
GLOSSARY OF TECHNICAL TERMS

This glossary contains certain definitions of technical terms used in this prospectus as they relate to us and as they are used in this prospectus in connection with our business or us. Some of these definitions may not correspond to standard industry definitions.

“AC”	Alternating current, being electricity that changes direction periodically
“active power control”	The method of reducing the power output generated by wind turbines at any point in time. For pitch regulated WTGs, it is achieved by adjusting the angle of the blades facing the wind thereby changing the wind energy absorbed by wind turbines
“attributable installed capacity”	The aggregate installed capacity is calculated by multiplying an entity’s percentage ownership in the power project company by the total installed capacity of such power project company
“availability”	A percentage calculated by dividing the amount of time a WTG is not experiencing technical defaults over a certain period by the amount of time in such period
“blade”	The WTG component that drives the turbine rotor using wind energy
“concession project”	A wind power concession project for which the NDRC solicits bids. It involves: (1) the PRC Government designating the construction site and the project capacity; (2) a grid corporation acquiring all the power generated; (3) a fixed tariff price during the concession term; (4) determining the tariff price by public bidding; (5) selection of the wind power investor and WTG manufacturer through bidding; and (6) a grid corporation being responsible for connecting the wind farm to the grid
“constant frequency”	The technology that converts the changing power frequency from the generator of a WTG into a constant grid frequency
“constant speed”	Operation of a WTG whereby the rotational speed of the turbine rotor remains constant
“DC”	Direct current, being electricity which flows in one direction through the conductor
“direct-drive”	A drive-train concept in which the need for a gearbox is eliminated and the turbine rotor directly drives the generator rotor
“excitation”	Using an electric current to create a magnetic field
“full power rectification”	The converter technology wherein the WTG converter’s rated capacity is equal to the WTG’s rated capacity
“gigawatt” or “GW”	A unit of power. 1 GW equals 1,000 MW
“greenhouse gas”	The natural and man-made gaseous components of the atmosphere that absorb and release infrared radiation

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“grid connection”	When a WTG is connected to the grid and is transmitting power
“hub”	The component of the WTG to which the blades are fixed
“hub height”	The height of the hub center above the ground
“hybrid-drive”	A geared drive transmission using a low-speed gearbox
“IEC Type I, II, III and S models”	According to the IEC 61400-1 (2005) standard for WTG design, a type I model is defined as a WTG model able to operate in environments with a reference wind speed of less than 50m/s measured at the hub height of a WTG; a type II model is defined as a WTG model able to operate in environments with a reference wind speed of less than 42.5m/s measured at the hub height of a WTG; and a type III model is a WTG model able to operate in environments with a reference wind speed of less than 37.5m/s measured at the hub height of a WTG; and a type S model is a WTG model able to operate in the specific environment defined by both the WTG manufacturer and the customer
“kilowatt” or “kW”	A unit of power. 1 kW equals 1,000 watts
“kilowatt hour” or “kWh”	The unit of measurement for calculating the quantity of power production output. One kilowatt hour is the work completed by a kilowatt generator running continuously for one hour at the rated output capacity
“low voltage ride through capability”	The ability of a WTG to continue to stay connected to the grid within a given period of time when the grid is experiencing abnormal voltage drops
“megawatt” or “MW”	A unit of power. 1 MW equals 1,000 kW
“MW-level WTGs”	WTGs with rated output capacity of equal to or greater than 1 MW
“nacelle”	The structure at the top of the tower just behind the blades that houses the key components of the wind turbine, including the turbine rotor shaft and generator
“permanent magnet”	A material that retains its magnetic properties without external magnetic field
“permanent magnet generator” or “permanent magnet synchronous generator”	A synchronous generator in which permanent magnet is used on the generator rotor
“pitch control” or “pitch regulated”	A method of controlling the power of a WTG by using the control system to adjust the angle of the blade (or inlet angle)
“power curve”	The curve showing the relation between the output power of a WTG and the wind speed
“rated output capacity”	The output capacity as per a WTG nameplate

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“rated wind speed”	The wind speed range at which a WTG can produce its rated output capacity
“reactive power control”	A method of transmitting or absorbing reactive power to stabilize the grid voltage
“renewable energy”	Energy sources that are sustainable, or for all practical purposes, cannot be depleted, such as geothermal, biomass, wind and sunlight. Unless otherwise specified, for purposes of this prospectus, renewable energy excludes conventional hydropower
“SCADA”	Supervisory Control and Data Acquisition
“stall-regulated”	A method to control and regulate the power generated by a WTG. When the wind speed exceeds the rated wind speed of the WTG, the blade stalls and no further increase in the energy is captured by the turbine rotor, thereby controlling the power output of the WTG
“terawatt hour” or “TWh”	The unit of measurement for calculating the quantity of power production output. 1 TWh equals 1 billion kWh
“total installed capacity” (also referred to as “cumulative installed capacity” by BTM or in other industry reports)	The sum of the rated output capacity for power generation equipment such as WTGs, installed
“tower”	The supporting structure which supports and elevates a turbine rotor and nacelle
“turbine rotor”	The component of a WTG that consists of a hub and blades and drives the generator rotor
“unit capacity”	The rated power of an individual WTG
“variable pitch system”	The electrical system in a WTG that ensures high efficiency at different wind velocities. This system is capable of real-time regulation of the WTG’s rotational speed when wind velocity changes through control of the blade angle for optimal operation and energy capture
“wind farm”	A power plant in which a group of WTGs are installed to generate electricity from wind power