

# Power Curve Working Group Agenda

Impact of 'non-standard' inflow  
4rd Meeting, Thursday 19th September 2013, Vestas R&D, Aarhus, Denmark

**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 put some of those solutions into practice. The 4<sup>th</sup> meeting will aim to consolidate the learning to date by examining new datasets.

**Welcome/Registration:** Please note earlier than usual start time of 9am.

- 08.45am-9.00am: Tea/Coffee will be provided on arrival.

**Morning Session:** 9am-12pm

- 09.00 – 09.05 “Welcome” Michael Pram Nielsen (Vestas)
- 09.05 – 09.20 “Review of Previous Meetings” Daniel Stevens SSE
- 09.20 – 10.00 “Round Robin Results Overview” Peter Stuart (RES):
  - Shear + Turbulence Corrections.
  - The inner/outer calculation is not officially part of the second round robin. However in order to compare how the method behaves on different sites example results will be presented for Datasets 1, 2 and 3.
- 10.00 – 10.30 Round Robin Results and Discussion: Impact of High Wind Shear
  - Introduced by Anna Marsh (DNV)
  - Datasets 1, 2 and 3 (time series modelling)
  - Dataset 1 (frequency distribution modelling)
- 10.30 – 11.00 Round Robin Results and Discussion: Impact of Turbulence Discussion
  - Introduction
  - Datasets 1, 2 and 3 (time series modelling)
  - Dataset 1 (frequency distribution modelling)
- 11.00 – 11.15 Presentation: “Numerical Modeling” Peter Stuart (RES)
- 11.15 – 11.30 Presentation: “Extended RR2 Analysis” Axel Albers (Wind Guard)
- 11.30 – 12.00 CFD Modelling of Turbulence and Shear Inputs for Power Correction Methods
  - 11.30 – 11.45 Oisin Brady (Natural Power)
  - 11.45 – 12.00 Yavor V. Hristov (Vestas)

**Lunch:** 12:00 – 12:30

**Afternoon Discussion Session:** 12:30 – 14:30 (Moderated by Andrew Tindal GLGH)

- How to improve consistency of round robin results?
- Open Discussion
- Proposals for future round robin exercises: possibility of additional power + LiDAR datasets?
- AWEA presentation.
- Continued public distribution of proceedings.

**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 Vestas's R&D office in Aarhus. Please **ask for Michael Pram Nielsen at reception.**

Vestas Turbines R&D  
Hedeager 42  
8200 Aarhus N  
Denmark

Please note that Vestas have multiple offices in Aarhus so please make sure to travel to the R&D office as above.

## Transport

Aarhus has a local airport and rail connections. It is also possible to access the venue from Billund Airport (approximately 1 hour 15 minutes by car).