

A

Access and Forward-looking Charges Significant Code Review (Access SCR)

The Access and Forward-looking Charges Significant Code Review is looking at the ‘forward-looking charges’ which send signals to users about the effect of their behaviour on the networks. A Significant Code Review provides a role for Ofgem to holistically review a code-based issue and speed up industry reform. It is part of a package of reforms proposed by Ofgem with the objective of enabling competition, innovation, and decarbonisation at lowest cost, and to protect consumers in the transition to a smarter, more flexible, and low carbon energy system.

Information of Ofgem’s consultation is available here: <https://www.ofgem.gov.uk/publications/access-and-forward-looking-charges-significant-code-review-consultation-minded-positions>

Advanced Distribution Management System

An information system covering network control

Allowed revenue

The amount of money that a licensee can earn from the operation of its distribution business, as calculated in accordance with the special conditions of its distribution licence.

Anchor Institution

Anchor institution refers to an organisation which has an important presence in a place, usually through a combination of: being large-scale employers, the largest purchasers of goods and services in the locality, controlling large areas of land and/or having relatively fixed assets.

Area of outstanding natural beauty (AONB)

An area of high scenic quality, which has statutory protection in order to conserve and enhance the natural beauty of its landscape. AONB landscapes range from rugged coastline to water meadows to gentle lowland and upland moors. They are different to National Parks because of their more limited opportunities for extensive outdoor recreation.

Artificial Intelligence (AI) and machine learning

The ability of a digital computer or computer-controlled robot to safely perform tasks commonly associated with intelligent beings

Asset Replacement

An activity we undertake to remove existing assets and install a new asset. The driver for this replacement may be due to poor asset condition, obsolescence or environmental or safety issues.

The principal assets replaced as part of a replacement project are captured as primary assets. Where associated assets are also replaced to facilitate the primary asset replacement, they are counted as consequential assets.

Asset serviceability review (ASR)

A routine study conducted by us on the condition and performance of our assets. We use the information to determine and justify future investment levels.

The Authority/Ofgem/GEMA

Ofgem is the Office of Gas and Electricity Markets, which supports the Gas and Electricity Markets Authority (GEMA), the body established by section 1 of the Utilities Act 2000 to regulate the gas and electricity markets in Great Britain.

AutoDesign

Our online low-voltage connection budget estimation tool, which currently allows customers to generate quick and accurate budget estimates for proposed connections to our network.

Automated Power Restoration System (APRS)

Technology that improves network performance by identifying the location of faults on the HV network and restores power supplies by automatically switching to alternative sources of power on the network.

B

Benchmarking

The process used to compare a company's performance (e.g. its costs) to that of best practice or to average levels within the sector.

Black start

The procedure to recover from a total or partial shutdown of the National Grid transmission system. This entails isolated power stations being started individually and gradually being reconnected to each other in order to form an interconnected system again.

Broad Measure of Customer Service (BMCS)

An incentive consisting of a customer satisfaction survey, a complaints metric and stakeholder engagement. It was introduced by Ofgem under the previous price control period to drive improvements in the quality of the overall customer experience by capturing and measuring customers' experiences of contact across the range of services and activities that we provide.

Boston Spa Energy Efficiency Trial (BEET)

A Northern Powergrid innovation project that seeks to develop a system that will use half-hourly averaged voltage measurements from smart meters in order to calculate an optimum 11kV target voltage that can be dynamically applied at three primary substations in the trial area

Building Research Establishment Environmental Assessment Method (BREEAM)

A sustainability certification and assessment method for master planning projects, infrastructure and buildings.

Business Carbon Footprint (BCF)

A calculation representing the effect of the work completed by us has on the environment. BCF is measured and is reported using equivalent tonnes of carbon dioxide to express the impact of energy usage in our offices, emissions from our vehicles and the release of greenhouse gases.

C

Capital expenditure (capex)

Expenditure on investment in long-lived assets.

Climate Change Committee (CCC)

TAAn independent, statutory body established under the Climate Change Act 2008.

