### **Power Curve Working Group Agenda**

Impact of 'non-standard' inflow 3rd Meeting, Thursday 30th May 2013, REPower, Hamburg

**Theme:** The 1<sup>st</sup> meeting gave a clear statement of the problem. The 2<sup>nd</sup> meeting examined possible solutions. The 3<sup>rd</sup> meeting is aimed at putting some of those solutions into practice.

#### Welcome/Registration:

• 9am-10am: Tea/Coffee will be available.

### Morning Session: 10am-1pm

- 10.00 10.05 "Welcome" Tomas Blodau (REPower)
- 10.05 10.20 "Review of Previous Meetings" Andrew Tindal (GLGH)
- 10.20 10.40 "Round Robin Results Overview" Peter Stuart (RES)
- 10.40 11.30 Round Robin Task#1: Impact of High Wind Shear
  - o Task #1 Introduction Presentation (Anna Marsh DNV KEMA) 5 minutes
  - What lessons have we learnt from the round robin exercise?
  - O What are the pro/cons of the approaches?
  - How does the use of LiDAR rotor data compare to 'proxy methods' (e.g. turbulence intensity as proxy for stability)?
  - What would be an appropriate follow up exercise on this topic?
- 11.30 11.45 Tea/Coffee Break
- 11.45 12.15 Round Robin Task#2: Impact of Turbulence
  - o Task #2 Introduction Presentation (Anabel Gammidge RWE) 5 minutes
  - What lessons have we learnt from the round robin exercise?
  - O What are the pro/cons of the approaches?
  - What would be an appropriate follow up exercise on this topic?
- 12.15 12.45 Round Robin Task#3: Stakeholder Interaction
  - o Task #3 Recap of Inner/Outer Range Proposal Tomas Blodau (REPower) 5 minutes
  - o Task #3 Introduction Presentation Daniel Bendel (REPower) 5 minutes
  - O What lessons have we learnt from the round robin exercise?

- O What are the pro/cons of the approaches?
- What would be an appropriate follow up exercise on this topic?
- 12.45 13.00 Machine Learning Approach to Round Robin Tasks (NREL)

**Lunch**: 13:00 – 14:00

#### **Afternoon Presentation Session**: 14.00-14:30

- 14.00 14.15 Power curve measurements using the spinner anemometer, Jørgen Højstrup (ROMOWind)
- 14.15 14.30 "Use of lidars to measure non-standard flow effect on power curve measurement and resource assessment in the IEA Task 32", Rozenn Wagner (Risoe)
  - WP 3.1: Exchange of experience in power performance testing using a ground-based lidar according to IEC 61400-12-1 ed. 2 CDV;
  - WP 2.4: Using lidars (in particular wind speed profile measurements) for wind resource assessment.

#### Afternoon Discussion Session Part 1: 14:30 – 15:30 (Moderated by Andrew Tindal GLGH)

- Contrast of Round Robin with US Observations (Richard Whiting GLGH) 5 minutes.
- Open Discussion
- Ideal structure of next round robin exercise
- 15.30 15.45 Tea/Coffee Break

### Afternoon Discussion Part 2: 15.45 – 17.00 (Moderated by Andrew Tindal GLGH)

- Availability of datasets for future round robin exercises.
- What key messages does the working group want to communicate at the Dublin EWEA Technology Workshop in June?
- Wrap Up, Conclusions and Next Steps (20 minutes)
- Continued Public Distribution of Minutes and Presentations (5 minutes)
- Venue for next meeting (5 minutes)

**Reception**: 17:00 – 18:00 (tea, coffee and biscuits)

#### **Minutes of and Presentation of Previous Meetings:**

http://www.ewea.org/events/workshops/resource-assessment-2013/power-curve-working-group

# Venue

The meeting will take place at REPower's office in Hamburg. Please ask for Tomas Blodau at reception.

REpower Systems SE Überseering 10 D-22297 Hamburg





# **Nearby Hotels**

Leonardo Hotel City north, Mexikoring 1, 22297 Hamburg, tel: 00 49 40 632940 (100m from REPower office). http://www.leonardo-hotels.com

# **Transport**

Hamburg has excellent air and train connections. The venue is approximately 10 minutes from the airport by taxi.