Louisville Metro Council **Public Works Committee**

February 12, 2019 Steve Denning, Group Leader, Line Maintenance & Construction Jerry Helton, Electrical Engineer Marianne Butler, Manager, Community Initiatives

PPL companies



PPL companies

Outsmarting outages with new technology

- We're continually investing in our electric system to further harden our equipment and ensure we continue providing you and all of our customers with safe, reliable electric service for years to come.
 - This includes programs like our year-round Powerline Tree Clearance program to help keep overhead powerlines clear of limbs and detect issues in need of repair, as well as ongoing system enhancements.
 - We're also investingin a \$112-million project, called Distribution Automation, that will help us better detect outages and deliver safe, reliable service to our customers.





Distribution Automation at work

- We're installing new automated controls along our powerlines that will reduce the number of power outages and, if the power does go out, help us restore service faster than ever before.
- The new controls will communicate with our system to help identify the location of a power outage and allow us to immediately reroute power around the impacted area, when we can, restoring service to as many customers as possible
- Installation of this equipment will continue over the next several years, but already, we're seeing its positive impacts in the form of fewer outages for customers and less time without power, when outages do occur.
- Since we began installing these electronic reclosers, about 43,000 interruptions for customers have been prevented — saving customers more than 16 million minutes when they would have been without power.



Distribution Automation at work

<u>https:// youtu.be/Lthr8mnBpR8</u>



Technology driven

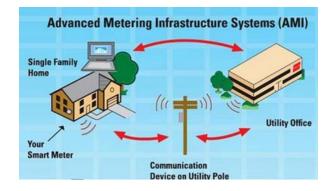
- Receive information from LG&E via text by signing up through your online account. With the app you can report outages and receive information about cycle trimming and restoration.
- LG&E is committed to offering the most reliable and affordable service to our customers. We currently have a RFP out on renewable energy. This allows to see where the market is on this technology and do cost analysis for our customers.
- LG&E has a diverse fleet with hydro, solar, coal and combined natural gas. Customers can also purchase solar shares.







Technology of the future



Advanced Meters

— Just over 6,800 LG&E customers have smart meters in a pilot program

- Advanced meters offer customers near-real-time energy-use information through a user-friendly online dashboard that provides insights into their energy consumption — data to help them make decisions which can save them money. Many customers in the Early Adopter Program have shown their ability to save energy with the information provided through the MyMeter portal.
- Advanced meters also allow utilities to better determine where outages are occurring, quickly diagnose the cause of the outage and, at times, respond more efficiently. In fact, power can sometimes be restored even before a customer reports an outage.
- The meters also provide streamlined meter-related processes and establish a foundation for a stronger energy grid, especially when combined with other automated technology.



Streetlights in Metro Louisville

- Many different types of lights in Louisville Metro
 - -Private pay lights maintained by LG&E
 - -Business paid lights maintained by LG&E
 - -Metro maintained lights
 - —State maintained lights along the expressways and entrance/exit ramps
 - -LG&E maintained lights within the Urban Service District for Metro





Reporting a street light outage

- Call 311
- Call LG&E customer service 502589-4111
- Report online at Ige-ku.com, select outages then street light outages
- Please know the location of the light
 - —Closest address
 - -In front of rear of property



Investment in Capital

- LG&E has spent over \$1 billion in the last 6 years at plants in Jefferson County–Millcreek, Cane Run and Ohio Falls–reducing CO2 emissions while increasing capacity
- LG&E and Kentucky Utilities is committed to spending \$5 billion over the next four years to improvements on the grid which include upgrading technology and replacing 60 year old wood poles with steel for our transmission lines
- This work improves reliability for customers and hardens the grid for generations



