

# Evergy





### Strategic Priorities and Focus

#### **CORPORATE STRATEGY**



#### Strategic Focus

#### Reliability

Improved resiliency and reliability for customers

Flexible grid to enable demand transformation

#### **Affordability**

Productivity enhancements and technology deployments to lower costs and improve service

Growth-driven improvements in affordability

#### Sustainability

Advancing clean energy while ensuring reliability and affordability

Defined pathway to responsible fleet transition and necessary transmission infrastructure

#### Strategic Priorities



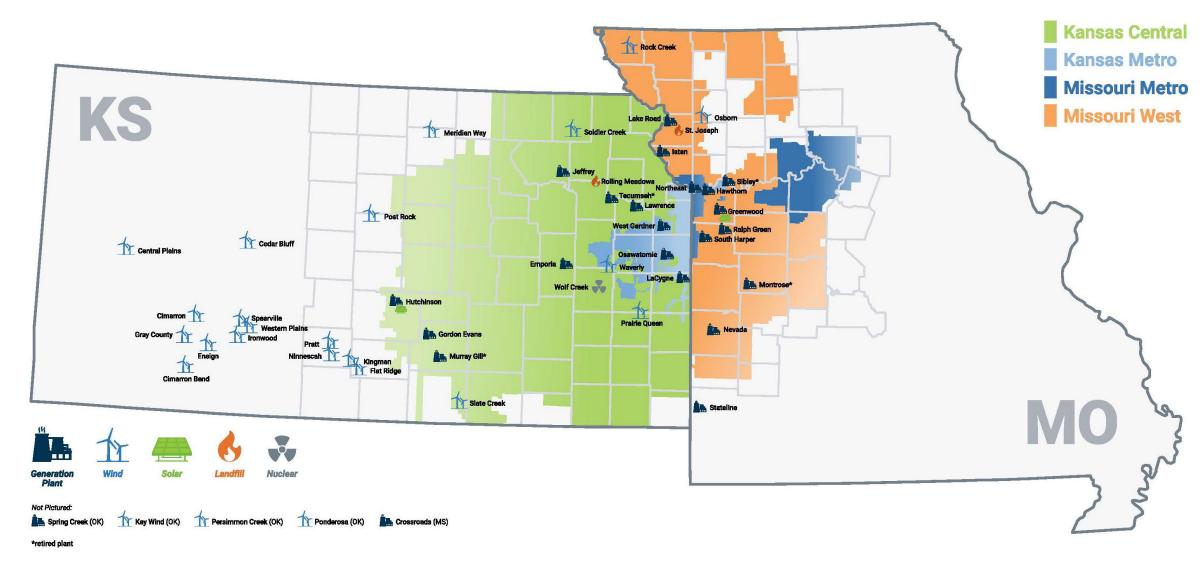
Evergy is focused on driving a continuous improvement culture that consistently delivers against our affordability, reliability and sustainability objectives.







