



DAMAGE ASSESSMENT ON WECS

In Germany, persons in the field of technical expertise who are appointed through the individual chambers of industry and commerce, e.g. to “publicly appointed and sworn technical expert for wind energy converters” are certified as having outstanding experience and extraordinary expertise in their particular field.

Inspection

Damage assessment

With court reports, meticulous clarification of the facts and an objective assessment are of particular importance insofar as they can have a direct influence on the court and thus on the verdict in a dispute between two parties with conflicting interests. The court therefore normally consults a publicly sworn technical expert for the assessment of technical issues. For the insurance company, it is in the nature of the thing to compensate adequately for damage. If damage occurs, the technical expert is called upon in order to obtain a technically correct clarification of the facts and an objective assessment of the matter. The technical expert is usually commissioned by the insurance company and must also take the actuarial principles into account in his report.

Scope of inspection

The practical inspection is similar in scope to a recurring periodic inspection with in-depth inspection of the “fatigue” complex of the most cases, a dispute in court will lead proceedings for the preservation of evidence. In order to gain evidence, the court formulates questions to the expert. In such cases, the function of the technical expert can be very diverse.

The questions concern defects and damage to wind energy converters in connection with the warranty for example. In connection with his function as a technical expert in court, it should be kept in mind that he must never be suspected of bias and must always maintain a neutral position to both parties at all times when giving evidence. For the insurance company, the scope of work varies greatly from damage to damage, ranging from gearbox damage or lightning damage to a rotor blade, to a disaster in which the entire nacelle is destroyed by fire. As with any report, it is particularly important to adhere to a structured process in the approach to and processing of the following points:

- investigating the facts and verifying the deficiencies or damage respectively,
- investigating and verifying the cause of damage,
- estimating the cost of repairing the deficiency or damage respectively,
- determining the depreciation in value if applicable,
- determining the increase in value in connection with the repair,
- determining the current value of the damaged components,
- evaluating the consequences in the overall context.

The appropriate experts are called upon to clarify questions in special cases such as fire. To determine the causes of damage and to analyse materials, like for example a tooth fracture in the gearbox, test laboratories or institutes which have the appropriate special facilities (scanning electron microscopy, material test bed, etc.) and can use appropriate test equipment, are called upon.

Inspection Result

The insurance company/client receives a report in which the scope of damage is described and is documented with photographs. The cause of the damage is clarified as far as possible therein and all other measures required for the respective case are derived from it.