**Maven Power Outage Challenge**

[**https://mavenanalytics.io/challenges/maven-power-outage-challenge/28**](https://mavenanalytics.io/challenges/maven-power-outage-challenge/28)

**Individual sheets directly from DOE:** [**https://www.oe.netl.doe.gov/OE417\_annual\_summary.aspx**](https://www.oe.netl.doe.gov/OE417_annual_summary.aspx)

Clean and prepare real data from the U.S. Department of Energy, and create a dashboard to explore and visualize electric grid outages over a 20-year period

**Challenge Objective**

For the **Maven Power Outage Challenge**, you'll be playing the role of a Senior Analytics Consultant hired by the U.S. Department of Energy (DOE). Here's your project brief:

Electricity outages are a growing concern as we enter an age of unprecedented energy demand and climate disasters.

We have event-level power outage data going back to 2002, but have struggled to make sense of it due to severe issues with the data quality and integrity.

This is where you come in.

We need you to **consolidate and clean up the raw data**, and **create a dashboard or report** to help us understand patterns and trends around outages, quantify their impact on our communities, and identify possible weak points in the grid.

Last but not least, please **explicitly call out any caveats or assumptions** you make in regards to data quality issues or missing values.

**About The Data Set** Information on electric disturbance events is collected using Form DOE-417 and published online in an annual summary. The dataset contains 4 files for download: An Excel spreadsheet containing the annual summaries, and 3 PDF documents for reference (the survey form, intructions, and documentation for online form submissions).

**US Electric Grid Outages**

Electric outages reported to the US Department of Energy from 2002-2023