
Electric Vehicles in Smart Grids

Electric vehicles (EVs) could play the central role in decarbonising road transport, but this new type of electricity load imposes challenges on the Smart Grid. Demonstration and deployment of smart grids with the help of specific technologies are needed to make the grid integration of electric vehicles viable. Moreover, this process can facilitate ancillary services of the grids and make full use of the storage capabilities of electric vehicles in the power system.

Special Issue on Grid Integration of Electric Vehicles

This special issue of DER Journal welcomes papers from the scientists working with electric vehicles and their grid integration. Special focus is given to the COTEVOS project.

COTEVOS addresses various aspects of EV deployment: along with the issues of cross-national transparency, the operational reliability, and the interaction between the grid infrastructure and vehicles, the project also considers the standpoint of services and business.

The issue will be published in summer 2015.

Expected Topics:

- Modelling and simulation of EVs
- Smart charging
- Interoperability aspects
- ICT aspects for EV management within Smart Grids
- Key innovations for accelerating the adoption of EVs
- Testing procedures for grid integration
- Grid services opportunities from EVs
- Standardisation aspects for grid integration of EVs

DER Journal

International Journal of Distributed Energy Resources and Smart Grids is a scholarly peer-reviewed archival Journal.

It publishes experimental, theoretical and applied results in both science and engineering for Distributed Energy Resources and Smart Grids. The Journal welcomes paper submissions describing recent results in science and engineering on the following topics:

- Power Electronics
- Grid Control
- Microgrids
- Transmission Systems
- Power Quality
- Wind Energy
- Fuel Cells
- Photovoltaics
- Storage Technology
- Combined Heat and Power
- Thermal Energy
- Information and Communication Systems
- Simulation
- Laboratory Tests
- Pilot Installations
- Regulatory and Normative Aspects
- Hardware-in-the-loop Testing
- Electric Vehicles

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Call for Papers

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Grid Integration of
Electric Vehicles

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Entry Deadline: 15th May, 2015

Paper Submission

Editors welcome high quality papers from the international Smart Grid and DER research community. You are invited to find more information on the submission procedure and to download the Guide for Authors and an article template on <http://www.der-journal.org/paper-submission/index.html>

DERlab association

DERlab is a network of leading research institutes working together for the grid integration of distributed power generation. DERlab develops joint requirements and quality criteria for Smart Grid integration of distributed energy resources (DER).



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