Package 'USgrid'

October 12, 2022

Type Package

Title The Demand and Supply for Electricity in the US

Version 0.1.2

Maintainer Rami Krispin <rami.krispin@gmail.com>

Description Provides a set of regular time-series datasets, describing the US electricity grid. That includes the total demand and supply, and as well as the demand by energy source (coal, solar, wind, etc.). Source: US Energy Information Administration (Dec 2019) <https://www.eia.gov/>.

License MIT + file LICENSE

Encoding UTF-8

LazyData true

Depends R (>= 3.0.2)

Imports tsibble(>= 0.8.5)

Suggests knitr, lubridate, rmarkdown, devtools, plotly, remotes, tidyr, testthat, usethis

URL https://github.com/RamiKrispin/USgrid

BugReports https://github.com/RamiKrispin/USgrid/issues

RoxygenNote 6.1.1

NeedsCompilation no

Author Rami Krispin [aut, cre]

Repository CRAN

Date/Publication 2021-03-21 15:50:22 UTC

R topics documented:

`Cal_elec` *Demand for California Independent System Operator (CISO)*

Description

The demand for electricity in California subregion since July 2018 by operator.

Units: megawatthours

Time zone: UTC

Usage

```
Cal_elec
```

Format

A tsibble object with hourly intervals

Details

The dataset contains the hourly demand for electricity in the California subregion (megawatthours). The ‘operator‘ column describes the name of operator provider

Source

US Energy Information Administration (Dec 2019) website

Examples

```
data(Cal_elec)

library(plotly)

plot_ly(data = Cal_elec,
        x = ~ date_time,
        y = ~ series,
        color = ~ operator,
        type = "scatter",
        mode = "lines")
```

US_elec *The US Hourly Demand and Supply for Electricity*

Description

The total hourly demand and supply (generation) for electricity in the US since July 2015

Units: megawatthours

Time zone: UTC

Usage

```
US_elec
```

Format

A tsibble object with hourly intervals

Details

The dataset contains the hourly demand and supply (generation) for electricity in the US (megawatthours). The 'type' column describes the type of the series (demand or generation)

Source

US Energy Information Administration (Dec 2019) website

Examples

```
data(US_elec)

library(plotly)

plot_ly(data = US_elec,
        x = ~ date_time,
        y = ~ series,
        color = ~ type,
        type = "scatter",
        mode = "lines")
```

US_source *The US Hourly Net Generation by Energy Source*

Description

The net generation of electricity in the US by energy source (i.e., natural gas, coal, solar, etc.) since July 2018.

Units: megawatthours

Time zone: UTC

Usage

```
US_source
```

Format

A tsibble object with hourly intervals

Details

The dataset contains the hourly net generation of electricity in the US (megawatthours) by energy source The 'source' column describes the type of the energy source

Source

US Energy Information Administration (Dec 2019) website

Examples

```
data(US_source)

library(plotly)

plot_ly(data = US_source,
        x = ~ date_time,
        y = ~ series,
        color = ~ source,
        type = "scatter",
        mode = "lines")
```

Index