

Performance Check in WindPRO webinar: Questions submitted during the webinar

| Questions | Answers |
|---|--|
| Hi, is it possible to use the module to check a wind turbine power curve? | Yes. If you have SCADA data and a good wind data record you can make a time-varying PARK calculation for your wind farm and compare it to your production record. The calculation tells you what a turbine should have produced in a time step and the production record what it actually did produce. One of the presentation options in the Performance Check module is as a power curve. |
| will there be an power sorted calender available (month, hour, power-matrix)? | Except for the actual report, which presents monthly production there is no specific calendar view. You can however isolate specific situations when you look at SCADA data (hours, seasons, wind directions etc.). |
| Is that a control tool as well to make sure that the manufacturers fulfill their guaranteed availabilities? | I think an analysis of the availability of the turbine is better one in a spread sheet analysis of SCADA data. You can assign the different SCADA parameters to a column in the production time series and then analyse the different parameters, but at the end of the day this analysis is simply a matter of whether the actual availability is below the warranted availability. |
| Is this tool specially made for operating turbines or is it also reasonable for the planning phase of a windfarm? | Definitely both. For the operating turbine you can based on actual production normalize it to a standard year and thus what you can expect to get from the turbine. That figure is important when you use the turbine as reference turbine in your calculation of a nearby planned project. If you can predict the existing turbines correctly you have validated the model for new turbines. |
| When will you demonstrate the aibility to detect underperformance? | Not in this presentation. Use of SCADA data in combination with a time-varying calculation is a more advanced operation. |
| what are the losses to be considered for estimating producion by on-site wind mast data while doing performance check of WTGs | In this presentation the wind index is not used directly to predict a production for the turbine. It is used to tel how a given month differs from a normal month.The losses that need to be applied depends on what is already included in the production data. If production data is sold power then only the compensated availability loss must be deducted. If however SCADA data and a timevarying calculation is used you will likely have to assume that the SCADA data are raw production and the difference to that predicted by the time-varying calculation must be explained by curtailment losses. After that external losses like electrical and availability losses must be deducted. |