

# **Grid Integration and Power Quality**



Grid integration and power quality of decentralized power generating units (PGU) like wind turbines, small wind turbines, PV converters and combined heat and power plants (CHP), but also power generating plants (PGP) like wind farms and PV plants are becoming ever more crucial topics all over the world. To guarantee grid stability, utilities have established different requirements in terms of controllability, response to temporary voltage drops (LVRT and OVRT), grid protection and power quality.

The department Grid Integration and Power Quality of windtest grevenbroich gmbh (wtg) offers accredited measurement services at PGUs and PGPs for IEC type certification, international grid code compliance certification, verification of the above- mentioned electrical characteristics for the utility or your R&D.

#### **Customer benefits**

The main reasons for using wtg as your accredited partner are:



- High-quality, powerful cooperation with our customers before, during and after the project, which helps to identify problems early on and rectify them before certification;
- Specialist skills and professional approach as well as the flexibility and ingenuity of our staff;
- Customized evaluations like harmonic grid pre-load, harmonic power flow and detailed flicker frequency analysis for your R&D.

# **Basic implemantation**

Measurements are taken all over the world using our own measurement technology and specifically developed software either in the field test or on test benches. Depending on the technology, the site where the measurement is performed and also depending onthe test plan, testing may take from one week up to several months.



### Competence

wtg is a test laboratory accredited in accordance with DIN EN ISO/IEC 17025 and offers all necessary measurements based on national and international standards and grid codes. Furthermore, our specialists are members of several national and international working committees like IEC61400 21, FGW TR3 and the MEASNET Power Quality Expert Group.

The department Grid Integration and Power Quality is one of the few measurement institutes worldwide holding the

- MEASNET seal of conformity for grid integration and power quality measurements as well a the
- FGW seal of conformity for the determination of electrical characteristics of power generating units and systems connected to MV, HV and EHV grids (FGW TR3)



# Contact

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