

Glossary

AGR	Advanced Gas-cooled Reactor (nuclear). The generation design prior to PWR . Most nuclear generation is by AGRs.
Ancillary services	Services that are required for the security and stability of the transmission system . See uplift .
Annual average cold spell	A particular combination of weather elements which give rise to a level of peak demand within an NGC financial year which has a 50 per cent chance of being exceeded as a result of weather variation alone.
Area board	An area electricity board in England and Wales that has been succeeded in business by a REC pursuant to the Electricity Act 1989.
Authorized area	The geographical area within which a PES has been authorized by its PES licence to supply electricity.
Auto-generators	Auto-generators generate electricity primarily for their own needs, but may additionally supply other customers on the same site.
Availability	The maximum amount of generation in MW that the operator of a genset declares it to be capable of providing.
Baseload, non-baseload, mid-merit, peak-load generation	Baseload generation is that used to meet continuous demand even at its lowest level. Non-baseload generation is brought in progressively as demand increases. Peak-load generation is used to satisfy short periods of maximum demand. Mid-merit generation is that which falls between baseload and peak.
Beach price	The price of gas available at the shore terminal.
BNFL	British Nuclear Fuels plc.
Capacity	The capacity of a genset or power station is usually given in MW and can be expressed in a number of ways. Generators are required to register the capacity of their gensets under the Grid Code . The GRC of a genset is equal to its normal full load capacity, less the power in MW consumed by it through its transformer when generating at that normal full load capacity, as declared by the generator and registered with the NGC . Declared net capacity was the measure of capacity commonly used by the CEGB and is now principally used for business rating purposes.
Capacity payments	The difference between SMP and PPP . Capacity payments reflect the probability of supply being lost (LOLP) by reason of available generation being insufficient to meet demand, and the VOLL .
CCGT	Combined cycle gas turbine. A type of generating plant in which turbines, typically fuelled by natural gas (or an oil distillate), are used to drive generators to produce electricity. The exhaust gases are then passed through a boiler to produce steam which in turn drives an additional turbine coupled to a generator. Overall thermal efficiency with current technology is improved to up to about 50 per cent net, compared with about 37 per cent for coal, oil or conventional gas (OCGT).

CEGB	Central Electricity Generating Board. Replaced at vesting by PG , NP , NEP and the NGC .
CfD	Contract for Differences. CfDs are contracts negotiated between the generators and suppliers in which the parties allocate among themselves the risk of variability in prices otherwise associated with the purchase and sale of electricity through the Pool .
CHP	Combined heat and power. The simultaneous generation of heat and electricity, typically where the need for both arises for industrial or commercial purposes.
CO₂	Carbon dioxide.
Coal-backed contracts	The contracts agreed between NP and PG on the one hand and the RECs on the other for the provision of specified volumes of electricity sales, the electricity having been generated by coal supplied under contracts between these two generators and British Coal (now RJB Mining). Their duration is from 1 April 1993 to 31 March 1998. They replaced similar contracts agreed at vesting , on their expiry.
Co-generators	Co-generators can simultaneously generate electricity and steam. The steam is used locally, and the electricity may be used by local customers, sold through the Pool , or both.
Competitive customer	See competitive market .
Competitive market	The market to supply customers whose average power demand currently exceeds 100 kW for three months in a year. These customers may purchase their electricity from any supplier as well their local PES . They are known as competitive or non-franchise customers . From 1 April 1998 the competitive, or non-franchise, market extends to all customers. See also franchise market .
Constrained-off	Gensets which, despite their output being offered at a price equal to or lower than SMP , are instructed by the NGC to limit or cease generation as a result of limitations on the transmission system or demand forecasting errors.
Constrained-on	Generating sets which, despite their output being offered at a price in excess of SMP , are called on by the NGC to operate as a result of limitations on the transmission system , demand forecasting errors or breakdowns of other gensets .
Demand-weighted Pool price	The demand-weighted Pool price for a given period is obtained by multiplying the price and demand for each half-hour slot, summing them, and dividing the sum by the total demand for the period. It is the price a generator would receive from the Pool over a period of time if its output profile was identical to Pool demand.
DGES	The Director General of Electricity Supply, currently Professor Stephen Littlechild. See OFFER .
Direct sales	Sales of electricity to an end-customer by a second-tier supplier , particularly a generator .
Distribution system	A system of electric circuits with a nominal voltage of 132,000 volts or less, and associated electrical plant and meters to convey electricity from

