



Wind energy

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## TÜV SÜD optimises method for calculating ice throw and ice fall

**Munich. TÜV SÜD has expanded its method of calculating ice throw and ice fall from wind turbines. The optimised method now increases the level of precision in assessment of the potential risks and thus ultimately allows for more targeted control of wind-energy generators (WEGs).**

In Germany, the installation and operation of WEGs is subject to high quality and safety standards. The primary objective is to operate WEGs both safely and profitably. In regions with winter weather conditions, expert opinions addressing the risks of ice throw and ice fall are generally required as early as in the licensing procedure. "We carry out multi-step analysis of ice throw for this purpose. If the WEG has an ice-detection system, our analysis focuses on assessment of potential hazards", says Florian Weber, TÜV SÜD Industrie Service GmbH. In a first step, the experts find out whether the WEG has an ice-detection system which reliably shuts it down in case of icing, thus preventing further operation that may result in ice throw. In the next step, the experts determine the specific ice-fall hazards of the shut-down WEG.

To ensure maximum precision in their results, the experts from TÜV SÜD have further optimised their method of calculation. Next to orography and the meteorological input data from a site, they also consider turbine-specific parameters such as speed characteristics, rotor blade heating and the possibility of failure of the turbine's ice detection system. "Our calculations enable us to determine the hazard zone and provide precise assessment of any potential hazards for traffic routes or any possible damage to property such as photovoltaic systems in this zone", explains Thorsten Weidl, TÜV SÜD Industrie Service. "Our analysis also flags the measures that will enable operators to reduce these risks further, thereby possibly preventing lost days of operation due to icing."

Further information about TÜV SÜD's services in the field of wind energy are available at [www.tuvsud.com/windenergy](http://www.tuvsud.com/windenergy).

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