

Prof. Jinyue Yan
Editor-in-Chief
Applied Energy

June 1, 2018

Dear Prof. Jinyue Yan,

We are pleased to submit an article entitled “Open Power System Data - Frictionless data for electricity system modelling” for consideration for publication in the *Special Issue of Applied Energy: Data on Energy, Climate change and Sustainability*.

This article describes the idea, content and benefit of the Open Power System Data platform that aims at realising the efficiency and quality gains of centralised data provision by collecting, checking, processing, aggregating, documenting and publishing data required by electricity system modellers.

We think that this manuscript is appropriate for publication by the Special Issue of Applied Energy since it supports the proceedings and analysis on the data that is required for electricity system analysis and thus contributes to its application in quantitative energy system analysis and its sustainable development.

Applied energy research as well as energy and climate policy advice are often based on quantitative computer models. Thus, quality of electricity system modelling heavily relies on input data, while being underrepresented in the academic discussion. The approach presented in the paper has the potential to significantly increase the quality of input data and the efficiency of data processing for electricity system modelling, thus contributing to quality improvements and more time for the system analysis itself.

The novelty of our work is the approach of providing processed ready-to-use data for electricity system modelling in a central manner, while using a decentralised lightweight, scalable technical architecture and keeping it fully transparent and flexible by offering the possibility to adapt the processing scripts. The main principles in this regard - open source scripts, transparency of used input data and documentation of both the script as well as the final output – comply with scientific standards.

This work has not been submitted previously to Applied Energy (in part or in whole), has not been published previously and is not under consideration for publication elsewhere. All authors approved the article.

If you feel that the manuscript is appropriate for your journal, we suggest the following reviewers:

- Sylvain Quolin; Contact: sylvain.quotin@kuleuven.be
- Francesco Gardumi; Contact: francesco.gardumi@desa.kth.se
- Mark Howells; Contact: mark.howells@energy.kth.se
- Chris Davis; Contact: c.b.davis@rug.nl
- Manuel Wetzel; Contact: manuel.wetzel@dlr.de

Thank you for your consideration.

Sincerely,

Ingmar Schlecht (Corresponding Author) and Frauke Wiese (1st Author) for all the authors