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## GLOSSARY OF TECHNICAL TERMS

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To facilitate a better understanding of our business, the following glossary provides explanations of some of the technical terms and abbreviations commonly found in our industry. The terms and their meanings may not correspond to standard industry or common meanings, as the case may be, or usage of these terms:

“AAAC”	an abbreviation for all aluminium alloy conductor, a conductor made from aluminium-magnesium-silicon alloy
“ABC”	an abbreviation for aerial bundled cable (also aerial bundled conductor), an overhead power lines using several insulated phase conductors bundled tightly together, usually with a bare neutral conductor
“ACSR”	an abbreviation for aluminium conductor steel reinforced, a high-capacity, high-strength stranded cable that has long been the backbone of overhead transmission and distribution systems
“annealing”	a heat treatment process to boost plasticity, eliminate hardness and preserve the optimum electrical characteristics and metallic performance of the copper
“armour”	a layer of galvanised steel wire or tape that is wrapped around a cable to provide a high level of protection against mechanical damage
“cable”	a tube wrapped in insulating material and sheath containing wires that carry electricity and electronic signals
“cabling”	a process whereby several insulated cores or other materials are wrapped together to form a cabled assembly
“CB”	CB Test Certificate, a formal document affirming that a sample of the product tested was found to be in compliance with applicable requirements based on the use of IEC Standards
“CCC”	China Compulsory Certification (中國國家強制性產品認證證書), a compulsory safety certificate for many products sold in the Chinese market including home appliances, safety glasses and wires and cables for electrical equipment

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“CE”	CE marking, a mandatory conformance mark that certifies that a product has met European consumer safety, health or environmental requirements
“conductor”	a wire or combination of wires not insulated from one another, suitable for carrying an electrical current
“core”	the portion of an insulated cable lying under the protective covering or coverings
“drawing”	a procedure that involves pulling the metal wire through a die or series of dies to reduce the size of the wire diameter
“EPR”	an abbreviation for ethylene propylene rubber, an insulation used for high-voltage cables that is suited for applications where regular cable movement is required such as in the mining industry
“extrusion”	the process of continuously forcing an insulating material and a conductor or core through an extrusion machine or die, thereby applying an insulation to the conductor or core
“fire resistant”	the ability of cables to continue to function at temperatures of up to 750 degrees Celsius and for a period of up to 90 minutes whilst under the influence of fire. The fire-resistant cable maintains circuit integrity even when burnt. Cables with enhanced fire-resistant attribute have the ability to continue to function at temperatures of 1,000 degrees Celsius and for a period of up to 180 minutes. Such cables are mainly used in petrochemicals and metallurgy industries, as well as in high-rise buildings
“flame retardant”	the ability of cables to retard or slow the progress of fire and flame along the cable. This is achieved by the use of materials that do not readily burn and will tend to self-extinguish. Cables with such an attribute are mainly used in communications, railway, real estate, petrochemicals and metallurgy industries
“high voltage cables”	high voltage cables comprise cables of rated voltage 66-220kV

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“hydroelectric”	relating to the electricity generated through the use of gravitational force of falling or flowing water
“IEC”	International Electrotechnical Commission, the world’s leading organisation that prepares and publishes International Standards for all electrical, electronic and related technologies
“insulation”	an outer coating for the conductor that helps resist the flow of electric charge
“ISO”	International Organisation of Standards, a world-wide federation of national standards bodies whose mission is to develop industrial standards that facilitate international trade
“kV”	kilovolt
“kWh”	kilowatt hour
“low voltage cables”	low voltage cables comprise cables of rated voltage of up to 0.61/1kV. Low voltage cables are mainly used in low voltage power transmission and distribution networks in commercial and residential buildings
“LSZH”	an abbreviation for low smoke zero halogen, a feature and material classification that causes cables to emit very low concentrations of dangerous fumes when burnt
“mid voltage cables”	mid voltage cables comprise cables of rated voltage ranging from 3.6/6kV to 26/35kV. Due to the ability of mid voltage cables to transmit higher voltages of power, such cables are usually used in power plants for industrial uses
“PCCC”	a certification issued by the Power (Beijing) Product Certification Centre Co., Ltd., which is responsible for certifying a variety of electrical and mechanical products
“PE”	an abbreviation for polyethylene, a general purpose thermoplastic generally used as insulations and sheaths for low voltage wire and cable

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“photoelectric”	relating to the electric effects of electromagnetic radiation, especially the ejection of an electron from a surface by a photon. In other words, photoelectric pertains to the conversion of light to electricity
“polyolefin”	a polymer and general thermoplastic that is a non-polar, odourless and nonporous material commonly used in consumer goods, structural plastics, food packaging and industrial products
“PVC”	an abbreviation for polyvinyl chloride, a general purpose thermoplastic generally used as insulations and sheaths for low voltage wire and cable
“RoHS”	Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, a set of standards with reference to European Union Directives 2002/95/EC and 2005/618/EC
“screen”	a sheet, screen or braid of metal (usually copper, aluminium or other conductor material) placed around or between electric circuits or cables or their components, to avoid any unwanted interference or radiation
“sheath”	a layer of material, usually being plastic or rubber, applied to a cable that protects the insulation from mechanical damage
“stranding”	small wires are twisted together to produce a larger conductor size
“ultra high voltage cables”	ultra high voltage cables comprise cables of rated voltages of above 220kV
“ultra high voltage direct current”	a feature in power transmission lines that uses direct current to transmit large amounts of power over long distances. Ultra high voltage direct current systems are less expensive and suffer lower electrical loss than alternating current systems
“V”	volt
“XLPE”	an abbreviation for cross-linked polyethylene, a high-grade insulation material generally used for high voltage cables as it has good electrical performance and can endure higher temperatures of up to 90 degrees Celsius