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Modeling, Optimization, and Security of Modern Energy-Water Nexus with High Penetration of Renewable Energy Sources

Guest Editors:

Prof. Dr. Javad Khazaei

 Department of Electrical Engineering, Penn State Harrisburg, Middletown, PA 17057, USA
Department of Architectural Engineering, Penn State University Park, PA 16802, USA

Dr. Arash Asrari

School of Electrical, Computer, and Biomedical Engineering, Southern Illinois University, Carbondale, IL 62901, USA

Dr. Faegheh Moazeni

Department of Civil and Environmental Engineering, Penn State Harrisburg, Middletown, PA 17057, USA

Deadline for manuscript submissions: closed (15 October 2021)



Message from the Guest Editors

This Special Issue aims at acting as a bridge between research and development groups for state-of-the-art application of intelligent methods in modeling, optimizing, controlling, and securing smart grids. Researchers from academia, industry, and government are invited to submit their original and unpublished work to this Special Issue. The topics of interest include but are not limited to:

- Dynamic modeling and stability analysis of energywater systems with high penetration of renewables and storage;
- Control of power systems in presence of uncertainty from renewables;
- Optimization problems in modern water and energy systems;
- Demand side management in modern power grids and water distribution systems with high penetration of renewables and storage;
- Modeling and detection of cyberattacks in smart grids and water distribution networks;
- Application of renewable sources to building energy management;
- Modeling and analysis of loads in buildings for economic dispatch in smart grids;
- Application of artificial intelligence in addressing modern power grid issues;
- Performance of smart homes in smart city;
- Smart homes in power markets.



mdpi.com/si/56568





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Prof. Dr. Marc A. Rosen

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

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Sustainability Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/sustainability sustainability@mdpi.com X@Sus_MDPI