

Demonstrate Wind Turbine Reliability

Background

- Budget and time for turbine validation are tight
- New control strategies, new design and upscaling of turbines are risk drivers
- Modules are validated by system suppliers who need duty cycles for efficient tests

Requirement

- Validation program for a 12MW+ wind turbine
- Modular validation work-split between turbine manufacturer and suppliers
- Integration of tests, simulation and quality into the validation process

Customer benefit

- A joint test program for the turbine manufacturer and the suppliers, performed in parallel on all integration levels from component to module
- High demonstration of reliability and excellent coverage of risks by the turbine supervision
- Reduction of warranty costs and highest availability via condition based maintenance

The Solution with Uptime LOCATE

- Definition of reliability targets and identification of main risk drivers
- Optimization of test efficiency and risk mitigation measures for a joint validation program
- Specification a the risk-focused turbine supervision and analytics system

