



## Dynamic Protection of Power Systems with a High Penetration of Renewables

Guest Editor:

**Prof. Dr. Taha Selim Ustun**

Head of Power System  
Automation and Cybersecurity  
Lab, Fukushima Renewable  
Energy Institute, Fukushima 963-  
0298, Japan

[tahaselim@yahoo.com](mailto:tahaselim@yahoo.com)

Deadline for manuscript  
submissions:

**30 December 2021**

### Message from the Guest Editor

A constant increase in renewable energy deployments and nonconventional technology has changed the operation paradigms of power systems. Bilateral power flows, fault contribution of distributed generators, and the unknown fault behavior of new equipment call for fundamental changes in protection approaches.

This Special Issue is aimed at covering different aspects of ground-breaking protection system designs to achieve deep penetration of renewable and clean energy systems. In this regard, papers are solicited in, among others, the following topics:

- Advanced communication solutions between protection equipment;
- Novel implementation of nature inspired algorithms for protection coordination;
- Power electronics design and control for improving fault behavior of inverters;
- Standardized communication solutions for interoperability, such as IEC61850 and IEEE 1547;
- Cybersecurity considerations to ensure proper operation;
- Edge-computing-based solutions for intelligent protection.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Marc A. Rosen**

Faculty of Engineering and  
Applied Science, University of  
Ontario Institute of Technology,  
Oshawa, ON L1G 0C5, Canada

## Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer-reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

## Author Benefits

**Open Access:**— free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High visibility:** indexed within [Scopus](#), [SCIE](#) and [SSCI \(Web of Science\)](#), [GEOBASE](#), [Inspec](#), [AGRIS](#), [RePEc](#), [CAPlus / SciFinder](#), and many [other databases](#).

**Journal Rank:** [JCR](#) - Q2 (*Environmental Sciences*) / [CiteScore](#) - Q1 (*Geography, Planning and Development*)

## Contact Us

---

*Sustainability*  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
Fax: +41 61 302 89 18  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sustainability](http://mdpi.com/journal/sustainability)  
[sustainability@mdpi.com](mailto:sustainability@mdpi.com)  
[@Sus\\_MDPI](https://twitter.com/Sus_MDPI)