Special Issue

Interactive Integration of Electric Vehicles and Power Networks: Emerging Issues and Solutions

Message from the Guest Editor

With the increased interest for sustainability, the use of electric vehicles (EVs) has emerged as a popular choice for enabling sustainable energy usage. Operation of EVs not only contribute to decreased dependence on fossil fuel but also address novel issues reported in the modernized power network. Promising results have been reported from various demonstration sites that EVs could be considered as a valuable distribution resource that accelerates flexible and resilient operation of power networks. Meanwhile, EVs would also introduce novel challenges to power grid operation. Installation of EV charging facilities is required and charging demand of EVs should be effectively addressed for stable power system operation. This special issue attempts to discuss issues and solutions related to challenges and opportunities introduced by EVs. Topics of interest include, but are not limited to: Approaches for prediction of EV charging demand and renewable energy resource output Approaches for distributing method of EV charging demand EV charging demand and transmission & distribution network EV scheduling and Demand Response EV smart charging method(V1G) and Vehicle-to-Grid(V2G)

Guest Editor

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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