Planning, Policy & Development Control
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Web site: www.staffordshire.gov.uk/planning
Please ask for: Mike Grundy

Mr P. Roden
Axis
Unit 11, Well House
Bretton
Chester
CH4 0DH

Our Ref: SCE.127/524 MW

30 April 2012

Sent by email only

Dear Mr Roden,

SCE.127/524 MW: REQUEST FOR A SCREENING OPINION REGARDING THE DEVELOPMENT OF SINGLE WIND TURBINE ON RESTORED LAND AT UTTOXETER QUARRY

THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2011: REGULATION 5 - SCREENING OPINION

I refer to your letter dated 8 March 2012, received by email on 9 March 2012, in connection with the above.

I requested an extension of time to deal with this matter and you agreed an extension to 4 May 2012.

In accordance with the above regulations the County Council is required to adopt a "Screening Opinion" to establish whether the forthcoming application should be accompanied by an Environmental Statement.

The County Council has considered the information you supplied and is of the opinion that the proposed development falls within the description provided within Schedule 2 paragraph 3(i) to the above regulations, but in the opinion of the County Council, having taken into account the criteria in Schedule 3 to the above regulations and the indicative threshold criteria currently available in Circular 2/99 'EIA – A Guide to Procedures', the proposed development would not be likely to have significant effects on the environment by virtue of factors such as its nature, size or location. Further details are provided in the attached 'Screening Opinion Checklist'.

Under the powers contained in the 'Scheme of Delegation to Officers', this letter therefore confirms that the County Council is of the opinion that the proposed development **is not EIA development** and need not be accompanied by an Environmental Statement.

Nevertheless, as you point out in your letter, the application will need to be accompanied by supporting information to address a range of potential impacts. I would add at this stage that consideration should also be given to the following matters:

- the potential impact on air traffic as the site falls within the Marchington Civil Aviation Authority consultation area and close to the Needwood Forest Civil Aviation Authority consultation area;

- the potential impact on the proposed cricket pitch to be developed on the restored land (contact Maggie Taylor at Sport England tel. 020 7273 1753 / email Maggie.Taylor@sportengland.org); and,

- the relationship between the wind turbine and the quarry / other current and future neighbouring land uses e.g. life of the wind turbine and the duration of the quarrying activities and afteruses.

Yours sincerely

[Electronic Copy: Signature Removed]

Mike Grundy
Planning, Policy and Development Control Team Manager

Encl – Screening Opinion Checklist dated 27 April 2012

Screening Opinion Checklist Case Officer: …Mike Grundy……..Date: …27 April 2012……. F2

PA/PAD No. …SCE.127/524 MW…….	**Site / Location:** : Uttoxeter Quarry ……
Description of development: :… the development of a single wind turbine on restored land (hub height 59 m, 3 blades 28m each; max height 87 m to blade tip; output 500 kW……	

			Yes	No
PART 1* - *Is a Screening Opinion Required? (ref: EIA Regulations 2011***,*** Circular 2/99 ***and*** DETR EIA – Guide to procedures 2000***)*** See also DCLG note to LPAs on EIA click **here** **and for DCLG guidance from June 2006 about reserved matters and variations of condition and EIA click here**				
1	Development Description	Do you have enough information to define the size and type of development (a plan, description of type/nature/ purpose and possible effects)?** • **Yes** (proceed to step 2) • **No** - *either take the precautionary principle and assume the worst case or, request more information confirming 3 week deadline not commence until received*; ***Note - **Changes or extensions may also need an EIA!** (Schedule 2, category 13)*	✔	
2	Is it a Schedule 1 development?	• **Yes/No** (explain) **YES** – The development is category…… and a **screening opinion is not required as an EIA mandatory!** **NO** – *If the development is not listed in Schedule 1 it may be listed in Schedule 2* (proceed to step 3)		✔
3	Is it a Schedule 2 development? (Schedule 2, Col 1)	• **Yes/No** (explain) • **YES -** The development falls/could fall within category 3 Energy Industry (i) 'installations for the harnessing of wind power for energy production (wind farms)' (proceed to step 4) • **NO** – If the development is not listed in Schedule 2 a **screening opinion is not required and EIA not required**!	✔	
4	4(a) Does the development fall within the absolute threshold/criteria? (Schedule 2, Col 2)	**Yes/No** – (explain) The threshold/criteria is/are (i) The development involves the installation of more than 2 turbines; or (ii) the hub height of any turbine or height of any other structure exceeds 15 metres The proposal is for a single wind turbine and the hub height is 59 metres (proceed to step 4b)	✔	
	4(b) Is the proposal within/near to a 'sensitive area'? (e.g. SSSI, NP, AONB, SAC, RAMSAR, Scheduled Monument)	• **Yes/No –** (explain) **YES** – The development falls within/near to the following designated site(s) Within or …… metres from …… Within or …… metres from…… (OR)		✔
		• *If you have answered **'Yes'** to the threshold/criteria **a screening opinion is required** – proceed to Part 2* • *If you have answered **'No'** to the threshold/criteria and the development **is** within/near a sensitive area **a screening opinion is required** – proceed to Part 2* • *If you have answered **'No'** to the threshold/criteria and the development **is not** within/near a sensitive area **a screening opinion is not required**.*		
5	**Conclusion**	**Screening opinion required?**	✔	

