

## **Cutting Power Outage Minutes in Half**

Storms happen.

Trees fall.

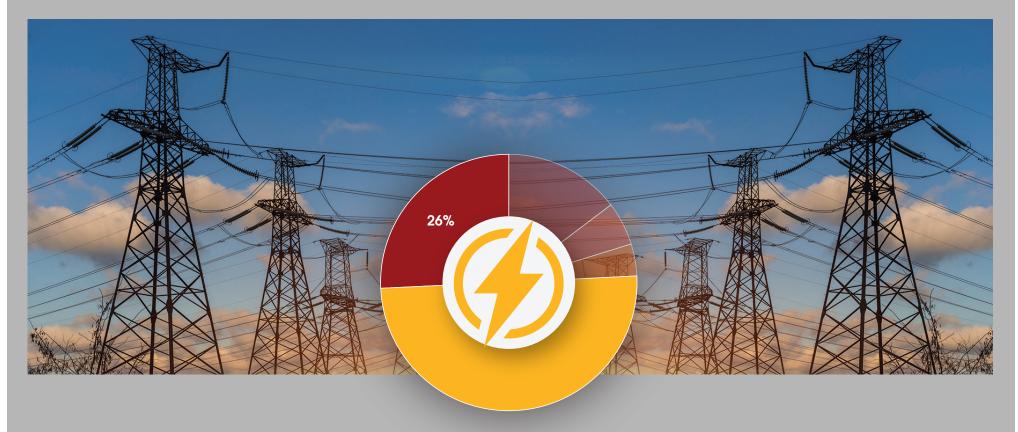
Cars crash into poles.

Equipment fails.

We can't stop all power outages.

But we can do a better job of preventing the amount of time customers have no power in their homes and businesses.





### Electric "Smart" Grid

(26% reduction in power outage minutes)

Installing smart switches to restore circuit outages automatically. Using smart meter data to better manage outages.



### **Trees**

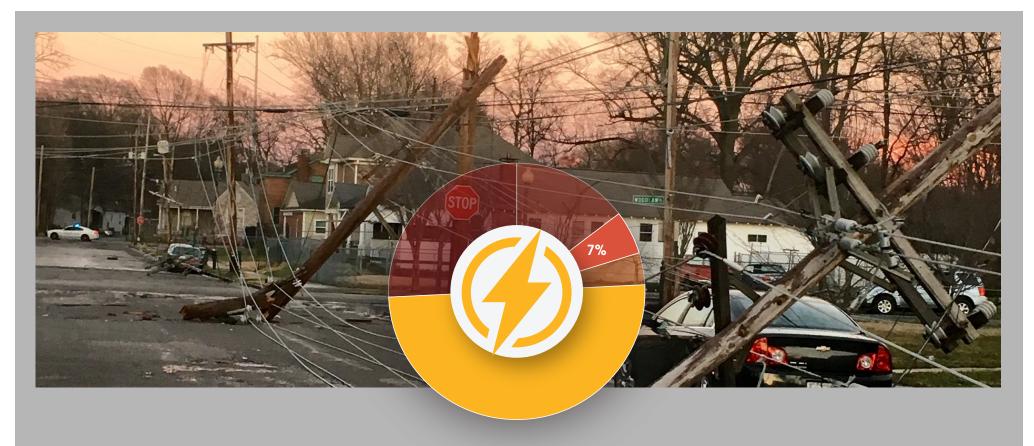
(13% reduction in power outage minutes)

Adding more tree trimming contractors.

Directing trimming to areas with worst power outages.

Using satellite imagery to ID diseased or dangerous trees.

Developing better local laws to manage power line vegetation.



#### **Overhead Power Lines**

(7% reduction in power outage minutes)

Starting in areas with the highest outages.

Dedicating crews and engineers to get the work done.

Conducting an in-depth survey of area infrastructure.

Bringing aging overhead power lines up to current standards.

Installing more transformers for better reliability and fewer outages.

Upgrading lightning and animal protection on lines and transformers.



# Underground Cable (3% reduction in power outage minutes)

Replacing aging cables in subdivisions experiencing failures.

