information can be found at ku-ku.com/assistance-programs.

**\$ TO AVOID**

Make your payment using listed above.

Avoid disconnection by making a Partial Payment Arrangement on the rest of this notice.

Payment Arrangements through our mobile app (1-2-2-1).

Unpaid payment arrangement amount will be due date.

The Final Pay Date will be if your service is disconnected, call us at 800-961-0600.

Final Pay Date: 7/8/24 **\$511.85**

Total Amount Enclosed:

**KU**  
a PPL company  
PO Box 771670  
St. Louis, MO 63177-1670

Account # 3000-0000-1234  
Service Address: 123 MAIN ST GEORGETOWN KY

JOHN SMITH  
123 MAIN ST  
GEORGETOWN, KY

0203000000012340000000051185000

**DISCONNECTION NOTICE**

Your account is past due. If the Delinquent Amount Due is not received by the **Final Pay Date**, your service will be subject to disconnection. **Advanced Electric Meters may be remotely disconnected.**

If disconnected: The ENTIRE Delinquent Amount Due must be paid and you must request reconnection through our mobile app, online My Account, or our automated phone system. For same day reconnection, requests must be made by 5 p.m. ET. Requests received after 5 p.m. ET will be reconnected next day. A reconnect fee and deposit may be required as a condition of reconnection. Advanced Electric Meters may be remotely reconnected and will not be charged a reconnection fee.

Unauthorized reconnection of service is punishable by law.

**NEED ASSISTANCE?**

You may be eligible to receive financial assistance to help you pay your

**Service Address:**

**Payment Options**  
(fees may apply)

**Customer Service:**

**\$ TO AVOID**



Make your payment listed above.  
Avoid disconnection OR by making a Partial Payment Arrangement on the rest of this notice.  
Payment Arrangements through our mobile app (1-2-2-1).

Sample bill insert:

If your meter has been upgraded to an advanced electric meter, you now have the extra benefit of remote electric service turn-on and turn-off—removing the burden of waiting for a utility truck to visit your home or business.

You will still need to contact us when you are moving, but you typically won't need to wait for a field service technician or make an appointment. Advanced meters allow all these routine activities to happen easily and remotely.


As an added benefit, there will no longer be a reconnection fee charged for turning on service when the new remote process is used. To learn more, visit [lge-ku.com/connect](http://lge-ku.com/connect).



00301377

## No more waiting on a truck.

Advanced meters offer customers new tools and services — at no additional cost.




Power Source customer newsletter article:

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ies

help lower your energy bill.

### AMI UPDATE: NO MORE WAITING ON A TRUCK



If your meter has already been upgraded to an advanced electric meter, you now have the extra benefit of remote electric service turn-on and turn-off – removing the burden of waiting for a utility truck to visit your home.

You will still need to contact us when you are moving, but you typically won't need to wait for a field service technician or make an appointment. Advanced meters allow all these routine activities to happen easily and remotely.

As an added benefit, there will no longer be a reconnection fee charged for turning on service when the new remote process is used. To learn more, visit [lge-ku.com/meter-upgrade](http://lge-ku.com/meter-upgrade).

Created a new webpage, [lge-ku.com/connect](http://lge-ku.com/connect), to reinforce the ease of AMI electric remote service switch reconnection after payment by using self-service options. This page also contains links to the updated [Meter Upgrade Map](#) webpage and the [My Meter](#) tool information.

**Need to connect service?**

We are making it easier than ever to [start, stop, or move](#) your utility service from one location to another - or to reconnect your service following a disconnection.

[Start, stop or move service](#)

**Need reconnection?**

If you need to be reconnected after payment, you can schedule your service to be reconnected through one of the following options:

- [My Account](#)
- [Mobile app](#)
- By calling us at:
  - LG&E: 502-589-1444 or 800-331-7370 (1-2-2-2-1 for fast path option)
  - KU/ODP: 800-981-0600 (1-2-2-2-1 for fast path option)

Customers with an advanced electric meter will not be charged a reconnection fee if the remote process is used. Other fees may apply.

**How to request reconnection through the mobile app**

**How to request reconnection through My Account**

**Start service**

You will need to provide:

- Primary and joint account holder's (if any) full Social Security number(s).
- Location and contact information.
- Access to meter location.

[Start service request](#)

**Stop service**

You will need to provide:

- Account number and the last four digits of the account holder's Social Security number.
- Location and contact information.
- Access to meter location.

[Stop service request](#)

**Move service**

You will need to provide:

- Primary and joint account holder's (if any) full Social Security number(s).
- Location and contact information.
- Access to meter location.
- Your previous account number.

[Move service request](#)

**Information at your fingertips**

Learn more about the benefits of My Meter.

[My Meter](#) →

**When will I receive my meter upgrade?**

Check our fully interactive map to see when electric meter upgrades are coming to your area.

[Meter upgrade map](#)