PART 2 – Is an EIA Required? (ref: Schedule 3 - EIA Regulations 2011***,*** Circular 2/99 ***and*** DETR EIA – Guide to procedures 2000***)*** EIA usually required for (i) major developments of more than local importance; (ii) development in particularly environmentally sensitive or vulnerable locations; (iii) developments with unusually complex and potentially hazardous environmental effects. This checklist should be used to determine whether significant effects are likely to arise from the development. **REMEMBER** – the Regs also apply to changes to EIA development and reserved matters / subsequent approvals			
1	Indicative thresholds/criteria	Does the development fall within the indicative thresholds/criteria? (see Circular 02/99 and DETR EIA - links above)	Annex A to Circular 2/99 (paragraph A15 Wind Farms) states that 'The likelihood of significant effects will generally depend upon the scale of the development, and its visual impact, as well as potential noise impacts. EIA is more likely to be required for commercial developments of five or more turbines, or more than 5 MW of new generating capacity. ' In this case the proposal is for a single turbine with an output of 500kW. The site was the subject of a quarrying extension permission (ref. ES.08/02/524 M dated 31 July 2009) which itself was the subject of an EIA. The ongoing quarrying operations on the adjoining land was the subject of an EIA (ref. ES.09/05/524 M dated 23 December 2010). The proposed wind turbine is within the permitted quarry extension area. The land has now been worked, restored and is currently undergoing 5 year aftercare. The original proposal was to develop the land as a cricket pitch.

2	Characteristic of the development:	Size of the development:	The footprint of the single turbine is small however the height is significant – hub height 59 metres; blade tip 87m.
		Cumulation with other developments	The site has recently been worked for sand and gravel and restored. Quarrying is ongoing on adjoining land. There are no other wind turbines in the vicinity of the site.
		Use of natural resources	Natural resources would be limited to the materials required to construct and operate the wind turbine. The turbine would generate renewable energy thus helping to reduce the demand for energy minerals.
		Production of waste	Limited to any waste materials during the construction and decommissioning phases.
		Pollution and nuisances	Potential noise and shadow flicker effect (one property)
		Risk of accidents	Established technology so risks are likely to be known and limited – with build in controls
3	Location of the development (the environmental sensitivity of area likely to be affected):	Existing land use (*include past, present and future (allocated land)*)	The proposed wind turbine is within the permitted quarry extension area. The land has now been worked, restored and is currently undergoing 5 year aftercare. The land was restored to facilitate the development of a cricket pitch. This will require separate planning permission from East Staffordshire Borough Council. Noteable that the site falls within the Marchington Airfield CAA consultation area and within 200 metres of the Needwood Forest Airfield CAA consultation area.
		Relative abundance, quality, regenerative capacity of natural resources	The foot print of the turbine is small and the land has recently been restored following mineral extraction. It is therefore reasonable to expect that it could be restored again when the wind turbine is decommissioned.
		Absorption capacity of natural environment (particularly wetlands, nature reserves/parks; SSSIs and international designations; areas where environmental quality standards have been exceeded; densely populated areas; landscapes of historical, cultural or archaeological significance).	The site is not in a 'sensitive area' in EIA terms, nor is it in a densely populated area or landscape of particular significance. Checks using the 'Magic' web site confirmed that nearby in Derbyshire there is an ancient woodland (approx 1 km away) and a Lowland Meadow (approx 1310 m away) which are also not 'sensitive areas in EIA terms.

