Data for European Power System Analyses

In 2009, I collected Danish and German time series from 2006 to 2008 for the Renewable Energy Foundation in London. The data was used for a study on wind power and spot prices. Since then data for the following years have been added to the collection and the geographic coverage has been extended to all German control areas and to other countries.

The collection has been available on http://pfbach.dk/. The idea was to give access to time series from different European countries, but in a common format, so the user needed only one conversion tool. The emergence of other and better data sources has given me a welcome opportunity to stop collecting new data.

Several persons from other European countries have contributed to my collection. I owe these people my sincere gratitude for their efforts.

The ENTSO-E Transparency Platform

The ENTSO-E Transparency Platform (https://transparency.entsoe.eu/) is an important source of European *operational data* on power systems and electricity markets. It is mandatory for EU Members States to submit data related to electricity generation, load, transmission and electricity balancing, which ENTSO-E now publishes on the ENTSO-E Transparency Platform as of 5 January 2015.

The transparency platform includes the following main categories:

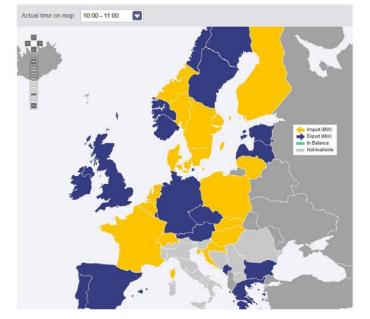
- Load
- Generation
- Transmission
- Balancing
- Outages
- Congestion Management
- Data Pre-5.1.15

The platform includes data per price zone for countries, which have been divided into price zones.

The collection is not yet complete, but it is steadily being improved.

Introduction and explanation:

https://www.entsoe.eu/data/entso-e-transparency-platform/Pages/default.aspx



Open Power System Data

The Open Power System Data platform: http://data.open-power-system-data.org/

This collection of data is being developed by four institutions: Europa-Universität Flensburg, DIW Berlin, Technical University of Berlin, and Neon Neue Energieökonomik. It is funded by the German Federal Ministry for Economic Affairs and Energy.

The main categories are:

- Conventional power plants
- National generation capacity: Aggregated generation capacity by technology and country
- Renewable power plants
- Time series: Load, wind, solar and prices in hourly resolution
- Weather data: Script for the download of MERRA-2 weather data

Open Power System Data includes infrastructure data as a necessary addition to the operational ENTSO-E data. The essential limitations are that grid equivalents and price zones are missing.

Present availability:

- Conventional power plants: CH, CZ, DE, DK and PL
- Renewable power plants: DE and DK
- Time series
 - Load: 15 countries, most of them starting 2006
 - Wind: 5 countriesSolar: 4 countries
 - o Spot prices: 4 countries

Introduction: http://open-power-system-data.org/

SciGRID

Open Source Reference Model of European Transmission Networks for Scientific Analysis

Website: http://www.scigrid.de/pages/general-information.html

The project was initiated and is managed and performed by NEXT ENERGY - EWE Research Centre for Energy Technology, an independent non-profit institute at the University of Oldenburg, Germany. The funding period is from September 2014 to August 2017.

I did not yet test the practical usability of this source.