

Site Specific Load Assessment

Renewables



Our professional services provide comprehensive site-specific load calculations and comparisons for both planned and existing wind turbines, facilitating performance optimization when site conditions deviate from type certification. With our expertise, you can ensure the safe and efficient operation of your wind turbine and optimize your energy yield.

The individual wind turbine types are modeled using generic or detailed load calculation models. Detailed models contain all load-relevant design information. Alternatively, we can work with generic models that are developed and maintained for specific wind turbine types from our experienced loads team. These are based on the individual documents of the type certification as well as on further assumptions that are based on experience and require corresponding safety margins.

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With our independent site-specific load calculations and comparisons, you can unlock numerous benefits for your wind turbine project:

- Site Suitability Assessment
- Optimized Wind Sector Management
- Enhanced Energy Yield
- Risk Evaluation

Site specific load calculations as part of the site-suitability assessment adheres to industry standards like IEC 61400 series, ensuring compliance. Wind speed and turbulence parameters are critical in determining the appropriate wind turbine class for the site. Within wind farms, neighboring turbines cause wake effects, leading to potential increases in operational loads.

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