

6th International Conference and Exhibition on

Mechanical & Aerospace Engineering

November 07-08, 2018 | Atlanta, USA

The optimized PV-UPFC hybrid network for power quality improvement load by an improved distribution algorithm: A best performances from combination of the proposed PV systems and unified power quality controllers

Wassila Issaadi

University of Bejaia, Algeria

Combining active filters and renewable sources, in particular photovoltaic systems, allows us to take advantage of power enhancers in delivering high quality pollution free power to consumers. Due to the numerous applications of the solar system, the present study has taken into consideration a different type of its applications, so that by combining UPQC and PV systems in areas nearby loads, which have high potential of radiation, one can improve the quality of electrical energy delivered to consumers. Therefore, the present study aimed to design a proposed system (UPQC-PV) considering control of the active filter, the photovoltaic system's maximum power point tracking, and DC-link voltage control strategy. The results obtained from the present study indicated that compensating the parallel active filter leads to remove the unwanted current at the end of the network and also compensating the series active filter leads to compensated voltage drop in the network.

Biography

Wassila Issaadi is a Doctor of Sciences in Department of Automatics, Electronics, and Electrical Engineering, University of Bejaia, Algeria and received her Doctorate (PhD) degree in September 2016 at the age of 26 years. She obtained Magister degree in 2013 and the diploma of state engineer in 2011. Her current research interests include Robotics, Automatics, Adaptive and Robust control, Photovoltaic and its Controls, Artificial Neural Network and Fuzzy Logic Theory. She is author of many research papers published at both International and National journals (Elsevier and IEEE), Conference proceedings. Now she works as Editor for Nova Science Publisher and Springer Publisher for four collections of Books in Robotics and Renewable Energy, and also as Guest Editor for upcoming collection for the journal of Advances in Mechanical Engineering for publisher Sage. She is an Editorial Board Member for reputed in International Journals She is also a reviewer in renowned journals: Applied Energy APEN (Elsevier), Energy Strategy ES (Elsevier), Solar Energy SE (Elsevier), International Journal of Renewable Energy Research-IJRER Cited in SCOPUS, EBSCO and Thomson Reuters and International Journal of Energy Research (Wiley), International Journal of Management, Information Technology and Engineering and many others journals and serving as an Editorial Board Member of reputed conferences and both an Editorial Board Member and Reviewer in many conferences events and potential speaker for many conferences events. Doctor Wassila Issaadi teaches in University courses in programming of automates (PLC programming), automatismes and robotics. Doctor Wassila ISSAADI worked as Chair Member in International Conference on Design and Production Engineering "DPE2016" at Berlin, Germany 2016, and Chair for session of her interest in International Conference on Design and Production Engineering "DPE2017" at Paris, France 2017. She is Chair and speaker for session in "2nd World Congress on Wind and Renewable Energy" June 14-15, 2018 at London, United Kingdom (UK).

milissa.kate@yahoo.fr

Notes: