

GLOSSARY AND ABBREVIATIONS

Availability Actual electricity generation capability in relation to the maximum possible generation.

CCS Carbon Capture and Storage – capture and storage underground of the carbon dioxide that is emitted in the combustion of fossil fuels.

Combined heat and power (CHP) plant A plant that generates heat and electricity in the same process.

CSR Corporate Social Responsibility – How a company, on a voluntary basis, integrates economic, social and environmental concerns in its business activities and in contacts with its stakeholders.

Deep repository Underground facility for the final disposal of spent nuclear fuel. See also SKB's website: www.skb.se.

Deregulation Abolishing monopoly rights and obligations to open up for competition. Used here as a synonym for liberalisation.

Derivative instruments Financial instruments where the value or change in value is derived from an underlying instrument. Examples of derivative instruments include options, forwards and swaps. Derivative instruments are often used in risk management.

DSO Distribution System Operator. Responsible for operating, ensuring the maintenance of and developing the distribution system in a given area (compare with TSO).

EEX European Energy Exchange, in Germany.

Electricity spot market Short-term physical trading in electricity on an exchange.

EPD Environmental Product Declaration. A system based on certified environmental declarations.

EU27 The 27 Member States constituting the European Union following the enlargement on 1 January 2007.

Ex-ante tariff regulation The approval of tariffs prior to implementation.

Ex-post tariff regulation Tariffs are examined by the regulator after implementation, if necessary.

Forward market A market in which buyers and sellers agree on a fixed price for the future delivery of an underlying instrument, such as electricity. (See also Derivative instruments.)

Green Certificates/electricity certificates Tradeable certificates issued for renewable energy. Called electricity certificates in Sweden.

Gross capacity The electrical power that is delivered directly from a plant's generator.

IAEA International Atomic Energy Agency – the UN's nuclear energy agency.

IFRS International Financial Reporting Standards. Applied by Vattenfall since 2005.

Installed capacity Plant performance based on design data. Commonly measured in MW.

ISDA agreement A bilateral general agreement prepared in accordance with guidelines established by the International Swap Dealers Association. The agreement regulates the parties' legal obligations in derivative transactions with each other.

ISO 14001 International standard for environmental management systems.

Kyoto Protocol International agreement to reduce greenhouse gas emissions.

Local network An electricity network in Sweden within the 0.4–20 kV range.

Margin call Marginal security that the holder of a derivative position must pledge to cover the credit risk of its counterparty (OTC or exchange)

Merit order The order in which capacity is put into use.

Net capacity The electric power a plant delivers to connected networks, i.e., gross power less the plant's own electricity use.

Nord Pool The Nordic electricity exchange.

Normalised annual generation Planned generation at normal values of weather and plant status.

NO_x A collective term for various oxides of nitrogen.

NTPA Negotiated Third Party Access. Access to a network granted on the basis of bilateral negotiations between the network owner and the network user.

OTC Over the Counter. Trading (directly or via a broker) outside the official exchanges in physical and financial contracts.

Oxyfuel combustion Combustion of fossil fuel in pure oxygen.

PoIPX The Polish electricity exchange, Towarowa Gielda Energii. Post-combustion Separation of CO₂ after combustion.

PSE Polskie Sieci Elektroenergetyczne – Polish Power Grid Company. Regional network An electricity network in Sweden within the 40–130 kV range.

Renewable energy sources Non-finite energy sources such as hydro power, biofuel, wind, solar power, tidal power, wave power, geothermal power.

SKB Svensk Kärnbränslehantering AB, the company responsible for managing radioactive waste in Sweden.

SO₂ Sulphur dioxide.

Spot market A market where trade is conducted with immediate delivery.

Swap A financial instrument that is a combination of spot and forward transactions, a type of financial exchange agreement.

Swedish GAAP Swedish Generally Accepted Accounting Principles – Applied by Vattenfall through 2004.

Thermal power Electricity generated via a heating process, such as a gas turbine or a steam process in a coal-fired or nuclear power plant (compare with CHP).

TSO Transmission System Operator. Responsible for operating, ensuring the maintenance of and developing the transmission system in a given area (compare with DSO).

Unbundling Legal separation of transmission and distribution from other activities of a company (generation and sales).

Value chain Process for creating value. Within the electricity sector this includes the generation, transmission, distribution, trading and selling of electricity.

Volatility A measure of how the price of a commodity varies over a particular period.

Energy terms

Units of power

Power is energy per unit of time

Power is expressed in Watts (W)

1 kW (kilowatt) = 1,000 W

1 MW (megawatt) = 1,000 kW

1 GW (gigawatt) = 1,000,000 kW

Units of energy

Energy is power multiplied by time

1 kWh (kilowatt hour) = 1 kW expended over an hour

1 MWh (megawatt hour) = 1,000 kWh

1 GWh (gigawatt hour) = 1,000,000 kWh

1 TWh (terawatt hour) = 1,000,000,000 kWh

Voltage

1 kV (kilovolt) = 1,000 volt (V)