## **Combined Service Area**



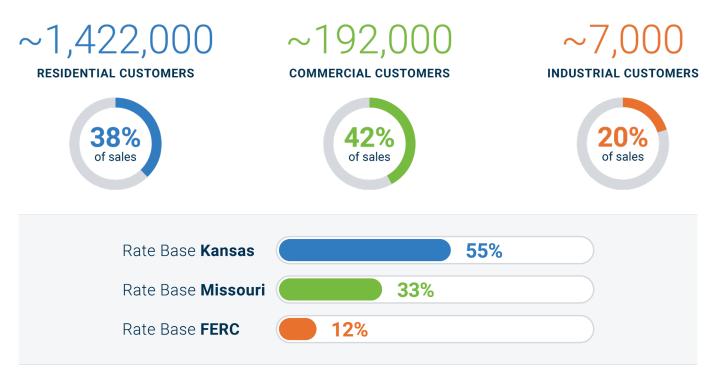
Evergy





## Who We Serve

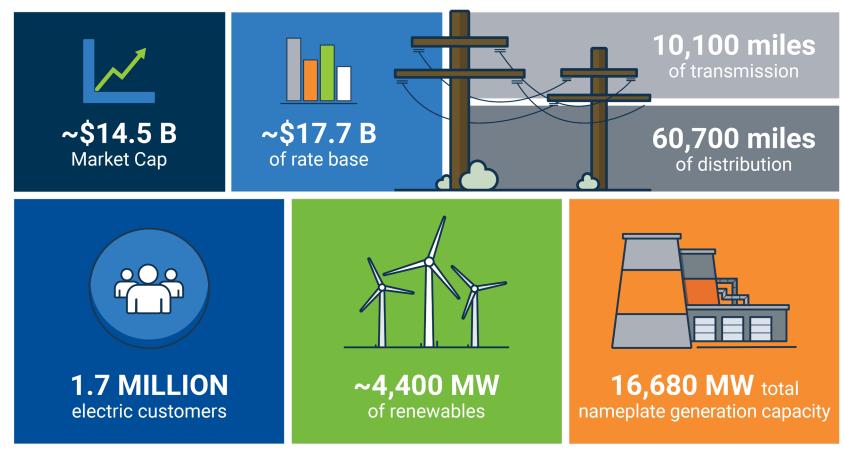
## **Evergy Customer Profile**



Statistics as of 12/31/20.



## **Evergy By the Numbers**



All as of YE 2022.

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### Focused on Reliability & Operational Excellence



Modernizing transmission and distribution lines



Investing in smart grid technologies



Innovating vegetation management practices



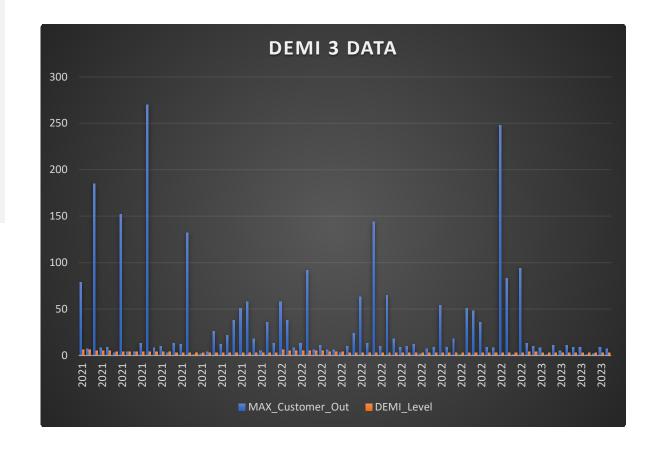
Focusing on seasonal generation flexibility to meet demand in peak seasons

Targeting top-tier performance in reliability, customer service and generation through grid modernization and continuous improvement in operations.



## **DEMI-3 Program**

- DEMI (Devices Experiencing Multiple Interruptions) This is a measurement of. Equipment experiencing multiple interruptions. The index depicts repetition of outages.
- 2022 was a trailblazing year to implement our DEMI-3 Program. Each month we review devices that have faulted 3 times in a given year and generate work orders to mitigate future outages.
- Our mission is to provide our customers with Pro Active service throughout this territory.



# DEMI-3 Targeted Improvements

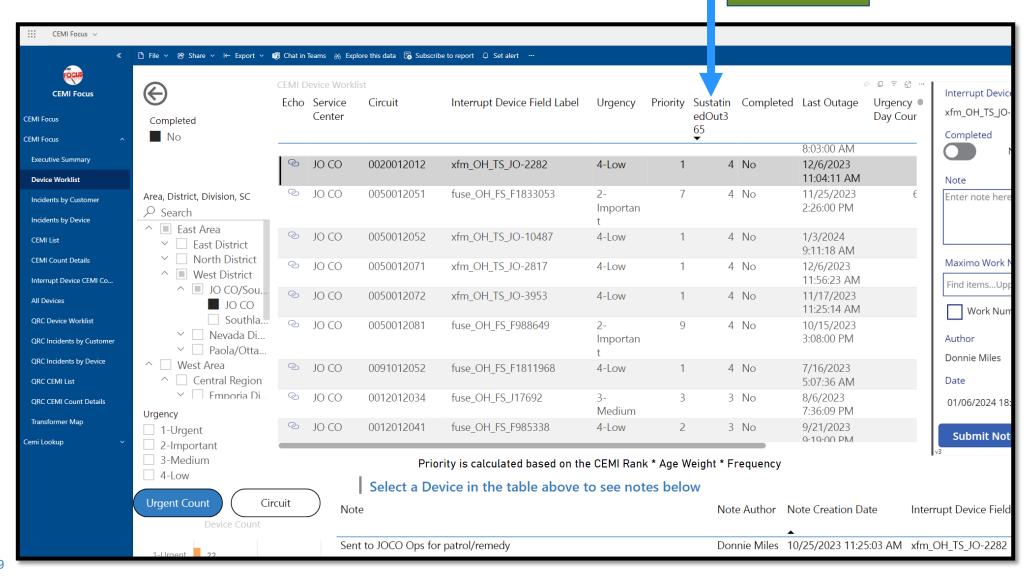
- Fusing coordination; When an outage occurs, less people will be impacted.
- New isolating devices installed; When an outage occurs, we will be able to quickly isolate a damaged area. This will reduce the outage time for those impacted.
- Create OH loops; This minimize the total customers on a line & provide opportunities to further isolate an area when damage occurs. Resulting in a reduction total of customers out of power.
- Proactively upgrading equipment and infrastructure for safety and reliability