Composite Scale Variable (CSV)

A method of combining a number of different cost drivers in to a single driver for regression analysis using fixed pre-determined weights.

Cost of capital

The minimum acceptable rate of return on capital investment. It includes both the cost of debt to a company and the cost of equity.

Cost of debt

The effective interest rate that we pay on our current debt. Ofgem calculates the cost of debt on a pre-tax basis.

Cost of equity

The rate of return on investment that is required by a company's shareholders. The return consists both of dividend and capital gains (e.g. increases in the share price). Ofgem calculates the cost of equity on a post-tax basis.

Criticality index

A measure of the combined safety, environmental, network-performance and financial impact of asset failure. We have developed, in collaboration with other DNOs and Ofgem, a common methodology for assigning a criticality index to our assets.

Composite risk index

An index derived from a combination of the health and criticality indices. The methodology for assigning numeric ratings to each combination of HI and criticality is still to be finalised with Ofgem.

Critical National Infrastructure (CNI)

Those of our sites designated as CNI by BEIS.

Customer Engagement Group (CEG)

An independent group that scrutinises and challenges our business plan and engagement activities to ensure the interests and needs of our customers are reflected in our business plan.

Customers interrupted (CI)

The proportion of total customers whose power has been interrupted in a year. This is the number of customers whose power has been interrupted for three minutes or longer, excluding re-interruptions to the supply of customers previously interrupted during the same incident, multiplied by 100 and divided by the total number of customers.

Customer-Led Network Revolution (CLNR)

Our smart-grid project, which assessed the potential for new network technology and flexible customer response to facilitate speedier and more economical take-up by customers of low-carbon technologies.

Customer Minutes Lost (CML)

The average number of minutes lost per customer per year, where a power cut lasts for three minutes or longer

Customer Relationship Management system (CRM)

A fully integrated service across all communication channels with a single record of customer information

Consumer Value Proposition (CVP)

Companies may bid for a CVP reward on the quality aspects of their business plan by demonstrating the additional value the CVP will generate for existing and future customers and for customers in vulnerable situations.

Consumer Price Index (RPI)

This measure the changes in the price level of a weighted average market basket of consumer goods and services purchased by households. A CPI is a statistical estimate constructed using the prices of a sample of representative items whose prices are collected periodically. This differs from RPI in that it does not measure changes in housing costs and mortgage interest repayments. RPI and CPI are calculated using different formulae and have a number of other more subtle differences.

D***Data and Communications Company (DCC)***

The company whose role is to connect premises with smart meters to a single network and is responsible for managing the services it needs to communicate with smart meters.

Department for Business, Energy & Industrial Strategy (BEIS)

The UK Government department responsible for developing and delivering a comprehensive industrial strategy and leading the Government's relationships with businesses, along with securing affordable and clean energy supplies to the country.

Department for Environment, Food and Rural Affairs (Defra)

The UK Government department responsible for environmental affairs, rural development, the countryside, wildlife, animal welfare and sustainable development.

Distributed Generation (DG)

Any generation plant or apparatus for the production of electricity, which is connected directly to the local distribution network, as well as combined heat and power schemes of any scale. The electricity generated by such schemes is typically used in the local system rather than being transported across the UK.

Distribution Future Energy Scenarios (DFES)

An outline of a range of credible future scenarios for customer energy uses that will require servicing by the distribution network.

Distribution network

The electricity distribution system is a network of wires, which distributes electricity from the transmission system or from Distributed Generation to domestic, commercial and industrial electricity consumers.

Our distribution network includes all parts of the network from 132kV down to 230V.

Distribution network operators (DNOs)

Distribution network operators are holders of electricity distribution licences and own distribution networks in specific geographical areas in Great Britain. There are currently 14 DNOs owned by six different groups. DNOs are responsible for distributing electricity from the transmission system and maintaining the cables, substations and equipment that make up their distribution networks. DNOs do not supply electricity to homes and businesses. Electricity suppliers pay the DNOs to distribute electricity through their distribution networks to homes and businesses that are the electricity suppliers' customers.

