GLOSSARY OF TECHNICAL TERMS

This glossary contains an explanation of certain technical terms used in this document as they relate to our Company and as they are used in this document in connection with our business or us. Such terminology and meanings may not correspond to standard industry meanings or usages of those terms.

"AI"	acronym for artificial intelligence
"BIM"	acronym for building information modelling, the process of generating and managing building data during its design, construction and building life cycle
"clean energy"	energy generated from sources with minimal to zero emissions, including renewables like solar, wind, and hydro energy, and other forms of energy generated with low-emission technologies such as nuclear energy
"digital twin"	a virtual representation of a physical object or system that uses real-time data to accurately reflect its real-world counterpart's behaviour, performance and conditions
"distribution substation"	a power substation at which transformers are used to step down the voltage of power coming from the transmission system for distribution to end users
"energy storage"	the storing of the power generated that is not immediately supplied to or consumed by consumers in energy storage facilities, such that it may be released for transmission, distribution and/or consumption at a later stage
"EPC" or "engineering, procurement and construction"	a common form of contracting arrangement whereby the contractor is commissioned by the project owner to carry out such project work as design, procurement, construction and trial operations, or any combination of the above, either through the contractor's own labour or by sub-contracting part or all of the project work, and is responsible for the quality, safety, completion and cost control of the project
"fossil fuel energy"	energy produced through burning fossil fuels such as coal, natural gas or petroleum
"IoT"	acronym for internet of things, a network of physical devices, vehicles, appliances and other physical objects that are embedded with sensors, software and network connectivity, allowing them to collect and share data

"new energy"	energy resources and energy carriers other than the traditional fossil fuels of oil, gas, and coal, and nuclear energy. Such energy resources and carriers cover both renewable and non-renewable ones, such as solar energy, wind energy, geothermal energy and hydro energy. For the purpose of this document, "new energy" should refer to solar energy and wind energy only.
"new-type power system"	a power system with wind and PV power as main energy sources that aims to achieve carbon peak and carbon neutrality by applying various new technologies such as new energy storage system, AI deployment system, virtual power plant and source network-load storage system
"O&M"	acronym for "operation and maintenance"
"power distribution"	the final stage in the delivery of power, at which power is carried from the distribution substation to end users at lower voltages for consumption
"power grid"	an interconnected network for power delivery from producers to end users, consisting of step-up substations, transmission systems, distribution substations and distribution systems
"power substation"	a place where the voltage level of power is changed, which may take the form of a step-up substation or a distribution substation
"power transformation"	the process of using transformers to change the voltage level of power that takes place at a power substation
"power transmission"	the bulk movement of power from a generating site, such as a power station, to a distribution substation at high voltages to reduce energy loss due to resistance that occurs over long distances
"PV" or "photovoltaic"	used to describe the direct conversion of light into power using semi-conductor devices
"solar energy"	the conversion of sunlight into power, either through the direct use of PV, or indirect use of solar thermal energy
"step-up substation"	a power substation at which transformers are used to step up the voltage of power coming from power stations and generators such that the power can be transmitted over long distances with reduced energy loss and higher efficiency

"virtual power plant"	a cloud-based digital platform that aggregates diverse distributed power resources from various sources, such as rooftop PV panels and energy storage systems, into a single, despatchable entity equivalent to a traditional power plant and dynamically balances power supply and demand through forecasting and optimisation of power supply and automated power despatch
"wind energy"	a form of renewable energy that converts the kinetic energy of wind into mechanical or electrical energy using wind turbines