4	Characteristics of the potential impact	Extent of the impact (area and size of affected population)		Relatively localised – noise and visual impact. The turbine is likely to be visible from the A50, A518 Dove Way and B5030 Ashbourne Road which are used by a large number of people including visitors travelling to Alton Towers.	
		The magnitude and complexity of the impact		The wind turbine is a well established technology	
		The probability of the impact		The impacts are likely to be known as the technology is well known, the footprint is small and it is reasonable to expect that the visual and noise effects can be predicted with a reasonable degree of accuracy.	
		The duration, frequency and reversibility of the impact		It is proposed that the duration would be 25 years, the effects would be constant during that time – visible and turbines turning during windy conditions and still during calm conditions. As stated above it is reasonable to expect that the site could be cleared and restored when the turbine is decommissioned.	
5	Can the significant effects be addressed by proposed mitigation measures?	Are the mitigation measures: • Modest in scope • Plainly and easily achievable		For the reasons stated above it is reasonable to expect that the mitigation measures likely to be required would be modest in scope, and plainly and easily achievable.	
6	**Conclusion**	**ES required?**		**NO**	
	Signed and dated	**Case Officer**	**Mike Grundy** **27 April 2012**	**Team Manager**	**Mike Grundy** **27 April 2012**

axis

planning

transportation planning

environment

design

Our Ref: 1230-05/SQ/Uttoxeter Screening

08 March 2012

Planning, Policy & Development Control
Staffordshire County Council
Wedgwood Building
Block A
Tipping Street
Stafford
ST16 2DH

For the Attention of Matt Griffin

Dear Sir

PROPOSED DEVELOPMENT OF SINGLE WIND TURBINE AT UTTOXETER QUARRY, SPATH, UTTOXETER.

ENVIRONMENTAL IMPACT ASSESSMENT - SCREENING REQUEST

We write on behalf of Powerwind Projects Ltd and Aggregate Industries UK Ltd (PP/AI) to request a formal Screening Opinion under Regulation 5 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. PP/AI are proposing to construct and operate a single wind turbine on restored land at the Uttoxeter Quarry, Spath. Uttoxeter.

To assist in your determination, we have provided a summary of the site location, a brief description of the nature and purpose of the proposed development and summary of possible environmental effects. In addition, we have set out the scope of information that would be provided with the application should the Authority determine that a full EIA is not required.

Site Location

The site is located within an area of previously quarried land which is now subject to restoration works and potential after use to sports/recreational use. Quarrying activity, (sand and gravel extraction), is on-going to the east and south, with stockpiling, processing and office facilities located to the west.

The site is located within a primarily agricultural area to the north of the urban area of Uttoxeter, separated by the A50 (dual carriageway). The River Tean passes through the existing quarry site to the east of the proposed turbine location and a mixture of water based activity (sailing) and nature conservation is proposed for the extraction areas following the cessation of mineral activities.

Description of the Development

The proposed development comprises the construction of a single wind turbine. The turbine would have three 28m long blades with a hub height of up to 59m, giving a maximum height to blade tip of 87m.

The wind turbine would generate renewable energy to supply the on-going quarrying and processing operations during the remaining life of the quarry. Electricity could also be used by the proposed recreational facility that would be located on the site following the restoration of the quarry site, with any surplus energy fed into the national grid. The turbine would have a rated power output of 500kW. A technical datasheet for the proposed PowerWind 500 turbine is provided at Annex B.

Environmental Effects

With regard to potential effects upon the environment, we would note the following:

Positive – The proposed development would provide renewable energy for existing quarry operations. Following cessation of mineral activities at the site renewable energy would be available for use by the proposed recreational facilities on the site. Initial consultations with the cricket club and other interested parties with respect to this element are on-going. Any surplus electricity would be fed in to the national grid. The use of renewable energy at the site would reduce reliance on conventional electricity generation and would support targets for increasing sustainable energy production and reduction of carbon emissions. It is proposed that the turbine would have an operational life of 25 years after which time it would be decommissioned or planning permission would need to be gained to extend its operational life.

Negative – Wind turbine development primarily gives rise to environmental concerns in respect of the potential effects on landscape and visual amenity, noise nuisance and, where relevant, ecology.

However, it should be noted that the site is not within an area designated for either landscape and visual or ecological sensitivity.

The nearest ecological designation is the Crakemarsh Pool, a Site of Biological Importance (SBI), located approximately 630m to the north. The closest SSSI designation is located at Saltersford Lane Meadows, which is approximately 6.5km to the north.

