

Applied Research

Scientific Committee Electronics & Computer

Research Work Title

Research, design and implementation of renewable energy technologies in networked microgrids



Researcher

Prof. Seyed Mohammad SHAHIDEHPOUR

Country of residence

U.S.A

Field

Green Technology

Scientific Affiliation

Illinois Institute of Technology

Abstract

Prof. Mohammad Shahidehpour is the principal investigator of numerous financially-sponsored projects on renewable energy applications to electric power system operation. For decades, he has advocated the use of renewable energy-based microgrids (i.e., small islandable electric power systems) for enhancing the economics, security, reliability, resilience, and sustainability of energy systems in various parts of the world. He is the chief architect of a 12MW microgrid at Illinois Institute of Technology (IIT) in Chicago which has enhanced the local grid reliability. Internationally, Prof. Shahidehpour is the key architect of a 3MW solar-based microgrid at the University of Virgin Island. In addition, he is the key designer of numerous renewable energy-based off-grid installations in Sierra Leone (West Africa), India, and Turkey, where local villagers now have access to the continuous supply of clean energy.

Biography

Prof. Mohammad Shahidehpour is a distinguished university professor, Bodine Chair Professor of Electrical and Computer Engineering, and director of the Robert W. Galvin Center for Electricity Innovation at Illinois Institute of Technology in Chicago. His project on Perfect Power Systems has converted the entire IIT Campus to an islandable microgrid. Dr. Shahidehpour was the recipient of several technical awards including of the IEEE Burke Hayes Award for his research on hydrokinetics, IEEE/PES Outstanding Power Engineering Educator Award, IEEE/PES Ramakumar Family Renewable Energy Excellence Award, IEEE/PES Douglas M. Staszkesy Distribution Automation Award, and the Edison Electric Institute's Power Engineering Educator Award. He co-authored 6 books and 750 technical papers on electric power system operation. He is also an academican of the US National Academy of Engineering.

