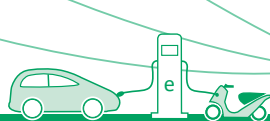


# 3<sup>rd</sup> E-Mobility Power System Integration Symposium



Oct/Nov 2019

Dublin, Ireland



[www.mobilityintegrationsymposium.org](http://www.mobilityintegrationsymposium.org)

## ► CALL FOR PAPERS

### Integration of Large-Scale E-Mobility Solutions into Power Systems

Sharing Knowledge & Ideas

Power System Aspects

Voltage Quality

Grid Integration Modelling

Research

Power System Balancing

Grid Integration Solutions

Supply/Demand Balance

Sustainable Business Models

Market Design

PEVs & PHEVs

Innovative E-Mobility Applications

Charging Infrastructure

EVs & Distribution Grids

Reactive Power Control

Vehicle-to-Grid (V2G) Services

Public Transportation

Smart Grid/IT Solutions

Electricity based Mobility Concepts

Grid Code & Power Quality

Charging Forecast

Industry

Regulatory Issues

Discussion

## ► Presentation of Paper

If you would like to present a paper at the symposium please visit our website:

[www.mobilityintegrationsymposium.org](http://www.mobilityintegrationsymposium.org)

To submit a paper, upload an abstract of maximum 3,000 characters (free style) between **11 February and 11 May 2019**.

Final papers must then be submitted online by **31 August 2019**.

As the conference language is English, all abstracts have to be written in **English**.

**Authors will pay a reduced registration fee.**

All participants are responsible for paying their own travel and hotel expenses.

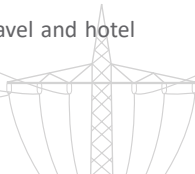
## ► Proposed Preferential Topics

### Project Experience

- World-wide project experience related to electric vehicles and power system integration and operation
- Experience with integration of electric vehicles into power systems

### Power System Aspects

- World-wide electric vehicles grid integration studies – methods and results; also in combination with renewable wind energy/VRE grid studies
- Electric vehicles integration study methodologies and data requirements
- Impact of electric vehicles on demand profiles
- Electricity demand forecast with electric vehicles
- Power system balancing with high share of electric vehicles
- Dynamic impact of electric vehicles on power system operation
- Power quality issues related to electric vehicles



### Distribution Grid Issues

- Electric vehicles in weak distribution grids – connection experience and studies
- Protection aspects related to electric vehicles in distribution grids

### Market Issues

- World-wide market design and regulatory issues related to electric vehicles
- Design concepts for ancillary services with electric vehicles
- Evaluation of rules and mechanisms for integrating of electric vehicles
- Role of electric vehicles in the electricity market

### Charging Infrastructure

- Charging infrastructure concepts
- Impact of electric vehicle charging infrastructure on distribution networks/power system

- Required electric vehicle infrastructure and its impact on power system infrastructure
- Standards and interoperability for charging interfaces and communication between vehicle and infrastructure
- Electric charging monitoring and prediction systems
- Innovative Smart Grid/IT solutions considering electric mobility

### Modelling Aspects

- Modelling of electric vehicle/charging infrastructure inverters for system integration studies including methods of testing and verification of compliance with requirements
- Modelling of electric vehicle/charging infrastructure for power system planning and interconnection studies

### Grid Code Issues

- Interconnection standards/grid codes for electric vehicles

## Smart Grid Aspects

- Vehicle-to-grid (V2G) services (e.g. V2G providing ancillary services for power system)
- Virtual power plants with electric vehicles
- Communication, control and coordination of electric vehicles charging
- New and emerging features of power systems with high share of electric vehicles

## Decarbonization of Energy Sectors

- Sector coupling – transportation, heat and electricity sector coupling for decarbonization of energy sectors
- Modelling of sector coupling with focus on electric vehicles
- Electric vehicle charging with renewable energy (wind & solar)

## Mobility Concepts

- Conversion of (public) fleets to e-mobility: concepts, strategies and experiences and its impact on grid integration
- New electricity based mobility concepts and its impact on power system infrastructure/operation
- Future mobility concepts and its impact on power system infrastructure/operation



## ► About the Symposium

The purpose of the Symposium is to discuss the challenges that arise with increased power demand due to electric vehicle charging, and how they can be met by coordinating with renewable power production in the electrical system (hence the combination with the Solar & Wind Integration Workshops). The selection of topics also highlights the need for integrating the required electric vehicle charging infrastructure with the expansion of the distribution and transmission system.

The Symposium offers a prime opportunity to discuss the significant future impact of E-Mobility on power system design and operation. It aims to bring together experts on electric vehicles, charging infrastructure, power system operators, and stakeholders of the renewable energy industry as well as power system regulators and universities.



## ► Advisory Committee

- Thomas Ackermann | Energynautics, Germany
- Jann Binder | Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW), Germany
- Hermann de Meer | University of Passau, Germany
- Markus Dietmannsberger | Hamburger Hochbahn, Germany
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- Emanuele Taibi | IRENA, Germany
- Oskar Wallmark | KTH – Royal Institute of Technology, Sweden

► The E-Mobility Symposium is part of the Grid Integration Week:



► Website & Contact Details:

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