PROCEEDINGS

1st International Workshop on

Integration of Solar Power into Power Systems



24 October, 2011, Aarhus, Denmark





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Edited by Uta Betancourt / Thomas Ackermann

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Welcome to the 1st International Workshop on Integration of Solar Power into Power Systems

It is a great pleasure to welcome you to the 1st edition of the *International Workshop on Integration of Solar Power into Power Systems* in Aarhus, Denmark.

The initial idea for a Solar Integration Workshop was already born a few years ago, but interest was rather low. But at the Wind Integration Workshop in Québec City, Canada in 2010, more and more participants indicated their interest in Solar Integration Issues, so we thought it is time to launch the idea again. This time, the feedback was much better than we anticipated, with close to 100 abstracts submitted following the call for papers which allowed us to compile a very interesting program.

Similar to the wind integration workshop, the general purpose of this workshop is to bring together utilities, PV/CSP system developers and project developers, power systems operators and other professionals to exchange knowledge and ideas, as well as experiences in matters relating to the integration of solar energy into the power systems.

The aim of the first workshop is to provide a full overview of all relevant topics related to Solar Integration with special focus on the German integration experiences. We hope that this $1^{\rm st}$ International Workshop on Integration of Solar Power into Power Systems is the beginning of a long, interesting success story, with many interesting presentations and discussions.

I like to mention that the 1st Solar Integration Workshop is part of a whole Renewable Energy Week this year in Aarhus, Denmark, with a number of related events such as *Tutorials for the Solar Integration Workshop* (October 23, 2011) and *Tutorials on Wind Turbine Modeling* (October 24, 2011), the 10th International Workshop on Large-Scale Integration of Wind Power into Power Systems as well as on Transmission Networks for Offshore Wind Power Plants (October 25-26, 2011), the *Fifth Workshop on Best Practice in the Use of Short-term Forecasting of Wind Power* (October 24th, 2011), the dedicated TSO-Energinet.dk-day (October 27, 2011) and two different *field trips* (October 27 and 28, 2011).

In order to make the contributions to this workshop easier available for academia and industry world-wide we will submit the proceedings 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.

This workshop would not be possible without the support of our Gigasponsor **Danfoss.** Above all, we would like to thank the Danish TSO *Energinet.dk* for its general support and local assistance.

We would also like to thank all those who supported the organizers of this workshop: Uta Betancourt and Jörg Braun (all Energynautics, Germany), Antje Orths (Energinet.dk) and the International Advisory Committee.

Have an inspiring stay in Aarhus and a fruitful workshop!

Thomas Ackermann energy**nautics**

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