17th Wind Integration Workshop

International Workshop on Large-Scale Integration of Wind Power into Power Systems as well as on Transmission Networks for Offshore Wind Power Plants

17 - 19 October 2018

Stockholm, Sweden

www.windintegrationworkshop.org

Call for Papers

Be one of **120+ speakers** at the next workshop! **250+ participants** expected!

ABSTRACT SUBMISSION
31 MAY 2018
Extended!

Participate in an international forum to:

- Discuss technical and economic issues of the large-scale integration of wind power including the recent advances in transmission technologies (AC and DC)
- Share project experiences
- Present innovative ideas and results from ongoing research
- Stimulate interdisciplinary thinking between wind energy and power transmission industries, as well as universities
- Identify subjects requiring more research efforts

Advisory Committee

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- Yoh Yasuda | Kyoto University, Japan

Proposed Preferential Topics

Project Experience

- World-wide project experience related to onshore/offshore grid connection of wind power
- World-wide experience with large-scale integration of wind power plants into power systems
- World-wide experience with balancing power systems with high shares of wind power/variable renewable energy (VRE)
- World-wide wind/VRE grid integration experience – the TSO perspective
- Advances in on- and offshore wind energy technology and grid connection (HVAC/HVDC)

Power System Studies

- World-wide renewable wind energy/VRE grid integration studies – methods and results
- Wind/VRE integration study methodologies and data requirements

Distribution Grid Issues

- Wind energy in weak distribution grids – connection experience and studies
- Protection aspects of wind power in distribution grids
- Voltage control with distributed wind power

Transmission Grid/Power System Issues

- Wind energy in weak transmission grids – connection experience and studies
- Wind power plant performance for power system operation and interconnection with the grid
- Dynamic line rating/online dynamic security assessment and high temperature overhead lines for the integration of VRE
- Transmission grid planning with high shares of wind/VRE
- Impact of N-1 regulations on power system operation with high shares of wind/VRE
- Conversion of AC power lines to DC lines to increase the capacity to facilitate higher shares of wind/VRE in power systems
- Power system automation and its benefits for wind/VRE integration
- Connection of Offshore wind power plants with HVDC Technology
- Inertia aspects related to high shares of wind power/VRE in power systems

Power Quality Issues

- The impact of wind power on power quality
- Power quality aspects with inverter based generation in scenarios with high penetration

Grid Code Issues

- World-wide interconnection standards (grid codes) for wind turbines, wind power plants, for system planning and interconnection studies
- Compliance testing for grid codes – world-wide status and approach

Wind Power Modelling Issues

- Wind turbine/plant models for interconnection and planning studies
- Modelling of inverters and wind power plants for system integration studies (static and dynamic)
- International modelling standardization activities
- Modelling Wind power plants output variability and assessing the impacts
- Modelling of HVDC technology

Power System Balancing Issues

- Power balancing methods and solutions, e.g. balance markets, to manage VRE variability in power systems
- Flexibility of the conventional power plants
- New power system operation tools and methods for balancing wind/VRE

Ancillary Services

- Ancillary services from wind power plants – world-wide status and experience
- Inertia response from wind power plants

Forecasting

- Wind power production monitoring and prediction systems
- State-of-the-art wind power forecasting, scheduling and opportunities for improvement
- Demand forecast with distributed wind/VRE

Hybrid Power Systems

- Design and operation of hybrid systems with wind energy technology Smart Grid/IT Innovations
- Innovative Smart Grid solutions utilizing wind power
- IT technology for the integration of wind power
- Microgrids and other new ideas to increase the share of wind/VRE in power systems
- Virtual power plants utilizing wind power plants
- Demand response in smart grid context
- New and emerging features of power systems with high share of wind energy/VRE

Market Issues

- World-wide market design and regulatory issues related to wind power/VRE
- Design concepts for ancillary services with wind/VRE participation
- Evaluation of rules and mechanisms for integrating of wind/VRE in electricity markets

Regulatory Issues

- Storage solutions and relevant regulatory issues
- Innovative Smart Grid solutions and relevant regulatory issues

Decarbonization of Energy Sectors

- Sector coupling – transportation, heat and electricity sector coupling for decarbonization of energy sectors
- Modelling of sector coupling with focus on wind power

Presentation of Paper

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

www.windintegrationworkshop.org

To submit a paper, upload an abstract of maximum 3,000 characters (free style) between **11 February and 31 May 2018 (extended deadline)**.

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 workshop fee.

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

Citation Index Systems & Best Papers

The workshop proceedings will have an ISBN Number and will be submitted to international libraries and organisations who operate citation index systems such as the (i) FIZ – Fach Informations Zentrum Karlsruhe, (ii) Elsevier, (iii) ETDE, (iv) Reuters, (v) Compendex, (vi) ThomsonCitationIndex so that the proceedings are more easily available for academia and industry world-wide.

Similar to previous years, the IET is going to publish the best workshop papers in a Special Edition of the Renewable Power Generation Journal. For the latest publication, from **April 2018**, visit: http://tiny.cc/IET

IET Publishing
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The Wind Integration Workshop is part of the Grid Integration Week:

2nd E-Mobility Integration Symposium — Stockholm Sweden — 15 October 2018

8th Solar Integration Workshop — Stockholm Sweden — 16 - 17 October 2018

17th Wind Integration Workshop — Stockholm Sweden — 17 - 19 October 2018

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