



END OF WARRANTY INSPECTION

The legal warranty obligation of the wind turbine manufacturer ends upon expiry of the warranty period. The risk of damage to the wind energy converter and its consequences are transferred to the operating company. If the manufacturer is not notified of deficiencies prior to expiry of the warranty period, the operating company forfeits their legal right to free repair at the expense of the manufacturer. Technical problems, repairs or replacement of entire components can then significantly affect the profitability of the project over the course of the service life. Many years of experience and the knowledge of the nominal condition as well as the plant-specific weak points are fundamental prerequisites to be in a position to recognize identify deficiencies and to assess them professionally.

Inspection

On the basis of a qualified inspection prior to the expiry of the warranty period by a specialist technical expert, all deficiencies existing in the plant should be identified.

The aim is to make a statement as to whether:

- deficiencies exist on the WEC, the rectification of which must be requested of the manufacturer,
- there are fundamental deficiencies that justify or make a formal objection to the expiry of the statutory limitation period of warranty necessary by the purchaser/operating company there are abnormalities on components and weak points in the plant engineering, which in the light of the experience of the technical expert can cause technical problems or damage over the course of the useful life and thus affect the profitability of the project,
- there are any safety issues that would preclude operation of the WEC.

Scope of inspection

An "End of Warranty Inspection" embraces the entire wind energy converter, including the rotor blades. During the inspection, a similar level of attention is paid to the cost-intensive main components like gearbox, generator, inverter and rotor blades as is paid to the integrity of structural components such as foundation, tower or machine mounting. As a rule, plant safety-relevant functions are also inspected.

The scope of the end of warranty inspection includes the following as standard:

- making vibration measurements on the drive train (Condition Monitoring CMS), (optional)
- inspecting the plant documentation and maintenance records throughout plant operation,
- inspecting the foundation, tower and machine mounting as well as random checks on important screwed/bolted connections.
- inspecting all mechanical engineering and electrical components,
- inspecting the drive train and if required, measuring the gearbox-generator alignment per laser, (optional)
- inspecting the gearbox in detail by means of video endoscopy (optional)
- testing safety-relevant components and their function (safety chain, over-speed test, etc.),
- inspecting rotor blades, externally and internally (insofar as accessible) using an elevating work platform or rope access technique.

Inspection Result

We value your cooperation in reducing the impact on the environment. Therefore, the client/operating company/investor will receive a detailed digital inspection report of every plant in the shape of a Word or PDF file in which all deficiencies identified are named, described and documented to a large extent by photos. The inspection report serves the customer for submission to the WEC manufacturer to make a claim for repair of possible deficiencies and can also be submitted to the relevant licensing authorities as proof of a "Recurring Periodic Inspection". (optional)