

# Palo Verde Electricity Hub Analysis (2014-2024)

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## Overview

The Intercontinental Exchange (ICE) has provided the U.S. Energy Information Administration selected wholesale daily spot price data from 2001-2024 (<https://www.eia.gov/electricity/wholesale/>) for 8 electricity hubs:

1. ERCOT North 345KV Peak
2. Indiana Rt Peak
3. Mid C Peak
4. Nepoch MH DA LMP Peak
5. NP15 EZ Gen DA LMP Peak
6. Palo Verde Peak
7. PJM WH Real Time Peak
8. SP-15 Gen DA LMP Peak

This report has analyzed the past 10 years of daily spot price data for Palo Verde Peak and discovered that daily

## Code

### 2014-2024 Datasets

Import all datasets into their own variables.

### Head 2014-2024

Use the following to make mass changes:

## Comined Dataset

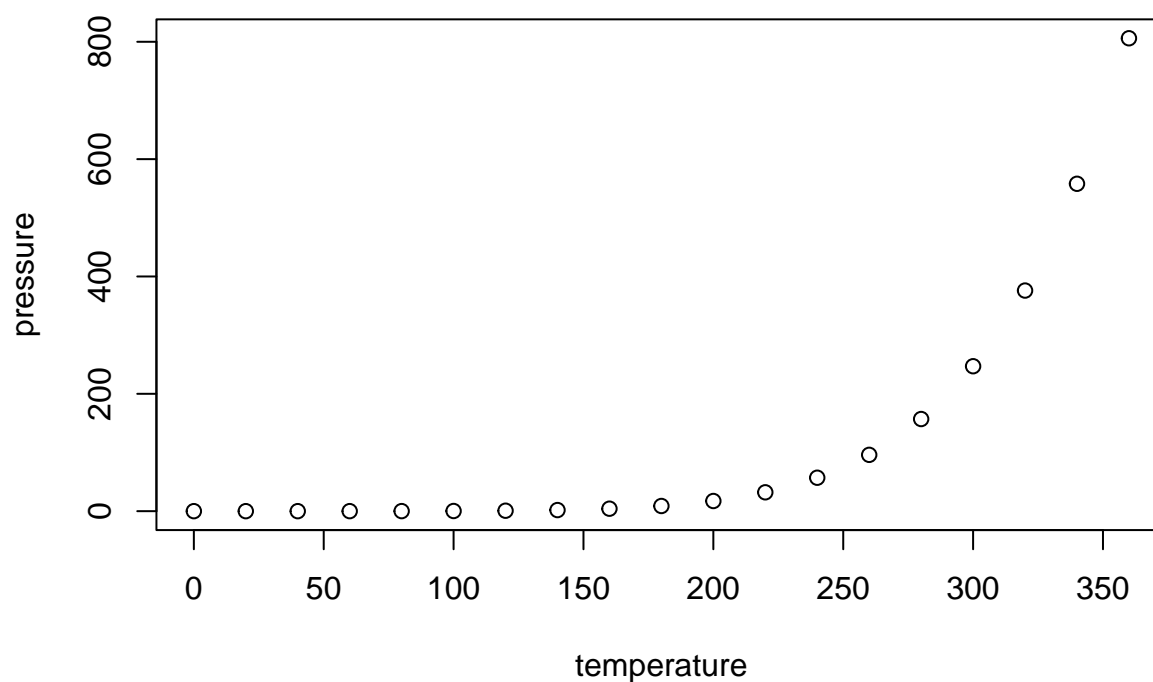
Some additional factors to look at:

- \$84 million in higher wholesale short-term sales primarily due to: (i) an increase in price and sales volume; and (ii) an increase in capacity sales to affiliates for a tolling PPA (Power Purchase Agreement) entered into in June 2021; (<https://www.sec.gov/ix?doc=/Archives/edgar/data/100122/000010012222000020/tep-20211231.htm>)

## Fixing Hidden Characters in Columns

### Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.