



Dynamic Thermal Rating System for Sustainable Electrical Power Systems

Guest Editor:

Prof. Dr. Jiashen Teh

School of Electrical and
Electronics Engineering,
Engineering Campus, Universiti
Sains Malaysia, Nibong Tebal
14300, Malaysia

Deadline for manuscript
submissions:

closed (20 October 2022)

Message from the Guest Editor

Dear Colleagues,

The dynamic thermal rating (DTR) system can safely determine the thermal limits of power components on the basis of environmental conditions. Studies have shown that the DTR system can provide ratings that are higher than the traditional static thermal rating (STR) 80% to 90% of the time; for 50% of the time, DTR is 15% to 30% higher than STR. Hence, the benefits and applications of the DTR system are promising, but lacking in coverage by research journal articles. Therefore, the setting of this Special Issue is timely and all prospective authors with a special interest in the research of the DTR system are highly encouraged to contribute to this Special Issue. The topics covered in this Special Issue are as follows:

- Applications of the DTR system in power systems;
- Thermal behaviour of line conductors (overhead lines and underground cables);
- Cyber network of the DTR system;
- Integration of the DTR system with other smart grid technologies;
- Reliability modelling of the DTR system;
- Forecasting of DTR
- The dynamic effects of the DTR system;
- Probabilistic line rating.



mdpi.com/si/117711

Prof. Dr. Jiashen Teh
Guest Editor

Special Issue



energies



an Open Access
Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and
Aerospace Engineering,
University of Roma Sapienza, Via
Eudossiana 18, 00184 Roma, Italy

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (Control and Optimization)

Contact Us

Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/energies_mdpi)