

# Visibility to Improve Distribution Reliability

## Using Transformer Monitors to Predict and Reduce Outages

6x

Increase in the number of outages between 2000-2015.

*US Department of Energy*

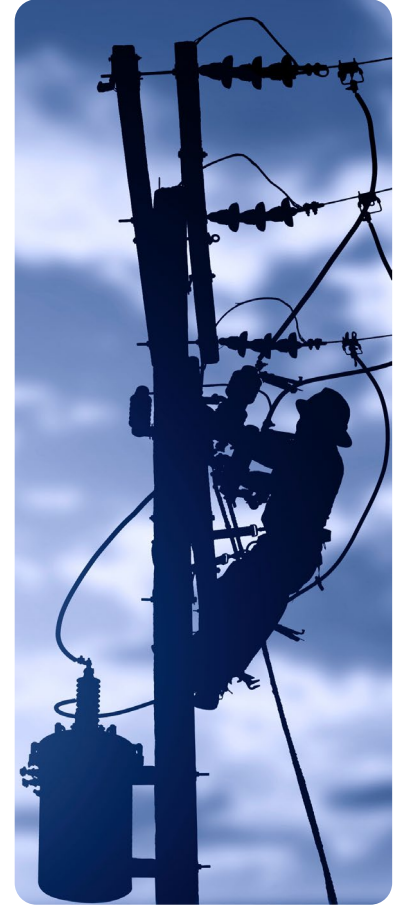
520 m

Average customer hours without power annually, 2018-2020, across 2,447 U.S. counties (73% of the U.S. population).  
*UW Study in Nature Communications, April 2023*

\$150B

The annual cost of power outages to American businesses.

*US Department of Energy*

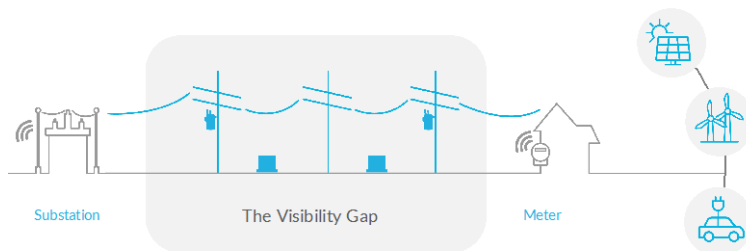


“Power outages can disrupt businesses, damage equipment, and put lives at risk. It’s important for utilities to invest in preventative measures to minimize the impact of outages and ensure the power grid’s reliability.”

**Gina McCarthy**, former Administrator of the U.S. Environmental Protection Agency

## Grid Visibility is Critical to Predicting and Reducing Outages

Significant Blind Spot  
Visibility Gap Between the Meter and the Substation



Faulty or aging transformers cause **70%** of outages on the grid, downtime, and service costs.

Addressing these challenges requires:

- Transformer situational awareness
- Analysis to spot anomalies
- Continuous high-speed sampling of voltage and current waveforms
- Condition-based asset management

Eliminating the visibility gap is vital to prioritizing maintenance, preventing equipment failures, and improving grid reliability.

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## Ubicquia DTM+ Makes Existing Infrastructure Smarter and More Visible

- Installed on **single/3 phase, pole, or pad-mounted** transformers.
- Collects and sends transformer and grid performance data over an **LTE network** to **UbiVu cloud-based asset management system**.
- UbiVu uses **predictive analytics, reporting and visualization** to eliminate the visibility gap.
- Built with **open APIs** that allow you to integrate data into existing Grid Operations and OSS systems.



## DTM+ Delivers Greater Visibility Prevent Outages



### Asset Health Awareness

Get a user-friendly real-time health snapshot of critical assets, including pressure, voltage, and load capacity.



### Predictive Analytics

Powerful artificial intelligence spots anomalies or leading indicators of a potential fault.



### Grid Situational Awareness

Visualize faults, detect distressed assets, and identify unplanned loads.



### Operational Intelligence

Enables you to move to a condition-based asset management strategy to avoid unnecessary truck rolls and inefficient O&M programs.

## Using Data Science to Predict Outages

Ubicquia developed algorithms based on extensive data analysis to **detect dielectric breakdowns up to 27 days before they happen**.



### About Ubicquia

Ubicquia® creates intelligent infrastructure platforms that are compatible with the 360 million streetlights and 500 million transformers that line our streets. They deliver energy savings, enhance public safety, bridge the digital divide, and improve grid resiliency. Ubicquia products are deployed by more than 700 customers including some of the largest cities, utilities, and mobile operators across North America. To learn more visit [www.Ubicquia.com](http://www.Ubicquia.com) or contact us at [info@ubicquia.com](mailto:info@ubicquia.com)