## Utilizing Power BI Data Platform

#### Outage Count in 12 Months













## The Best in Business

- Line Crews are dispatched out to proactively patrol your lines.
- Reporting what we can do to improve and upgrade your infrastructure for the long term.
- We look forward to serving you!



## Tree Trimming Process

- We work year-round to manage the impact of trees on power lines. Our tree trimming program helps reduce the impact of vegetation on lines.
- Our specially-trained team of utility foresters, supervisors and contractors maintain more than 37,000 miles of Evergy lines, which we inspect and address to eliminate potential issues.
- We let you know if maintenance is needed at your property with a door notice that provides more detail and contact information.
- Tree trimming guidelines take into account the tree's proximity to power lines, size, species, health and growth rate.
- Crews generally visit circuits once every four to five years.
- Requesting a Line Clearance
- Customer requests for assistance of trimming/removal of trees near Evergy lines is available at evergy.com/TreeTrimRequest.

#### **Tree Work Required**

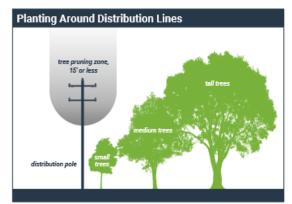
#### There is no charge for this service

As part of Evergy's commitment to supply safe, reliable electric service, contractors will visit your property to maintain trees/branches that could interfere with power lines.

Our specially-trained utility foresters have identified trees requiring maintenance. Our tree trimming contractors will use arboricultural practices supported by industry standards and tree care professionals.

Trees requiring work are marked with orange paint:

- Single Dot = Side Trim/Crown Reduction
- Double Dot = Good Removal Candidate
- Long Orange Line = Small volunteer trees that will be cut down



If you have any questions about the work required on your property, please call us at the number below within the next five days.

**Evergy Representative** 

Phone Number

>> evergy



## **Annual Maintenance Cycles**

- > Tree Trimming on a Preventative Maintenance Cycle:
  - ➤ 4-year cycle in Urban areas
  - ➤ Mid-cycle Inspections to ensure reliability for duration of cycle
  - > Process:
    - ▶ Plan: Utility Forester inspects circuit from top to bottom to identify each individual tree for trimming.
    - > Notify: Customer's notified in advance of tree crews and work orders created.
    - > Trim: Tree crews mobilize and execute work orders
    - ➤ Audit: Inspection to ensure trim work carried out according to work orders, quality of workmanship, effective tree to conductor clearance.
  - Customer initiated follow-ups initiated via Contact Center (~over 10,000/yr)
- ➤ Poles—Intrusive inspections every 12 years
- Overhead line Patrols—every 4 or 6 years (metro or rural)
- Pad-mount Equipment—every 4 or 8 years (visual and detailed)
- ➤ Every 12-years urban facilities are inspected a minimum of 4-times, 3x with OH patrols and 1x with intrusive pole inspection

# Outage Information





## Outage Cause and Prevention

#### Weather is the cause of most power outages

More than 70% of power outages are weather-related, including storms, high winds, lightning and ice. But they aren't the only causes; outages can happen at any time of the year. Animals gnawing into and making contact with wires, car accidents and human error can also cause outages. Damage from weakened trees can result in a loss of power weeks after a severe-weather event. Occasionally, shorter outage periods are necessary to accommodate installation efforts for other providers, including high-speed internet.

#### Wildlife prevention equipment

We care for wildlife and don't want to see them get hurt on energized equipment or disrupt power for our customers. One challenge with wildlife related power outages is that different areas of our service territory have different wildlife problems. In some areas, birds may be the problem, while in others it might be raccoons, snakes or squirrels.

