Situation for wind farm operators

- **HIGH INVESTMENT COST**
  Uncertainties around turbine- and site-specific loads hinder the minimization of conservative rotor blade designs.

- **POOR ENERGY-TO-LOAD RATIO**
  Unknown loads during operation prevent the optimization of turbine energy-to-load ratio.

- **LIFETIME LOADS**
  Unknown load histories impede the maximization of turbine lifetime.

Features of Turbine Load Control

With Turbine Load Control, we provide a sensitive detection system for detrimental loads and can calculate a virtual age of the turbine to enable lifetime extension.

Benefit for wind farm operators

- **KNOWLEDGE OF LOADS**
  Actively control the system and achieve an optimum relationship between protection and efficiency.

- **ACTIVE LOAD REDUCTION**
  Maintenance and repair work is reduced by active load reduction and avoidance of overloads.

- **LIFETIME EXTENSION**
  Knowledge of the cumulative loads can determine the virtual age and form the basis of lifetime extension.

Case Study

**Average continued service life**
6 years

**Potential for prolonged lifetime extension assessment**
10 %

**With a 3MW turbine this results in an additional production of**
2,250 MWh

**Equals an additional yield**
110 kEUR*

* At an assumed exchange price of 5 ct.

Achieved optimizations

- **LIFETIME ESTIMATION**
- **EXTREME LOADS MONITORING**
- **LOAD REDUCTION**

Get in touch

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