2nd E-Mobility Power System Integration Symposium

following the 8th Solar & 17th Wind Integration Workshops



19 October 2018 Stockholm, Sweden



www.mobilityintegrationsymposium.org

Call for Papers

Be one of 25+ speakers! 100+ participants expected!

The purpose of the E-Mobility Power System Integration 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 Workshop). 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.

► Presentation of Paper

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

www.mobilityintegrationsymposium.org

To submit a paper, upload an abstract of maximum 3,000 characters (free style) between **11 February and 11 May 2018**.

Final papers must then be submitted online by 31 August 2018.

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.

Advisory Committee

- Thomas Ackermann | Energynautics, Germany
 - John Anderson | Nat. Aeronautics & Space Research Centre (DLR), Germany
- Hermann de Meer | University of Passau, Germany
- Elin Karlsson | KTH Royal Institute of Technology, Sweden
- Sonja Klingert | University of Mannheim, Germany
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- Lennart Söder | KTH Royal Institute of Technology, Sweden
- Felix Steck | Nat. Aeronautics and Space Research Centre (DLR), Germany
- Emanuele Taibi | IRENA, Germany

Proposed Preferential Topics

- Project experience related to electric vehicles and power system integration and operation
- Experience with integration of electric vehicles into power systems
- Role of electric vehicles in the **electricity market**

- Evaluation of rules and mechanisms for integrating electric vehicles in electricity markets
- Market design and regulatory issues related to electric vehicles
- Impact of electric vehicles on demand profiles
- Electricity demand forecast with electric vehicles
- Power system balancing with high share of electric vehicles
- Impact of electric vehicle charging infrastructure on distribution networks/power system
- Required electric vehicle infrastructure and its impact on power system infrastructure
- 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
- Interconnection standards/grid codes for electric vehicles
- Electric vehicle charging with renewable energy (Wind & Solar)
- How to ensure electric vehicles charging with CO₂ free power generation
- Calculation methods for defining the energy mix for electric vehicles charging

- Sector coupling transportation, heat and electricity sector coupling for decarbonization of energy sectors
- Modelling of sector coupling with electric vehicles
- Dynamic impact of electric vehicles on power system operation
 Vehicle-to-grid (V2G) services (e.g. V2G providing ancillary services
- Electric charging monitoring and prediction systems
- Innovative Smart Grid/IT solutions considering electric mobility
- Virtual power plants with electric vehicles

for power system)

- Communication, control and coordination of electric vehicles charging
- New and emerging features of power systems with high share of electric vehicles
- New electricity based mobility concepts and its impact on power system infrastructure/operation
- Future mobility concepts and their impact on power system infrastructure/operation
- Power quality issues related to electric vehicles

▶ The Symposium is part of the Grid Integration Week:







Website & Contact Details:

 $www.mobility integration symposium. or g\\info@mobility integration symposium. or g\\$



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▶ Co-Organizer:

KTH – Royal Institute of Technology Stockholm, Sweden

