

Journal of Power and Energy Engineering

ISSN: 2327-588X



<https://www.scirp.org/journal/jpee>

Journal Editorial Board

ISSN Print: 2327-588X ISSN Online: 2327-5901

<https://www.scirp.org/journal/jpee>

Editor-in-Chief

Prof. Elias K. Stefanakos

University of South Florida, USA

Editorial Board

Dr. Reza Alayi

Department of Mechanics, Germe Branch, Islamic Azad University, Iran

Dr. Mahajan Sagar Bhaskar

Prince Sultan University, Saudi Arabia

Dr. Roberto Capata

University of Roma "Sapienza", Italy

Prof. Wei-Hsin Chen

National Cheng Kung University, Chinese Taipei

Dr. Chun-Hu Cheng

National Taiwan Normal University, Chinese Taipei

Dr. Wen Tong Chong

University Malaya, Malaysia

Dr. Erdem Cuce

Recep Tayyip Erdogan University, Türkiye

Dr. Smith Eiamsa-ard

Mahanakorn University of Technology, Thailand

Dr. Mostafa Eidiani

Khorasan Institute of Higher Education, Iran

Prof. D. Yogi Goswami

University of South Florida, USA

Prof. Afsin Gungor

Akdeniz University, Türkiye

Prof. Nikolay Hinov

Technical University of Sofia, Bulgaria

Prof. Zhongjie Huan

Tshwane University of Technology, South Africa

Prof. Ahmed Kadhim Hussein

University of Babylon, Iraq

Dr. Freddie Liswaniso Inambao

University of KwaZulu-Natal Durban, South Africa

Dr. Mohsin Jamil

Department of Electrical and Computer Engineering, Memorial University of Newfoundland, Canada

Dr. Long Jiang

University of Aberdeen, UK

Prof. Nnnesi A. Kgabi

Polytechnic of Namibia, Namibia

Prof. Young Min Kim

Korea University of Science and Technology, South Korea

Dr. Zhe Li

Johns Hopkins University, USA

Prof. Ching-Fuh Lin

National Taiwan University, Chinese Taipei

Prof. Rodolfo Dufo López

University of Zaragoza, Spain

Dr. M. Madhjarasan

Department of Computer Science and Engineering, Indian Institute of Technology Roorkee, India

Prof. Elham B. Makram

Clemson University, USA

Dr. Sohrab Mirsaedi

Beijing Jiaotong University, China

Prof. Zainura Zainon Noor

Universiti Teknologi Malaysia, Malaysia

Dr. Fernando Ortenzi

ENEA-Italian Agency Department of Aeronautical and Automotive Engineering, Italy

Dr. Hitesh Panchal

Gujarat Technological University, India

Prof. George Papadakis

Agricultural University of Athens, Greece

Dr. Elias Papanicolaou

Solar & Other Energy Systems Laboratory Attiki, Greece

Dr. Raul Rabinovici

Ben-Gurion University of the Negev, Israel

Prof. M. Ramamoorti

K L University, India

Dr. Manuel Romero

IMDEA Energy Institute, Spain

Dr. Ravi S. Srinivasan

University of Florida, USA

Dr. Mohamad Fani Sulaima

Universiti Teknikal Malaysia Melaka, Malaysia

Prof. Gopal Nath Tiwari

SRM University, India

Dr. Vittorio Verda

Politecnico di Torino, Italy

Prof. Valery Vodovozov

Tallinn University of Technology, Estonia

Prof. Nikolai Voropai

Energy Systems Institute of Russian Academy of Sciences, Russia

Prof. Hongqiang Wang

Northwestern Polytechnical University, China

Prof. Lei Wang

Hunan University, China

Dr. Yifei Wang

School of Mechanical Engineering and Automation, Harbin Institute of Technology, China

Prof. Fushuan Wen

Tallinn University of Technology (TalTech), Estonia

Prof. Chao Xu

North China Electric Power University, China

Dr. Wenxian Yang

Newcastle University, UK

Dr. Xiaowei Zhou

Northwestern University, USA

Table of Contents

Volume 11 Number 12

December 2023

**Modeling and Simulation of a Transmission Line Response to a
400 kV/400V Capacitor Coupled Substation**

S. W. Nene, B. T. Abe, A. F. Nnachi..... 1

**V2V Energy Trading Considering User Satisfaction under
Low-Carbon Objectives via Bayesian Game**

Y. Yu, Y. Liu, X. Feng, H. C. Wen 15

Noise Control Solutions for Diesel Generator Sets

M. Sawilam, S. E. Babaa, A. A. Haddabi, S. Wasiu, T. Hussain, M. Khzouz, J. Pillia..... 36

**Optimizing Solar Drying: A Critical Review of Shapes, Orientation,
and Future Prospects for Hybrid Solar Dryers**

A. Zziwa, A. W. Okello, I. Kabenge, D. Matsapwe, S. S. Kizito, S. Paul, R. K. Kambugu 44

**Optimal Design of Grid-Connected Microgrid System for Cold
Chain Logistics Centre in China**

X. S. Qin, X. L. Wu..... 64

**Peak Electricity Demand Management and Energy Efficiency among
Large Steel Manufacturing Firms in Nairobi Region, Kenya**

T. W. Jackson, P. Musau, C. W. Wekesa 82

Journal of Power and Energy Engineering (JPEE)

Journal Information

SUBSCRIPTIONS

The *Journal of Power and Energy Engineering* (Online at Scientific Research Publishing, <https://www.scirp.org/>) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$39 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:

Copyright © 2023 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>

Copyright for individual papers of the journal:

Copyright © 2023 by author(s) and Scientific Research Publishing Inc.