Distribution System Operator (DSO)

An organisation that securely operates and develops an active distribution system comprising networks, demand, generation and other flexible distributed energy resources (DER). As a neutral facilitator of an open and accessible market, a DSO will enable competitive access and optimal use of DER on distribution networks, to deliver security, sustainability and affordability in the support of whole-system optimisation. A DSO enables customers to be both producers and consumers, enabling customer access to networks and markets, so increasing customer choice.

Distribution Use of System (DUoS) charges

Charges which are made to the electricity suppliers for use of a DNO's distribution network in accordance with the special conditions of the licensee's electricity distribution licence. T

Demand-Side Response (DSR)

A process which involves customers modifying their use of electricity to consume less power in the peak period. Customers will often do this in return for a financial payment from either a network company or an electricity supplier who can save money as a result of the customer's flexibility.

E***Easements***

An entitlement to retain assets in a location for a determined period of time or in perpetuity without risk of interference from the owner.

Extra High Voltage (EHV)

Voltages over 20kV up to, but not including, 132kV.

Engineering Justification Paper (EJP)

A paper used to justify load-related and non-load related investments that are aimed at reinforcing the distribution network, improving assets health or distribution network performance

Electricity Distribution Price Control Review 1 (RIIO-ED1)

The price control period applied to the electricity distribution network operators, following DPCR5. This price control runs from 1 April 2015 to 31 March 2023.

Electricity Distribution Price Control Review 2 (RIIO-ED2)

The price control period to be applied to the electricity distribution network operators, following RIIO-ED1. This price control runs from 1 April 2023 to 31 March 2028.

Electricity System Operator

An organisation that controls the flow of electricity, ensuring the supply and demand balance meets requirements across the transmission network.

Electricity, Safety, Quality and Continuity Regulations 2002 (ESQCR)

Regulations that place obligations on DNOs that are aimed at protecting the general public from danger and ensuring the continuity of supply, as far as reasonably practicable. Amended in 2006 to include a requirement for resilience tree clearance.

Electric vehicles (EV)

An automobile that is propelled by one electric motor or more, using electrical energy stored in batteries or another energy storage device.

Environment Agency (EA)

An Executive Non-departmental Public Body. Its principal aims are to protect and improve the environment and to promote sustainable development.

Energy Company Obligation (ECO)

An obligation on energy suppliers to fund energy efficiency improvements that was introduced in January 2013 to reduce the UK's energy consumption and support people living in fuel poverty.

Energy Network Association (ENA)

The E the trade association for the UK transmission and distribution licence holders, acting in the interest of the gas and electricity network sectors.

Energy Ombudsman/Ombudsman Services (EO)

The organisation that provides an independent dispute resolution service for the communications, energy, property and copyright licensing sectors.

F

Fault Level Reinforcement

Work carried out on the distribution network where the prime objective is to alleviate fault level issues associated with switchgear or other equipment.

Financeability

Financial models used to determine whether the licensee is capable of financing its regulated activities and earning a return on its rRAV under the proposed price control. Financeability is assessed using a range of different financial ratios.

Flexibility

Flexibility is the ability to increase or decrease the production and/or consumption of energy at a given or requested time in order to support the wider distribution network and optimise capacity available for customers. We are seeking to adopt flexibility-first strategies, where flexibility solutions are the preferred means of balancing additional demand on our distribution network

Fuel poverty

A fuel poor household is defined as one that needs to spend 10% or more of its household income on all fuel use in order to maintain a satisfactory heating regime. BEIS's latest Fuel Poverty review (Hills Fuel Poverty Review) recommends that any household that requires fuel costs above the median level and, if they were to spend that, are left below the official poverty line, should be defined as fuel poor.

Fuse upgrades

At present, our standard low voltage fuse size is 80 amps for new connections, and 60 amps for legacy connections in order to facilitate customers seeking to increase the load of their premises, in particular for LCTs, their fuse will be upgraded to 100 amps.

G

Gas and Electricity Markets Authority (GEMA)

See the Authority/Ofgem.