	grid supply points on the national grid to customers. The systems owned and operated by the PESs are regulated by the DGES as local monopolies.
Eastern	Eastern Group plc, the owner of Eastern Electricity, one of the 12 RECs .
East Midlands	East Midlands Electricity plc. One of the 12 RECs .
EdF	Electricité de France.
EFA	Electricity Forward Agreement. A financial instrument, based on contracts similar to CfDs .
Electricity Act	Electricity Act 1989.
Embedded generation	Generating plant which is connected directly to the distribution system rather than to the transmission system .
FFL	Fossil Fuel Levy. A levy (currently 10 per cent) imposed on PES licence-holders and second-tier suppliers to share among such holders and suppliers the additional costs incurred by the PES licence-holders as a result of satisfying the NFFO .
FGD	Flue Gas Desulphurisation equipment. Coal contains sulphur, released as SO₂ , on burning. Tighter emission guidelines are being met by removing SO₂ from the exhaust gas, typically by passing flue gases through a limestone bed.
First-tier supply	The supply of electricity by a REC in its own area, whether or not this is to a competitive market or franchise market customer.
Fossil fuel	Coal, coal products, lignite, natural gas, crude liquid petroleum or other petroleum products.
Franchise customer	See franchise market .
Franchise market	PESs currently have a monopoly right to supply customers in their authorized areas whose demand is currently under 100 kW (see competitive market). These are known as franchise customers, and the market as the franchise market. The franchise ends on 31 March 1998.
Generating licence	A licence granted under section 6 of the Electricity Act 1989 authorizing the generation of electricity for the purpose of giving a supply or enabling a supply to be given to any premises.
Genset	Generating set. A generator and its associated turbines capable of generating electricity as a stand-alone unit. A power station may comprise one or more gensets.
Generator	A person authorized to generate electricity by way of a licence or an exemption from the requirement for a licence.
GW	Gigawatt-see power .
GWh	Gigawatt-hour-see power .
GRC	Genset registered capacity. See capacity .

HMIP	Her Majesty's Inspectorate of Pollution.
Interconnectors	The links between the transmission system in England and Wales and the transmission systems in Scotland and France.
IPPs	Independent power producers. A generator other than a privatized generator (PG , NP , NEP and the NGC's pumped storage business) or REC . They may be partly-owned by, or have power purchase agreements with, RECs .
kW	Kilowatt-see power .
kWh	Kilowatt-hour-see power .
Load factor	The ratio (expressed as a percentage) of the net amount of electricity generated by a genset to the net amount which it could have generated were it operating at its net output capacity. A genset operating at full capacity for half the time is said to have a 50 per cent load factor.
LOLP	Loss of load probability. See capacity payments .
London	London Electricity plc. One of the 12 RECs .
Magnox	Magnesium Oxide Reactor (nuclear). The earliest UK operational reactor design.
Manweb	Manweb plc. One of the 12 RECs .
MEB	Midlands Electricity plc. One of the 12 RECs .
MW	Megawatt-See power .
MWh	Megawatt-hour-see power .
Mid-merit generation	See baseload, non-baseload, mid-merit, peak-load generation .
Mothballing	The decommissioning of generating plant to a state from which it may be recommissioned. With the exception of IPPs , generators must seek permission from the DGES for both mothballing and recommissioning.
Must-take contract	See take-or-pay contract .
National grid	See transmission system .
NEP	Nuclear Electric plc.
NFFO	Non-Fossil Fuel Obligation. This is placed by the Government on the RECs , requiring them to contract for specified amounts of electricity from non-fossil, including nuclear, sources. The programme aims to identify and sponsor technologies likely to contribute economically to UK electricity supply by 2005. See also FFL .
NGC	National Grid Company plc. The NGC has the only transmission licence in England and Wales.
NO_x	Oxides of nitrogen.
Non-baseload generation	See baseload, non-baseload, mid-merit, peak-load generation .

Non-franchise customer	See competitive market .
Non-franchise market	See competitive market .
Northern NORWEB	Northern Electric plc. One of the 12 RECs . NORWEB plc. One of the 12 RECs .
NP	National Power PLC.
OCGT	Open cycle gas turbine. A type of generating plant in which turbines, typically fuelled by gas-oil, are used to drive generators to produce electricity. The exhaust gases are then released to the atmosphere. OCGT plant is today typically used only for generation at times of peak demand.
OFFER	The Office of Electricity Regulation. Headed by the DGES .
Orimulsion	An emulsion of bitumen and water. Orimulsion is a trademark of Bitumenas, Orinoco, SA of Venezuela.
Over 100 kW market	See competitive market .
Own-generation limit	The limit set on the level of ownership of generation capacity by a PES , and specified in Condition 6 of the PES licence . This is set by the DGES for each REC , and is currently about 15 per cent of the total electricity consumption in each REC 's area at privatization.
Pass-through price control	Price control in which a component of cost paid for by a supplier is passed on to the customer.
Peak-load generation	See baseload, non-baseload, mid-merit, peak-load generation .
PEC	Pool Executive Committee.
PES	Public Electricity Supplier. A holder of a PES licence .
PES licence	A licence granted under the Electricity Act 1989 to supply electricity as a PES to any premises within the authorized area specified in that licence.
PG	PowerGen plc.
Pool	The Electricity Pool of England and Wales. The Pool itself does not buy or sell electricity, but exists as a mechanism to allow trading between participating generators and suppliers according to a set of rules (the Pool rules) which governs the market's operation and the calculation of payments due to and from each member. Pool membership is open both to generators and suppliers of electricity, subject to fulfilment of certain membership conditions contained in the Pooling and Settlement Agreement .
Pooling and Settlement Agreement	The multi-party contract defining the rules and procedures relating to the Pool .

