



IMPLEMENTING AGREEMENT ON PHOTOVOLTAIC POWER SYSTEMS

IEA PVPS & SHC Workshop @ EUPVSEC 2013

“Solar resource and forecast data for high PV penetration electricity”



Day: Tuesday, 1st October, 2013
Time: 13:30 – 16:45
Site: Auditorium 515 A/B
Access: Open to all registered participants of the 28th EU PVSEC

The higher the penetration of PV the more important is the precise knowledge of the past and future solar resource. Additionally it becomes more and more important that engineers and meteorologists understand each other and work closely together. That’s why the IEA tasks SHC 46 (“solar resource assessment and forecasting”) and PVPS 14 (“high penetration of PV”) are working together and are holding this common workshop. In the workshop we will present some of the on-going work of the two tasks with a focus on solar (short term) forecast.

Programme Outline

13:30-15:00

Intro / Workshop outline / setting the floor – 20 min

- Dave Renne, operating agent of IEA SHC 46
- Christoph Mayr & Roland Bründlinger, AIT, operating agent of IEA PVPS 14
- Jan Remund, Meteotest, member of IEA PVPS 14 and IEA SHC 46

Session 1: High penetration of PV in distribution grids – 30 min

- Investigation of cloud indicators for low voltage distribution grid transformers – Holger Ruf, FH Ulm (SHC 46)
- Comparison of 7 measures to integrate PV in the low voltage grid, using stochastic irradiance data, Christof Bucher, Basler & Hofmann (PVPS 14)

Session 2: Forecast of PV on transmission level – 40 min

- PV production forecast of balance zones in Germany– Elke Lorenz, University of Oldenburg (SHC 46)
- Accuracy evaluation of solar irradiance forecasting technique using a meteorological model, Yasushi Miwa, Chubu Electric Power Co., Inc., Kazuhiko Ogimoto, University of Tokyo (PVPS 14)

15:00-15:15

Networking break / Coffee break

15.15-16:30

Session 3: Solar forecasting systems on local and regional level – 75 min

- Ensemble model solar forecasting for NW Europe – Kristian Pagh Nielsen, Danish Meteorol. Institute (SHC 46)
- PV forecasting confidence intervals for reserve planning and system operation – Paul Kreutzkamp, 3E (PVPS 14)
- Solar forecasting improvement project (USA) – Manajit Sengupta, NREL (SHC 46)
- Shortest term forecast system for PV plants and distribution grids – Stefan Müller, Meteotest (SHC 46 / PVPS 14)
- Ramp rate mitigation using short term energy buffers – Richard Perez, State University of New York (SHC 46)

16.30-16:45

Moderated discussion and workshop conclusion

Participants can look forward to a series of expert presentations, discussions and networking opportunities. Please register on www.iea-pvps.org/workshops