Preliminary noise predictions for the nearest properties have been undertaken, and have concluded that further monitoring is required at the two nearest properties. This has been programmed to be undertaken in March 2012.

Screening Opinion

The Town and County Planning (EIA) Regulations 2011 define EIA development as that falling under either Schedule 1 development, or Schedule 2 development.

Schedule 1 Development

The proposed development is not listed within Schedule 1 (mandatory EIA).

Schedule 2 Development

Schedule 2 development is described in the Regulations as that which is likely to have 'significant' effects on the environment by virtue of factors such as its nature, size or location. Schedule 2 of the Regulations includes a table which contains various development descriptions and relevant indicative thresholds/criteria in order to broadly define what is considered Schedule 2 development.

The proposed development falls within Schedule 2, Category (3) *Energy Industry* (i) *Installations for the harnessing of wind power for energy production (wind farms).* Thresholds indicate that EIA may be required if (i) the development involves the installation of more than 2 turbines; or (ii) the hub height of any turbine or height of any other structures exceeds 15m.

The proposal comprises a single turbine with a hub height of up to 59m; accordingly, the proposed development may require EIA and should be considered against the tests set out in Schedule 3 of the Regulations (criteria for determining whether Schedule 2 development is EIA).

Schedule 3 Development

Schedule 3 contains criteria for screening Schedule 2 development with regard to three subject areas:

1) Characteristics of the development;
2) Location of development; and
3) Characteristics of potential impacts.

Each subject area has multiple sub-headings (effectively criteria) which have been set out below, together with a brief commentary as to how the proposed turbine performs against the relevant sub-headings.

1) *Characteristics of the Development*

a) *Size*: Comprises single tower with maximum hub height of 59m and blade tip of 87m above ground level. The physical footprint of the development is small and as such the direct physical effects of the development on the environment would be limited. The height of the proposed turbine will result in visibility from the surrounding area. No sensitive landscape designations would be affected and these impacts could be satisfactorily addressed within a landscape and visual section of a planning supporting statement rather than requiring full EIA;

b) *Cumulative effect*: There is minimal existing provision within East Staffordshire. Therefore, the effects of a single medium scale turbine is considered unlikely to result in significant and unacceptable cumulative effects.

c) *The use of natural resources*: There would be no use or loss of natural resources beyond that associated with the modest amount of standard

construction. Conversely, the proposal provides for the reduction in use of non-renewable energy sources;

d) *Waste*: The operation of a wind turbine would not give rise to waste generation;
e) *Pollution and nuisances*: The proposal is unlikely to give rise to concerns with respect to physical pollution and nuisance. As referenced above noise is the main area of concern in respect of possible nuisance associated with the proposed turbine development. As referenced above preliminary noise assessment would be undertaken and if necessary a full noise assessment would be undertaken. This could be satisfactorily addressed within a noise section of a planning supporting statement rather than requiring full EIA. In addition, one property could experience shadow flicker and this would be assessed as part of any application;
f) *Risk of accidents*: No unusual practices/operations would be carried out that would give rise to any increased risk of accidents. This is a proven form of development whereby the technology contains automatic controls (notably limits with respect to operational wind speeds) that further minimise the risk of accidents.

2) <u>*Location*</u>

a) *Land use*: the turbine would be located within an existing quarry that is proposed for restoration as a recreational use.
b) *Local natural resources*: None would be affected by the development;
c) *Absorption capacity bearing in mind the locality*: The proposed development is not located within a 'sensitive area' as identified within Regulation 2(2) of the Regulations. Furthermore, it should be noted that the proposal site:
    (i) is not a wetland;
    (ii) is not on the coast;
    (iii) is not within a mountain or forest area;
    (iv) is not within nature reserve;
    (v) is not within any European nature conservation designation, nor are there any known European Protected Species on or in close proximity to the site;
    (vi) is not within an area known to exceed existing environmental standard, and
    (vii) is not within a designated landscape of historic, cultural or architectural significance.

3) <u>*Characteristics of the Potential Impacts*</u>

a) *Extent*: The majority of effects are likely to be of a localised nature due to the small physical footprint of the development. However, proposals could give rise to concerns with respect to effects on landscape and visual amenity and noise beyond the immediate locality of the development. As referenced above it is the applicants opinion that these issues could be satisfactorily addressed within a planning supporting statement rather than requiring full EIA. A blade tip Zone of Theoretical Visibility (ZTV) is included with this screening request;
b) *Trans frontier impacts*: None;
c) *Magnitude and complexity*: There are no particular complexities in either construction or operation;
d) *Probability*: The likely effects are clearly definable
e) *Duration, frequency and reversibility*: The effects would be constant for the life of the development (25 years), after which they are fully reversible.

