Direct Drive Wind-Turbine
Low-Cost PM-Generator and proven LVRT

The Simplicity of Wind-Power Generation
Based on Intellectual Property of SETEC-Dresden

WIND-POWER COMPETENCE by EXPERIENCE since 1995

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Advanced Wind-Turbine Design

• The features of the design are typified by technology of generator and electronics, and also includes the performance for Grid-Fault-Ride-Through. As a result high profit can be expected.

• There are neither oil containers nor hydraulics at the complete wind-turbine.

• The modular design of the permanent-magnet-generator makes low-cost fabrication possible. The design of the stator winding guarantees an increase in reliability.

• This is probably the best pitch system available at the market. Safety is excellent, compared with standard AC-Pitch-Drive, as well as with the DC-system. No batteries are needed at the pitch-system because of the super-capacitor.

• Design can easily be modified for offshore application

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The latest, cheapest and most highly reliable technology

→ Replace each type of gearbox from the drive-train.
→ Use a wind-turbine mainly free of maintenance ”
→ “ No hydraulic at the whole turbine ”
→ Apply AC pitch-drive with energy storage by capacitor and double safety at each rotor-blade drive system.
→ Use a decentral control system connected via direct bus, for the replacement of PC- and PLC control.
→ Remote control, diagnosis, condition monitoring and wind-farm SCADA without barrier.
→ Water-cooled permanent-magnet generator for insulation from contaminants includes modular winding structure, reduces costs and increases reliability
→ Water-cooled IGBT converter and direct drive experience since 1998

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• Complete electronic system for wind-turbine including manufacturing, sales and service of converter, pitch system and control system.

• Calculation and design “from tower-foundation to the rotor-blade”, including tower, nacelle, generator and hub (except of rotor-blades).

• Instructions for transport, installation, safety, commissioning, maintenance and service, and support for process of certification.

• Documents for the fabrication of PM generator, assembling and power-test. Generator shows an enormously simplified structure in order to ensure easy manufacturing and operation.

ENGINEERING and LICENSING
for MECHANICS, GENERATOR, IGBT-CONVERTER
The likely best PITCH-SYSTEM,
The CONTROL and SCADA SYSTEM

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