Power	Power is the rate at which energy is used or produced. One kilowatt-hour (kWh) represents one hour of electricity consumption at a constant rate of 1 kilowatt (kW). Correspondingly: 1 megawatt (MW) = 1,000 kW 1 megawatt-hour (MWh) = 1,000kWh 1 gigawatt (GW) = 1,000 MW 1 gigawatt-hour (GWh) = 1,000 MWh 1 terawatt (TW) = 1,000 GW 1 terawatt-hour (TWh) = 1,000 GWh
Power purchase agreement	A contract agreed between a generator and a supplier , typically an IPP and a REC which has an equity holding in that IPP , to supply electricity at a given price for a given period. It may allow for provision to the supplier of certain information about the generator ; and may confer certain rights on the supplier , for example to influence the way in which the generator bids into the Pool .
PPP	Pool purchase price. The price that forms the basis of payments to generators for sales of electricity through the Pool .
PSP	Pool selling price. The price that forms the basis of payments by suppliers for purchases of electricity through the Pool .
Pumped storage power station	A power station which uses electricity to pump water into a high holding reservoir. The water can be released to turn turbines to generate electricity on short notice in order to meet sudden increases in demand.
PWR	Pressurized Water Reactor (nuclear). The most recent commercial reactor design operating in the UK. Sizewell 'B' is the only nuclear power station using PWR technology.
RECs	The 12 regional electricity companies in England and Wales, successors to the area boards .
Renewables	Renewable energy sources are either natural, such as wind, water and sun, or sources such as waste or biofuels, which can be replenished.
RJB Mining	RJB Mining Plc.
RPI	Retail price index.
SE	Southern Electric plc. One of the 12 RECs .
Second-tier customer	A customer who purchases electricity from a second-tier supplier .
Second-tier licence	A licence granted under the Electricity Act 1989 to supply electricity as a second-tier supplier to any customer in the competitive market .
Second-tier supply	The supply by a REC outside its authorized area , or the supply by any other supplier to a competitive customer in any location.
Section 36 consent	Refers to the consent required under section 36 of the Electricity Act 1989, for the construction, extension or operation of generating stations.
SEEBOARD	SEEBOARD plc. One of the 12 RECs .
SEPG	Southern Electric Power Generation Limited.

SMP	System marginal price, being the highest offered price for any genset scheduled by the Pool to run before system constraints are taken into account.
SO₂	Sulphur dioxide.
Strike price	The price agreed between a generator and a supplier for a Cfd . It may contain a premium or a discount against current PSP .
Supplier	A person authorized to supply electricity by way of a licence or an exemption from the requirement for a licence.
Supply licence	A licence granted under section 6 of the Electricity Act 1989 authorizing the supply of electricity to consumers. Both second-tier licences and PES licences are supply licences.
SWALEC	South Wales Electricity plc. One of the 12 RECs .
SWEB	South Western Electricity plc. One of the 12 RECs .
System constraints	See constrained-off and constrained-on .
Take-or-pay contract	A contract calling for the purchaser to pay the contract price whether or not it accepts delivery of the contracted supply.
TW	Terawatt-see power .
TWh	Terawatt-hour-see power .
Thermal efficiency	The efficiency with which heat energy contained in fuel is converted into electrical energy. The thermal efficiency of a power station is the ratio of the electrical energy supplied by the power station (net of power consumed in the generation process) to the total energy of the fuel consumed by the station.
Time-weighted Pool price	The time-weighted Pool price for a given period is the average price over the period, obtained by summing the price for each half-hour slot and dividing the sum by the number of half-hour slots. It is the price a generator would receive from the Pool over a period of time if its output was constant.
TPHL	Teesside Power Holdings Limited.
TPL	Teesside Power Limited.
Transmission	See transmission system .
Transmission system	The system of electric circuits with a nominal voltage mainly above 132,000 volts, and associated electrical plant and meters to convey electricity from power stations to distribution systems via grid supply points. The system is owned and operated by the NGC and regulated by the DGES as a monopoly.
Under 100 kW market	See franchise market .
Uplift	The difference between PPP and PSP . It is the cost associated with operating the transmission system such that the NGC complies with its statutory and licence duties.
UMIS	Uplift management incentive scheme. A programme introduced to

provide the **NGC** with financial incentives to reduce **uplift**.

Use of system charges

Charges made on **suppliers** for the use of **distribution systems**.

Vesting

The transfer, on 31 March 1990, of the property, rights and liabilities (in England and Wales) of the **CEGB** and the 12 **area boards** to their successor companies: **NP**, **PG**, **NEP**, the **NGC** and the **RECs**.

VOLL

Value of lost load. See **capacity payments**.

Yorkshire

Yorkshire Electricity Group plc. One of the 12 **RECs**.