Reuse rights for individual papers:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

Disclaimer of liability

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: jpee@scirp.org

Call for Papers

Journal of Power and Energy Engineering

ISSN Print: 2327-588X ISSN Online: 2327-5901

<https://www.scirp.org/journal/jpee>

Journal of Power and Energy Engineering (JPEE) is an international journal dedicated to the latest advancements in power and energy engineering. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in different areas of power and energy engineering.

Editor-in-Chief

Prof. Elias K. Stefanakos

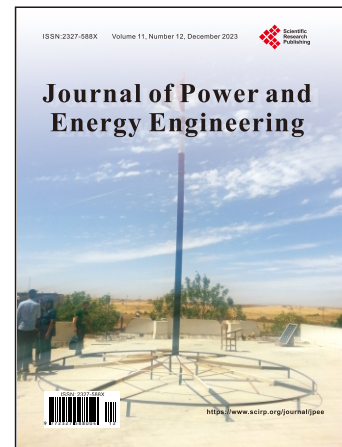
University of South Florida, USA

Editorial Board

Dr. Reza Alayi
Dr. Mahajan Sagar Bhaskar
Dr. Roberto Capata
Prof. Wei-Hsin Chen
Dr. Chun-Hu Cheng
Dr. Wen Tong Chong
Dr. Erdem Cuce
Dr. Smith Eiamsa-ard
Dr. Mostafa Eidiani
Prof. D. Yogi Goswami
Prof. Afsin Gungor
Prof. Nikolay Hinov
Prof. Zhongjie Huan
Prof. Ahmed Kadhim Hussein
Dr. Freddie Liswaniso Inambao
Dr. Mohsin Jamil

Dr. Long Jiang
Prof. Nnnesi A. Kgabi
Prof. Young Min Kim
Dr. Zhe Li
Prof. Ching-Fuh Lin
Prof. Rodolfo Dufo López
Dr. M. Madhiarasan
Prof. Elham B. Makram
Dr. Sohrab Mirsaeidi
Prof. Zainura Zainon Noor
Dr. Fernando Ortenzi
Dr. Hitesh Panchal
Prof. George Papadakis
Dr. Elias Papanicolaou
Dr. Raul Rabinovici
Prof. M. Ramamoorthy

Dr. Manuel Romero
Dr. Ravi S. Srinivasan
Dr. Mohamad Fani Sulaima
Prof. Gopal Nath Tiwari
Dr. Vittorio Verda
Prof. Valery Vodovozov
Prof. Nikolai Voropai
Prof. Hongqiang Wang
Prof. Lei Wang
Dr. Yifei Wang
Prof. Fushuan Wen
Prof. Chao Xu
Dr. Wenxian Yang
Dr. Xiaowei Zhou



Subject Coverage

All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copy. The journal publishes original papers including but not limited to the following fields:

1. Power Generation-Conventional and Renewable

Bio-energy technologies, process and utilization
Environmentally-friendly technologies for power generation
Geothermal and tidal wave energy
Hydropower technologies and applications
New technologies and design for energy efficiency
New technologies for minimizing CO₂ generation
Photovoltaics for solar power applications
Safe nuclear energy generation and utilization
Thermal power technologies and applications
Waste products as fuel
Wind power generation and utilization
Advanced energy and power devices
Other sustainable energy

2. Power System Management

Application of wide area measurement system (WAMS)
Control strategies for modern power system stability
Integrated substation automation technologies
Load modeling, estimation and forecast
Modeling and simulation of large power systems
Online monitoring and fault diagnosis system
Power system analysis and optimization
Power system management technologies

Power system monitoring and mitigation technologies
Power system planning and operation

3. Power Transmission and Distribution

Advanced distribution and SCADA technologies
Electromagnetic analysis in power systems
Electromagnetic compatibility in power systems
Electromagnetic transient in high voltage power systems
HVDC and flexible AC transmission system (FACTS)
Insulation condition monitoring in power systems
Over-voltage, lightning protection and grounding
Plasma physics and the pulsed power technology
Ultra high voltage (UHV) technologies

4. Smart Grid Technologies

Agent-based computational economics for grid
Agent-based mechanisms for grid markets
Agent-based simulation of grid environments and markets
Automated negotiation for grid resource allocation
Engineering of grid markets and grid architectures
Modeling of grid environments
Resource allocation in grid scenarios using agent-based approaches
Technical research on future application domains

We are also interested in: 1) Short Reports—2-5 page papers where an author can either present an idea with theoretical background but has not yet completed the research needed for a complete paper or preliminary data; 2) Book Reviews—Comments and critiques.

Notes for Intending Authors

The submitted manuscript should not have been previously published in any form and must not be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer process. For more details about the submissions, please access the website.

Website and E-Mail

<https://www.scirp.org/journal/jpee>

E-mail: jpee@scirp.org