



## Distribution System Reliability

### July 2019

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#### **What does reliability mean to CPS Energy?**

Reliability reflects the ability of our electric system to work -- actually deliver electricity to customers -- under normal and abnormal conditions.

#### **What does reliability mean to our customers?**

Reliability means that the power rarely goes out.

#### **What does CPS Energy do to make sure the electric system works, and the power rarely goes out?**

CPS Energy has a number of initiatives focused on reliability for our customers. We carefully inspect and maintain safe power lines; we use technology; we analyze data; we benchmark against other utilities; and we strive to respond quickly when an outage occurs.

#### **How does CPS Energy inspect and maintain safe power lines to help reliability?**

CPS Energy uses powerful data analytics as well as more traditional techniques to increase reliability for our customers. Data analytics can identify areas of frequent outages or trends in a particular neighborhood, for example. Power lines and circuits can be rearranged if a particular configuration seems to be more subject to outages.

We routinely inspect our powerlines for damaged or degraded equipment and trees, or other objects close to our electric lines. These inspections are performed in vehicles, on foot, or by licensed drone pilots and designed to identify damage and degraded equipment before an outage occurs. The same inspections may indicate a need to protect against animals or conduct careful tree trimming.

As much as we all love the trees in our beautiful city, we must routinely trim trees to maintain enough space around powerlines to ensure safe and reliable power. (All tree trimming is overseen by CPS Energy's own certified arborists.)



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### **How does CPS Energy use technology to keep reliability high?**

CPS Energy has invested in smart meters for every customer that instantly notify us when an outage occurs. These meters give us information like an outage location, how long the outage was, from which direction the power was flowing, and other information we can analyze.

### **What outage data is collected, and what happens with that data?**

Smart meter data can tell us if outages are happening routinely and, if so, where and when they are happening. We look at instant information as well as trends. For example, there could be a sudden outage at a big intersection (perhaps from a traffic accident where a car hits a pole), or there are routine outages on a certain residential block. The data helps us determine where and how to deploy resources like tree trimming, wire upgrades, or recommending improvements like strategically burying powerlines underground.

### **How does CPS Energy outage data compare to other utilities?**

We continually compare our outage data with that of peer utilities based on data collected and analyzed by the Institute of Electrical and Electronics Engineers (IEEE.) The key data points considered by IEEE are the average time of an outage and the rate of outages per customer on a day-to-day basis. (Data from events such as a hurricane or other storm, or other geographic anomalies, are removed from the data set.)

We typically rank among the best performing utilities with our reliability performance. In addition, the American Public Power Association (APPA) has recognized CPS Energy as a Reliable Public Power Provider (RP<sub>3</sub>) because it demonstrates best practices in reliability.

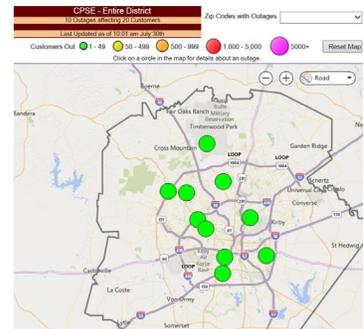


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### How does CPS Energy respond quickly when an outage does occur?

Restoring power after widespread outages are conducted as quickly as possible without compromising the safety of the community or our crews.

Priorities are on the power lines that restore electricity to the largest number of customers in the shortest amount of time and on vital community services such as hospitals, emergency services, and water and sewage stations. We do not make restoration priorities based on where your home is located, your credit history, or even how often you call us.



CPS Energy Outage Map

Industry best practices dictate that the first priority is to correct any outage caused by a hazard, a fallen tree, for example. The next priorities, in order, are the main lines that come out of substations, then connected lines that branch off the main lines, then individual homes and businesses. Our restoration teams always work hard to make your outage as short as possible.

### How does CPS communicate with its customers about outages?

CPS Energy interacts with its customers through a variety of real-time communication methods. A convenient online Outage Map, on the CPS Energy website, shows the locations of outages as well as each “Estimated Restoration Time (ERT)” based on historical averages. (The current default for ERT is three hours.)

CPS Energy also provides personal visits, text messages, and phone calls to customers and news releases, media interviews, and website and social media updates for the general public.

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### What is the bottom line?

CPS Energy actively deploys and manages data and physical techniques to ensure safe, reliable service to its customers.



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### **What do we want you to know?**

- CPS Energy continually measures our reliability and compares those standard measurements to our peers. Our reliability performance ranks among the top in the industry.
  - We inspect and maintain our powerlines to ensure top performance and safety.
  - We are leveraging new technology and sensors to improve reliability.
  - Outage information is available in real time at [cpsenergy.com](http://cpsenergy.com).
  - We fix outages as quickly as possible while maintaining safety for our community and crews.
  - Customers can call (210) 353-2222 or email [Reliability@cpsenergy.com](mailto:Reliability@cpsenergy.com) to report frequent outages.
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