#### Predictive maintenance

Predictive maintenance (PdM) technologies allow Evergy to detect problems closer to when they occur. This helps prevent more serious problems and power outages that require unplanned maintenance. PdM such as infrared thermography (IR), Corona, Dissolved Gas Analysis (DGA) and Doble testing processes help to test equipment health.



## **Lateral Conversion Options**

#### Usage rates are based on overhead design

New underground subdivision costs are paid by developers.

Existing neighborhoods can be converted to underground.

- Conversion costs are paid by involved customers
- Evergy performs all 12,000 Volt work
- Customer's contractor performs conduit work from line to house
- Evergy installs all cables

### Costs vary greatly.

- Example diagram:
  - Roughly \$100/foot for 12,000 Volt lines
  - Typical pole-pole distance = 80-100 ft
  - Estimated customer's conduit work \$2,000
  - Each Customer: \$2,000 + (\$27,000/5 houses)

The above does not include work or cost of attachers such as cable, phone, etc.





## Restoration process

Power sometimes returns in a different order than you'd expect. We have a process in place to address critical needs first then the largest number of customers as quickly and safely as possible.

#### Here's what happens as outage reports come in:

- Troubleshooters and sometimes damage assessment crews are sent to investigate the outage cause. This is why you may see an Evergy vehicle come and leave your neighborhood without power being restored.
- Crews then repair or replace equipment as needed, removing all hazards.
- Many times, tree trimming crews must remove trees or tree limbs before power can be restored.
- Following a major storm, sometimes it's a matter of completely rebuilding parts of the electrical system to restore services, which can take lots of coordination and many hours to complete.





## Outage Map Features



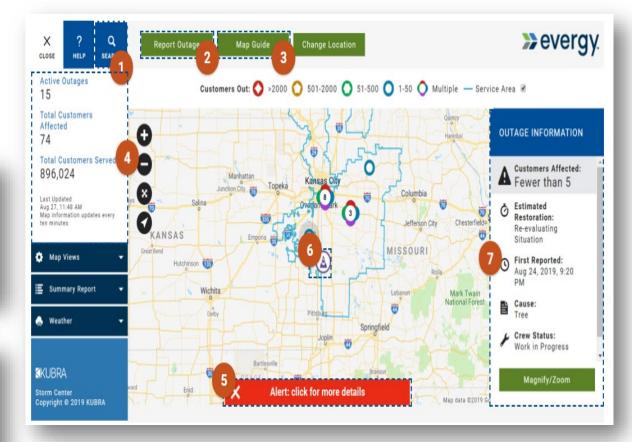
Search allows you to type in your address or general location. After typing in your information, click the location you want to view and the outage map will shift to your location and place a blue flag there.

Report Outage

The orange Report Outage button allows you to immediately report your outage online.

Map Guide

Map Guide takes you to a walk through of the outage map and its features, so you can use it with ease.



Tools

The Tools section shows you active outages, customers affected and total customers served. It also allows you to switch Map Views from locations to city, county or zip code. The Summary Report gives a table-like breakdown of customers affected and served by state, which you can change to city, county or zip code view. Lastly, the Weather tool let's you view or loop the radar to see what's currently going on in your area.





## Outage Map Features

## 5 Alert Banner

The Alert Banner appears in a situation where you may need to know widespread outage information or updates. You can click on the banner to read more information.

## 6 Icon

An Icon may appear on the map for things like a hazard, dry ice truck (in summer outage situations), warming centers (in winter outage situations) or relevant photos of crews and outages.

## Outage Info

When you click on an outage within the map, you'll be presented with Outage Info that shows your estimated restoration time (as long as there's not a severe storm or outage situation preventing us from knowing a restoration time). We'll also show you when your outage was reported, a cause (if it's been identified) and if a crew is on their way or working on your outage.