Based upon the above assessment, it is our opinion that significant environmental effects which would render the scheme unacceptable are unlikely and as such the proposed turbine should not be considered EIA development.

This position is supported by the additional guidance in Circular 02/99 Environmental Impact Assessment, Annex A15 (Wind Farms) which states: *'The likelihood of significant effects will generally depend upon the scale of the development, and its visual impacts, as well as potential noise impacts. EIA is more likely to be required for commercial developments of five or more turbines or more than 5MW of new generating capacity'.'*

Proposed Scope of the Planning Application

Notwithstanding the above, it is proposed that a planning application would be accompanied by a supporting statement comprising:

- Description of the Proposed Development;
- Noise Assessment;
- Landscape and Visual Assessment;
- Ecological Statement; and
- Design and Access Statement.

We trust that the contents of this letter are self-explanatory and look forward to receiving your response within the statutory three week period, and your views on the intended scope of the planning application. However, in the meantime, please do not hesitate to contact us at our Chester office should you have any queries.

Yours sincerely,

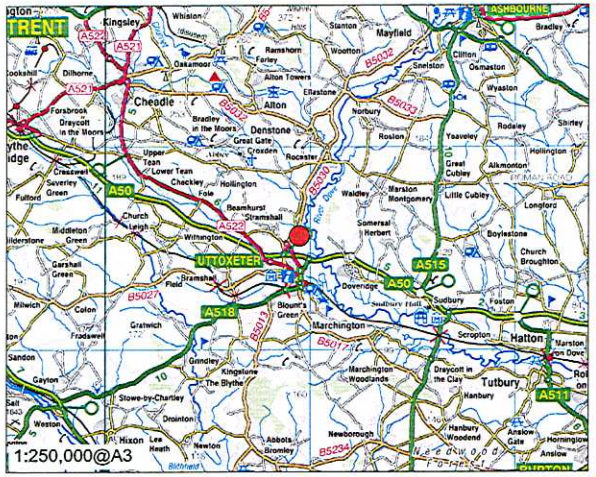
P.P

Phil Roden
Director

Enc:

Turbine Data Sheet
Site Location Plan
Blade Tip ZTV

Annex A: Site Location Plan and Wind Turbine Location



Revision History	Date

Turbine Location

Riversmede

Spath

River Tean

B5030

A518

Leasows Farm

78

77

76

80

N

PowerWind Projects Ltd.

AGGREGATE INDUSTRIES

axis

client: AGGREGATE INDUSTRIES / POWER WIND PROJECTS LTD

project: UTTOXETER WIND TURBINE

drawing title: SITE LOCATION PLAN

date: February 2012	drawn by: SM	checked: PR
drawing number: 1230-05-01	status: PLANNING	
scale(s): 1:5000@A3	rev: -	

planning environment design

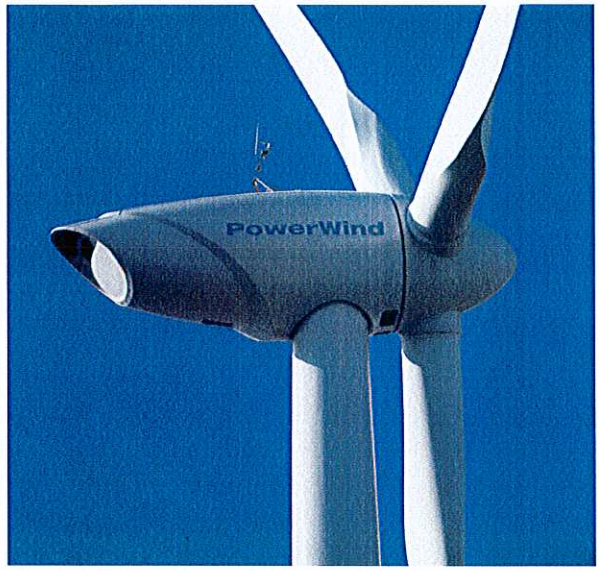
Annex B – Data Sheet for Proposed Wind Turbine

PowerWind 500

The PowerWind 500 is perfectly tailored to the requirements of smaller community wind installations. It combines a superb profitability due to outstanding energy yield with a low sound power level. Moreover its aesthetic design and reduced heights make the PowerWind 500 perfect to integrate in community surroundings.

