



Technical „Due-Diligence“ Inspection of Wind Energy Converters

In the sale of wind farm projects, the contractual object is extensively tested prior to acquisition, in order to carry out a solid evaluation of the investment risks (due-diligence test). This is standard international business practice.

The subject-matter of a due diligence test carried out by specialists:

- legal due-diligence,
- tax due-diligence,
- financial due-diligence,
- market/commercial due diligence,
- environmental due-diligence,
- insurance due-diligence,
- human resources due-diligence and
- technical due-diligence.

The due-diligence test is carried out by herein specialized services, which act as technical consultants to **SV-Veltrup**. On commission from the client or investor, **SV-Veltrup** carries out with expertise and know-how the inspection of the technical operations of the wind energy converter and writes up the “technical due- diligence report.”

Goal

In contrast with the writing up of a detailed list of defects for the commencement-of-operations inspection of a WEC, the focus of this inspection is the identification and evaluation of technical strengths and weaknesses – and the opportunities and risks resulting hereof.

The objective is to establish whether:

- major defects exist, which would justify a rejection by the buyer/operator,
- the built WEC complies with the supplied documentation and contractual agreements (compliance inspection),
- any technical-safety considerations exist and
- any weaknesses in the technical systems exist, which in the experienced opinion of the expert team could lead to technical problems or defects in the course of its useful life and therefore affect the profitability of the project.

Scope

An expert team carries out the technical inspection of each WEC at the respective sites or, as the case may be, of a selection of wind energy converters. The number of experts (a maximum of eight) depends upon the size of the project and the extent of the required inspections. The participation of the consultant or investor is possible. During the inspection, detailed tests are carried out on the converter plant. Therefore, the participation of a service team is convenient.

In preparation of the tests, a full-length examination of the documentation is carried out by a leading expert. Afterwards, and in agreement with the client, a decision is made on the scope of the inspection and points of special interest.

Standard with **SV-Veltrup** ist the testing of:

- the compliance of the converter plant with the documentation (type approval, individual approval, building permit),
- the foundations and the towers,
- the mechanical and electrical components,
- the gearbox,
- the components and operations relevant to safety and
- the rotor blades (*).



Technical „Due-Diligence“ Inspection of Wind Energy Converters

(*) For financial reasons it is often possible to postpone the detailed inspection of the rotor blades in the due diligence test until the warranty/periodic inspection. In this case, it is simplified (random sample view tests, exterior and interior, where accessible). An extensive inspection of the rotor blades is optional and can be carried out in the course of the due-diligence tests.

Results

The objective is the writing up of a „technical due-diligence report,“ which can be used by the servicing group. The inspection report is to be submitted to the servicing client or, as the case may be, to the investor, in order to name the strengths and weaknesses of the applied converter plant technology and to evaluate the resulting risks hereof.

The client (servicing group or investor) receives a full-length status report as an original document and as a PDF (portable document format) file, in which all defects are named, described and, for the most part, photographically documented. This technical due-diligence report is written in either English or German. Reports in other languages can also be made through technical translation offices. If so desired, the results can be explained orally, for example, following the on-site inspection.



Sachverständigenbüro Veltrup
Weidegrund 9
26188 Edeweicht-Friedrichsfehn
Tel. +49 (0)4486 - 93 08 38
Fax +49 (0)4486 - 93 08 58
info@sv-veltrup.de
www.sv-veltrup.de