Package 'aemo'

April 4, 2020

Type Package
Title Download and Process AEMO Price and Demand Data
Version 0.3.0
Description Download and process real time trading prices and demand data freely provided by the Australian Energy Market Operator (AEMO). Note that this includes a sample data set.
License GPL-2
Depends R (>= $3.1.0$)
Imports assertthat ($>= 0.1$), dplyr ($>= 0.5.0$), lubridate ($>= 1.3.3$), stats, stringr ($>= 0.6.2$), utils
Suggests httr (>= 0.3), testthat
Encoding UTF-8
LazyData true
RoxygenNote 7.1.0
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aemo

AEMO data set May 2009 - May 2014

Description

A sample data set containing trading interval price and demand data sourced from the AEMO website on or about 21 June 2014. This was downloaded and collated using collate_aemo_data().

Usage

aemo

Format

```
"REGION" (factor), "SETTLEMENTDATE" (POSIXct), "TOTALDEMAND" (numeric), "RRP" (numeric) and "PERIODTYPE" (factor).
```

References

AEMO website

Examples

data(aemo)
head(aemo)

clean_up_aemo_data_files

Remove AEMO CSV files

Description

This function removes AEMO data files that are on the path. These are identified by having a filename of the form [REGION][YYYY][MM].csv (e.g. "NSW201405.csv").

Usage

```
clean_up_aemo_data_files(path = ".")
```

Arguments

path

a string containing the location of the AEMO (CSV) data files that you wish to collate. These must have filenames of the form specified above.

Value

no return value. However, AEMO files that are identified are removed.

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collate_aemo_data

Collate AEMO data

Description

This function collates AEMO data files that are on the path. These are identified by having a filename of the form [REGION][YYYY][MM].csv (e.g. "NSW201405.csv"). If no such file exists on path, all available data files are downloaded from the AEMO website using get_aemo_data().

Usage

```
collate_aemo_data(path = ".", remove_files = TRUE)
```

Arguments

path a string containing the location of the AEMO (CSV) data files that you wish to

collate. These must have filenames of the form specified above.

remove_files a boolean flag indicating whether the AEMO CSV files should be removed once

the data sets are collated.

Value

a data frame containing five fields: "REGION" (factor), "SETTLEMENTDATE" (POSIXct), "TOTALDEMAND" (numeric), "RRP" (numeric) and "PERIODTYPE" (factor).

Examples

```
## Not run:
collate_aemo_data()
## End(Not run)
```

get_aemo_data

Download data from AEMO website

Description

Trading interval level price and demand data is available on the AEMO website. This function downloads these files for each region and period requested.

Usage

```
get_aemo_data(regions, years, months, path = ".")
```

get_aemo_data

Arguments

a case invariant character vector of abbreviated AEMO regions. Must be one of "nsw", "vic", "sa", "qld", "snowy" or "tas". Snowy region data is only available up to and including Jun 2008 while Tasmania region data is available from and including May 2005. Otherwise, all regions have data available from and including Dec 1998 up to the end of the month previous to the current month.

years a numeric vector of years in the form YYYY. See the regions parameter for more info.

months a numeric vector of months in the form MM.See the regions parameter for more info.

path defaults to "." (current working directory) and denotes the path to which the

Details

AEMO's copyright permissions specify that:

AEMO files are downloaded.

"AEMO confirms its general permission for anyone to use AEMO Material for any purpose, but only with accurate and appropriate attribution of the relevant AEMO Material and AEMO as its author".

Value

data files whose number corresponds to the maximum length of one of the parameters. The file names have the pattern: "[REGION][YYYY][MM].csv".

References

AEMO website

Examples

```
## Not run:
get_aemo_data("nsw", 2014, 1)
## End(Not run)
```

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