The PowerWind 500 is a variable-speed, pitch-controlled wind turbine, certified in accordance with IEC wind class IIA. It has a rated power output of 500 kW and a rotor diameter of 56 m. The turbine design is based on the well-proven modular drive train concept and combines robust mechanical engineering with state-of-the-art power electronics. Many years of wind energy experience and the success of the 900 kW PowerWind 56 have been drawn on in the creation of this new model.

Designed to simplify logistics, the PowerWind 500 is particularly benefical for locations which are difficult to access or have weak infrastructure.



PowerWind 500

The PowerWind 500 has a superb profitability due the highest energy yield in its class.

- Higher energy yield than all other comparable wind turbines in the same class due to large rotor diameter
- Variable speed and pitch control allow maximum energy production at reduced drive train loads
- Mulitple tower sizes from 44-50 m

Low sound power level due to reduced rotor speed.

- Sophisticated turbine design concept allows lower rotational speed and therefore a very low sound power level

The PowerWind 500 is modelled after the proven modular drive train concept — sharing the same mechanical robustness as the established PowerWind 56.

- The newly developed PowerWind 500 is designed with a maximum rated power of 500 kW
- High reliability due to sophisticated components from reputable European manufacturers
- Robust engineering

By using a full-scale converter in the megawatt class, the PowerWind 500 benefits from the experience gained with multi-megawatt turbines.

- Minimal disturbances (harmonics and flicker) due to use of a full-scale converter
- Large reactive power control range for potential of grid support
- Fault ride through in accordance with international grid requirement (optional)

By consciously reducing the system dimensions, difficult logistics requirements are met.

- Transport in containers possible
- Transport of the three rotor blades on a single truck
- Lesser crane requirement than multi-megawatt turbines, therefore significantly higher crane availability
- No special permit for road transport required in many countries

PowerWind 500

With its full range of features, the PowerWind 500 perfectly matches the requirements of smaller community wind installations.

- Highest energy yield due to large rotor diameter
- Low sound power level due to reduced rotor speed
- Compact design facilitates logistics and installation even in difficult locations
- Full-scale converter makes the system suitable even for weak grids

All key components are sourced from reputable European manufacturers and meet high durability standards.

- Close cooperation with leading companies in the wind industry
- Core suppliers certified to ISO 9001: 2008

The modern control concept offers web-based system monitoring and control.

- Simple web-based remote monitoring (SCADA) independent of a specific site

The high importance given to environmental protection is clearly reflected in our design.

- Where possible, no hydraulic units are used
- Enclosed oil and grease collecting trays
- Use of a readily biodegradable, non-water hazardous transformer fluid (Midel)

Compliance with all applicable safety standards is guaranteed.

- Lightning and surge protection corresponds to the lightning protection zone concept of IEC 61400-24
- Design of the tower fixtures is in accordance with DIN EN 25817-B and EN 50308

The PowerWind 500 was developed to provide easy service and maintenance.

- Accessibility to all main components with the possibility of easy replacement
- Customized service packages available

Performance

Rated power output	500 kW
Cut-in wind speed	3 m/s
Rated wind speed	10 m/s
Cut-out wind speed	25 m/s
Rotor diameter	56 m
Rotor swept area	2,463 m²
Rotor speed	6-24,9 rpm
Speed control	Individual electrical pitch
Aerodynamic breaking	Individual full span pitch
Operating temperature range	-20 °C to +45 °C
Power factor	0.9 ind. to 0.9 cap.
Wind class	IEC 61400 IIA
Gearbox	One planetary and two spur gears
Gear ratio	1:54.2
Mechanical brake	Disc brake on high-speed shaft (hydraulic)
Yaw drive	3 AC motor drives with planetary gear
Yaw brake	Friction brake

Generator	Asynchronous, air-cooled
Nominal rotation	1,350 rpm
Enclosure class	IP 55
Converter	Full-scale converter (water-cooled)
Tower	Conical steel tower
Hub height	44, 46, 49, 50 m
Nacelle	Glass fibre reinforced plastic
Blades	Glass fibre reinforced plastic
Blade length	27.1 m
Number of blades	3
Control system	PowerWind
SCADA	PowerWind SCADA System
Grid connection	50 Hz/690 V

Available from:

PowerWind GmbH
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20457 Hamburg
Germany

info@powerwind.de

For further information: www.powerwind.de