WEC CONTINUED OPERATION INSPECTION (EAW)

The useful life of a wind energy converter depends upon the design lifetime of your relevant type/individual test (often 20 years). Prolonged operation of the WEC beyond this period of time is possible, providing that proof of the conditions required for this can be furnished within the framework of a continued operation inspection (EAW). The EAW is carried out by the Veltrup Technical Expert Bureau in a two-tier procedure comprising computational supplementary verification and a practical inspection.

Inspection

Computational supplementary verification

The computational verification serves to determine possible residual life reserves (e.g. through low wind loads, downtimes, etc.). This verification closes the gap resulting from the expiring validity of the individual/type test.

Scope of inspection

Practical inspection of the WEC

The practical inspection is similar in scope to a recurring periodic inspection with in-depth inspection of the "fatigue" complex of themes. Furthermore, it takes account of the fact that a large number of the current technical regulations on the manufacture, construction and operation of a WEC were only written after the commissioning date of the plant to be inspected and thus became valid. Accordingly, the subject of the EAW is an individual analysis of possible risks resulting from the continued operation of the machine, with particular consideration being given to the operating life already achieved and the specific conditions at that particular location.

The following topics are inspected:

- general, typical risks through wear and fatigue,
- type-/series-specific hazards due to construction-specific features, (weak point analysis),
- operational safety systems (condition, recency/state-of-the-art technology),
- systems/equipment and work safety/accident protection resources (condition, recency/state-of-the-art technology),
- individual degree of use of the WEC based on the location-specific conditions (wind frequency, degree of turbulence, farm effects, etc.),
- hazard potential through location-specific changes/peculiarities.

Inspection Result

We value your cooperation in reducing the impact on the environment. Therefore, the client/operating company/investor/service provider 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 test result of the report provided shows whether:
- the WEC is suitable for prolonged operation,
- measures must be taken to prevent risks,
- other conditions are linked to the prolonged operation of the system.

The test report serves as proof of inspection and legitimacy for the further operation of the wind energy converter and is suitable for submission to the appropriate authority.

Von der Oldenburgischen Industrie- und Handelskammer
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