Gearing

A ratio measuring the extent to which we are financed through borrowing. Ofgem calculates gearing as the percentage of net debt relative to the RAV.

General reinforcement

Work carried out on our distribution network in order to enable new load growth (both demand and generation) which is not attributable to specific customers.

Gigawatt Hour (GWh)

Equal to one million Kilowatt hours.

Greenhouse gas (GHG)

A collection of gases which absorb infrared radiation and trap its heat in the atmosphere.

Grid resilience

A strong electricity network that minimises disruption from extreme weather and malicious activity, is a proactive force for good in the community, and maximises the benefits of new technologies such as batteries to develop a better energy system

Guaranteed Standards of Performance

A set of service standards that have been set to guarantee a level of performance that is reasonable to expect us to deliver. If we fail to meet the level of performance required, we must make a payment to the customer subject to certain conditions. There are two sets of Guaranteed Standards of Performance, one for connections and one for reliability. Payments under the guaranteed standards compensate for the inconvenience caused. They are not designed to compensate customers for financial loss incurred as a result of the failure.

H***Health Index (HI)***

A health index (HI) is a measure of the overall health of an asset as informed by a combination of data on condition assessments, fault performance, manufacturers' known defect reports, inspection test results, maintenance history, obsolescence information and asset age. Using degradation curves, based on industry research and operator experience, we are able to forecast future potential asset health.

The Health and Safety Executive (HSE)

A public body responsible for regulating health and safety in Great Britain with the primary function to secure the health, safety and welfare of people at work and to protect others from risks to health and safety from work activity.

Heat maps

A tool that shows where there is additional capacity on our distribution network, and where there are constraints. They are useful tools for customers investigating the viability of a new connection

Heat pump

Systems which capture heat energy from the ground, air or bodies of water and are utilised, for example, for water heating and space heating. A supply of electricity is required to power the system.

High Voltage (HV)

Voltages over 1kV up to, but not including, 22kV.

Industrial and Commercial (I&C) Customers

Larger businesses that are heavy users of electricity. Their power consumption is measured in half-hourly intervals.

Independent Distribution Network Operator (IDNO)

An organisation that owns and operates an electricity distribution network that is connected directly to a DNO's distribution network and holds an electricity distribution licence.

Incentive rate (efficiency)

The percentage of underspends/overspends against expenditure allowed at the price control review that is kept by the company responsible. The remaining savings/losses are passed through to customers.

Incident

Any occurrence on the distribution network or other connected distributed generation, transmission or distribution network, which results in an interruption of supply to customer(s) for three minutes or longer or prevents a circuit or item of equipment from carrying normal load current or being able to withstand through fault current for three minutes or longer.

Independent Connection Providers (ICPs)

An organisation that is appropriately accredited and, therefore, is able to build electricity distribution assets on behalf of its client that are to the specification and quality required for the assets to be adopted by us.

Indirect costs

Costs that relate to activities other than building, repairing, maintaining or operating our distribution network. Those costs include the essential support activities that make all of that possible and providing contact with our customers i.e.:

- Closely-associated indirects, including the costs of activities such as network design, our customer-contact centre and updating our information systems; and
- Business-support costs, i.e. overhead costs that most large businesses incur, such as our human resources and finance departments, property and IT.

Inflation index

A measure of the changes in given price levels over time. A common example is tRPI, which measures the aggregate change in consumer prices over time.

Innovation Funding Incentive (IFI)

The mechanism introduced by Ofgem to encourage us and other DNOs to invest in appropriate research and development activities that focus on the technical aspects of distribution network design, operation and maintenance. The principal objective is to deliver benefits to customers, taking a longer term view, by enhancing efficiency in distribution network operating costs and capital expenditure.

Inspections and maintenance

The overall activity that encompasses inspections, shrouding of low voltage overhead line conductors and repairs and maintenance.