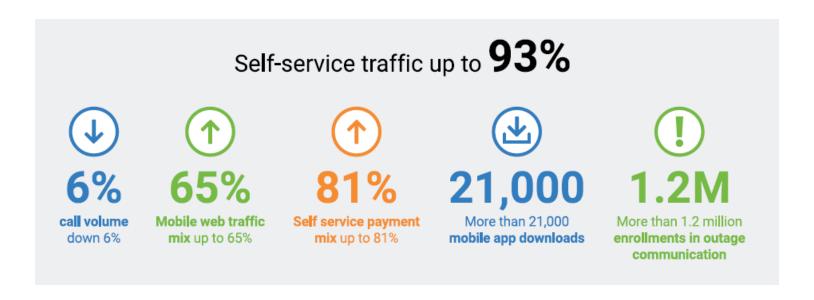




## How are we Improving Customer Experience?

As of end of year 2022

- Enhanced customer experience includes investments in core systems to improve ways we meet customers' needs
- Utilizing customer data and preferences, we want to deliver an omni-channel customer experience



## July 14-19, 2023

A large storm with 80-100 mph wind gusts, equivalent to a hurricane or tornado rolled through the Evergy service area Friday, July 14 contributing to a widespread customer outage, peaking at 186k customers and more the 265k customers impacted over the course of the storms.

Evergy's storm response is the largest mobilization of crews since Evergy was formed. There were more than 3k employees from Evergy, contractors and neighboring utilities working on restoration. Crews providing mutual assistance to help with the storm included OG&E, Liberty Utilities, Omaha Public Power District, MidAmerica Energy, Alliant, Northern Indiana Public Service Co., AEP and Ameren Illinois.





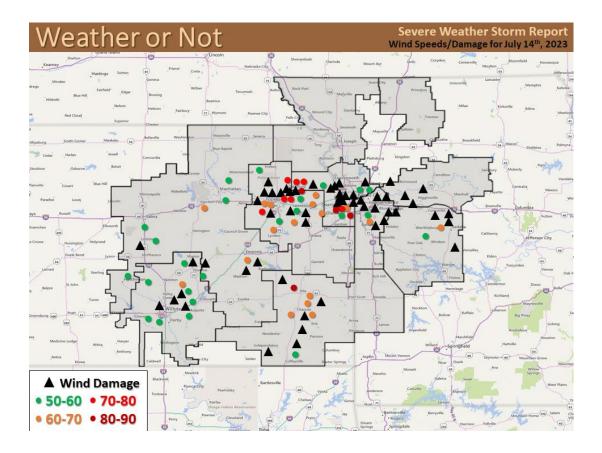
## Kansas City







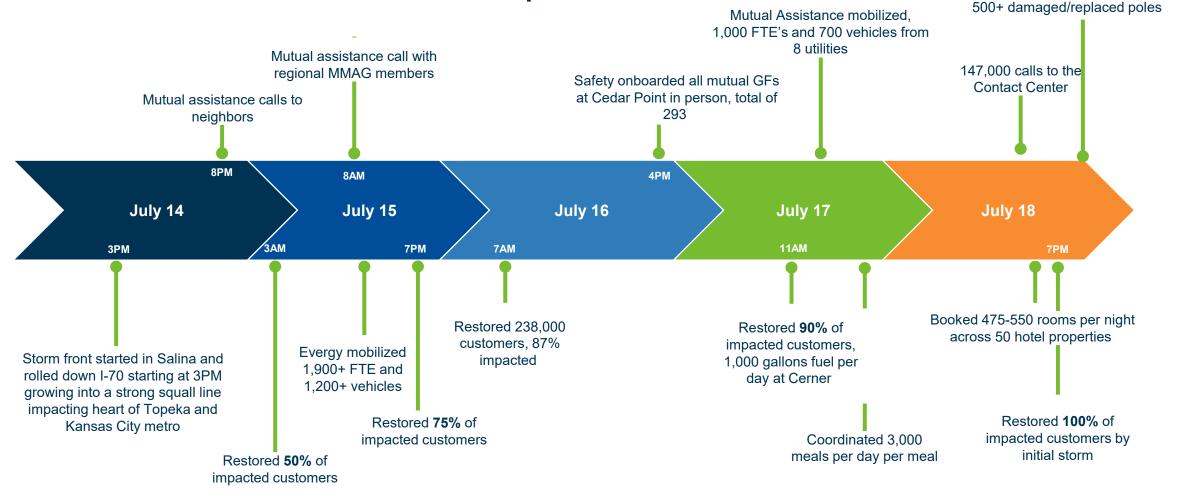
## Wind Reports







## "The Squall" Timeline



Completed fourteen after action review sessions with ninety-six participants.