### **Wood Poles**

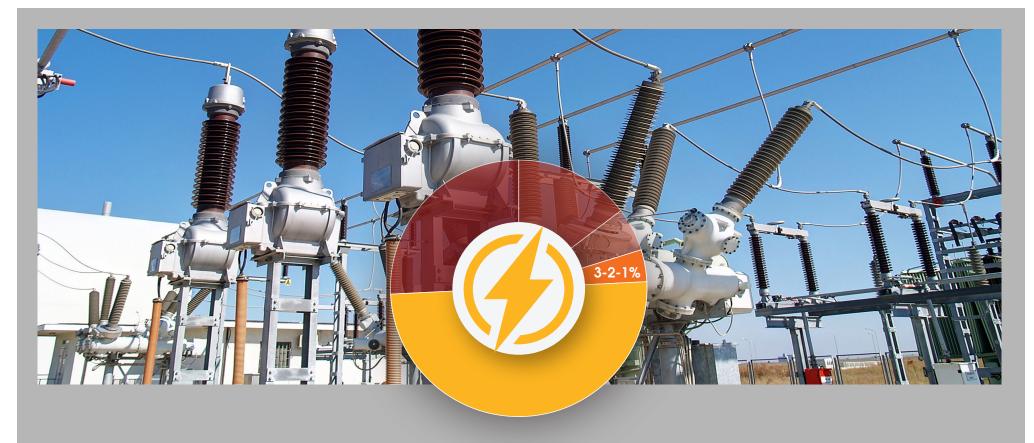
(2% reduction in power outage minutes)

Inspecting 150,000 wood utility poles.

Re-enforcing poles to prevent failures.

Treating poles from mold and insects.

Replacing 600 poles a year that are at end-of-life.



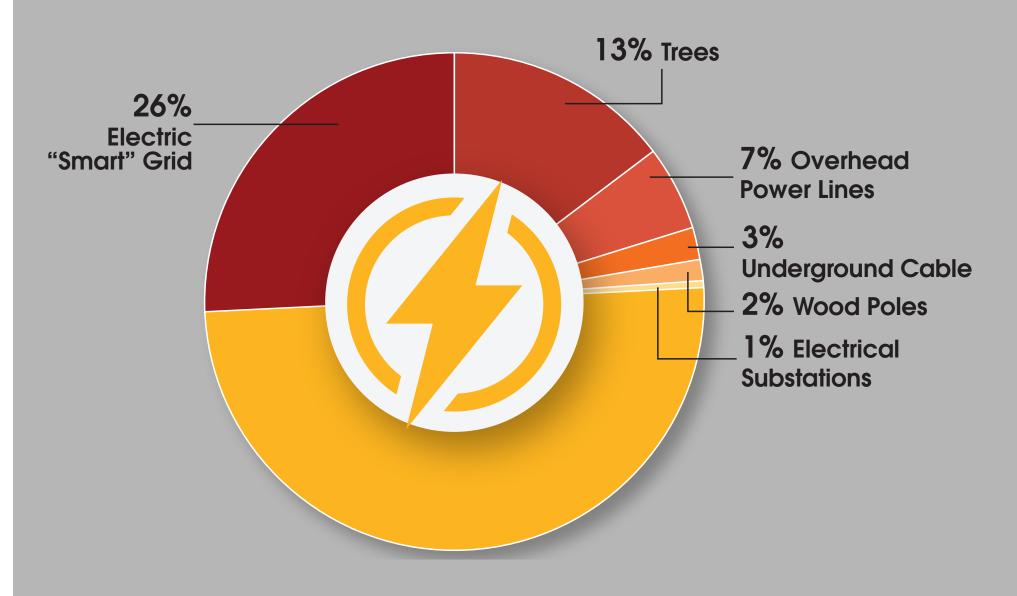
### **Electrical Substations**

(1% reduction in power outage minutes)

Replacing aging station breakers and transformers. Installing more animal mitigation measures.

For more details about the Outage Improvement Advisory Team presentations and Q&A, go to <a href="mailto:mlgw.com/oiat">mlgw.com/oiat</a>.

## **Cutting Power Outage Minutes in Half**



## **Cutting Power Outage Minutes in Half**