Interactive voice response (IVR)

Technology that allows a computer to interact with humans through the use of voice and dual-tone multi-frequency tone inputs via a keypad. IVR allows customers to interact with our telephony system via a telephone keypad or by speech recognition, after which they can service their own enquiries by following the IVR dialogue.

Interruption

An interruption is defined as the loss of supply of electricity to one or more customers due to an incident but excluding voltage quality and frequency abnormalities, such as dips, spikes or harmonics.

Interruptions Incentive Scheme (IIS)

An incentivised scheme introduced by Ofgem, under which we can be rewarded or penalised in monetary terms depending on our performance. For example, we can be penalised if we do not meet our power cut targets and rewarded if we achieve our targets. Our performance is measured along with the other DNOs.

Inter-seasonable storage

Consideration of the differing summer and winter loads as new low-carbon technologies connect to our distribution network. For example, as electric heat develops and generation becomes dominated by renewables, the requirement for summer-harvested energy to be stored for winter use (inter-seasonal storage).

ISO27001

An international standard on how to manage information securely. We hold ISO27001 accreditation as part of our process to ensure our operations have informational resilience embedded in them.

ISO27019

An international security standard which is applied for energy management to control the generation, transmission and distribution of electricity and for the control of the associated supporting processes

ISO45001

An international standard for health and safety at work developed by national and international standards committees independent of government.

ISO45003

ISO 45003 is the first global standard giving practical guidance on managing psychological health in the workplace. It provides guidance on the management of psychosocial risk, as part of an occupational health and safety management system.

K

Kilowatt Hours (KWh)

A unit of energy equal to 1,000 watts being consumed for one hour.

L

Licence conditions

The obligation placed on us that are contained in the special and standard conditions of our electricity distribution licence. The Authority has the power to take appropriate enforcement action in the event of a failure to meet these obligations.

Load Index (LI)

A measure of network health that is how often assets potentially have to be loaded above their continuous rating capacity in order to meet demand. This can be calculated by the use of a load index (LI). In conjunction with other network operators and Ofgem, we have developed a common methodology for calculating this load index. This now forms the basis of our secondary deliverable for network loading.

Load Related Expenditure (LRE)

Expenditure relating to the following activities:

- Connections;
- Diversions and Wayleaves/Easements;
- General Reinforcement;
- Fault Level Reinforcement; and
- Relevant High Value Projects (HVPs).

Local area energy planning (LAEP)

A key technique to inform, shape and enable key aspects of the transition to net zero. It is undertaken by local authorities and can underpin specific proposals to upgrade local energy networks to enable decarbonisation in line with local objectives. Done well and consistently across many localities, LAEPs can inform sharper, more effective and better targeted national policies.

Logging up

A type of uncertainty mechanisms, logging up provides for a company to be compensated for all, or part, of its actual expenditure on a particular activity or area, through the revenue allowance set at the next price control review.

Long Term Development Statement (LTDS)

A document that sets out the use and likely development of the distribution network and our plans for modifying the distribution network for the following two years. The LTDS covers the parts of the distribution network that are likely to reach capacity during the next five years, our plans to reduce any shortcomings in operation/capacity and how actual developments have compared to our plans under the previous statements. All DNOs must produce and maintain a LTDS.

Losses

The difference between units of electricity entering and units of electricity exiting our distribution network through different connection points.

Low carbon economy

An economy which has a minimal output of greenhouse gas emissions.

Low Carbon Networks Fund (LCNF)

A mechanism introduced under the fifth distribution price control review to encourage us and other DNOs to use the forthcoming price control period to prepare for the role we will have to play as the country moves to a low carbon economy. The fund makes up to £500m available for DNOs and partners to innovate and trial new technologies, commercial arrangements and ways of operating their distribution networks.

Low-carbon technology (LCT)

A process or technology that produces power with substantially lower amounts of carbon dioxide emissions than is presently emitted from conventional fossil fuel power generation. It includes low carbon power generation sources such as wind power, solar power, hydro power and nuclear power fuel preparation and decommissioning

Low Voltage (LV) Network

A low voltage network covers voltages up to, but not including, 1kV, that carries electrical energy from distribution substations to electricity meters.