## **Staging Site**







## Storm Damage





## Largest mutual assistance mobilization since 2002





## **Transmission**

#### Wolf Creek - Rose Hill 345kV

Three damaged structures, which required a derate of Wolf Creek

All structures replaced within 19 hours





## **Transmission**





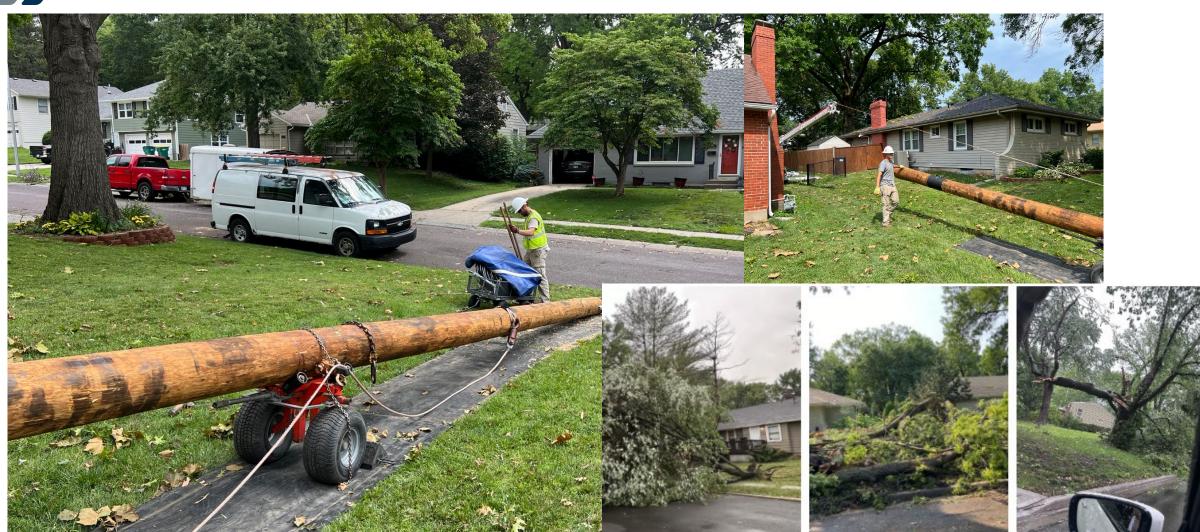
## **Transmission**







## **Distribution**







## Distribution





## Social Media







### Social Media

#### Storm by the numbers:

- •Nearly 147,000 calls to the contact centers over the weekend with our Intelligent Virtual Agent (IVA) and Outage Interactive Voice Response (IVR) systems assisting 75 percent of those customers.
- •Customer Service Representatives answered nearly 17,000 calls from customers over the weekend.
- •Members of Evergy's Social Media, Corporate Communications and Connect teams answered over 2,000 social media messages over the weekend.



#### **Evergy crews tackle a historic storm**

On Friday, July 14, a series of intense thunderstorms wreaked havoc through Kansas and Missouri, with winds up to 100 mph, torrential rain and lightning. The scale of the damage was the largest in Evergy's 5-year history, and the resulting recovery effort was also record-setting.

When the storm hit in late afternoon, 2,000 Evergy crewmembers and contractors began to mobilize to assess the damage, which included thousands of downed trees, destroyed utility poles and damaged transmission equipment.

By early Sunday morning, crews working 16-hour shifts were joined by crews from neighboring utilities including OG&E, Liberty Utilities, OPPD Nebraska, MidAmerica Energy, Alliant, NIPSCO, AEP and Ameren Illinois, utilizing a massive staging site at the former Cerner complex, the largest operation since the 2002 ice storm.

Power was restored to 75% of affected homes within 24 hours, while outages requiring more extensive repairs extended into Tuesday.

July 14 storm recovery-by the numbers:

- 500+ utility poles replaced or repaired
- 3,000 total line and vegetation personnel
- . 1,900 vehicles and equipment
- · 240,000 total effected customers

Thank you to our incredible team of skilled technicians, and to the visiting crews that helped. And thank you our customers, who despite losing power were incredibly kind to our hardworking men and women, many of whom lost power at their own homes.





## **Contacting Evergy**

# Emergency and Outage Reporting

1-888-LIGHTKC (1-888-544-4852)

Online at <a href="https://www.evergy.com">www.evergy.com</a>



## Service-related or billing questions

816-471-5275 888-471-5275

Discover self-serve options and information online at <a href="https://www.evergy.com">www.evergy.com</a>