M**Microgrid**

A small network of electricity users with a local source of supply (such as solar panels or wind turbines) that is connected to our distribution network but is also able to function independently.

N**National Parks (NPs)**

Extensive tracts of countryside that are protected by law for future generations because of their natural beauty and for the opportunities they offer for open air recreation.

Net Present Value (NPV)

The discounted sum of future cash flows, whether positive or negative, minus any initial investment.

Net Zero

Achieving a balance between greenhouse gas emissions being produced (including carbon dioxide) and greenhouse gas emissions being taken out of the atmosphere (e.g. by planting more trees) so that, overall, the amount of greenhouse gases in the atmosphere is no longer increasing.

Network Investment

Includes all costs associated with the following activities:

- Metered demand connections (Use of System funded)
- Core Network Investment
- Non-Core (ex-ante)
- Non-Core (reopener/logging up)
- Standalone funding (RAV)
- Standalone funding (not RAV)
- High Value Projects (HVPs)

Network Operating Costs (NOCs)

Includes the activities of:

- Trouble Call
- Atypicals – Severe Weather one-in-twenty events
- Inspections and Maintenance
- Tree Cutting
- NOC Other

Network Output Measures

The Network Output Measures introduced in DPCR5, which consisted of the Health Index, Load Index and Fault Rates. This framework ties the DNOs into the delivery of specified network improvements by linking activities to allowed revenues. The arrangements are comparable to RIIO Secondary Deliverables.

Network Innovation Allowance (NIA)

The allowance available to fund smaller scale innovative projects which have the potential to deliver benefits to network customers.

Network reinforcement

The investment of customers' money to improve network capacity. Sometimes we will seek to defer or delay this investment by using other techniques – such as flexibility – to provide better value for money for customers.

NCSC CAF Principles

Areas in which the National Cyber Security Centre (NCSC) Cyber Assessment Framework (CAF) targets are met or exceeded - In total, 39 Principles are defined in the CAF.

Non-Load Related Expenditure (NLRE)

The installation of new assets and the planned installation of replacement assets other than for load-related reasons.

Non-Operational Capex (NOC)

Expenditure on new and replacement assets which are not network assets incorporating items such as maintaining our vehicle fleet, purchasing the necessary tools and equipment and non-operational IT and telecoms costs.

O***Operating Expenditure (Opex)***

The costs of the day-to-day operation of the network, such as staff costs, repairs and maintenance expenditure, and overheads.

Occupational Safety and Health Administration (OSHA)

In the USA, OSHA records reportable work-related accidents including major injuries leading to absence from work and also less severe injuries where employees may experience restricted work duties or have prescription drugs issued as treatment or therapy. The OSHA rate is presented as recordable cases per 200,000 man hours. See www.osha.gov.

Open data

Data that may be made freely available to everyone to use as they wish. For example, customers may use data to assess network capacity ahead of installing low-carbon technology or assess the forecasts we are making about the increase in heat pumps. Making data available is a key part of how we can support customers in the shift to net zero

Open networks project

A major Energy Networks Association initiative that is transforming the way our electricity networks are supporting delivery of a smart flexible energy system.

Outputs resilience

Taking measures to ensure the physical assets that make up our electricity network are robust in the face of extreme weather, malicious activity or other events that threaten power supply availability.

Operational Technology (OT)

The hardware and software dedicated to detecting or causing changes in physical processes through direct monitoring and/or control of physical devices. This includes all processes in a loop between sensing and output of operational actions including communication, storage of received data, holding working copies of network data and real time/near real time processing of data prior to application back to system operation.

Outputs

Information to be used to assess a network company's performance against the outcomes within a control period. This information may be both qualitative and quantitative in nature.

Output Delivery Incentive (ODI)

A mechanism that will incentivise service level improvements by setting target service levels, rewards and penalties, these can be either financial (ODI-F) or reputational (ODI-R)

P***Partners***

Organisations with whom we collaborate on projects and operations within our region and our sector.

Pass through (of costs)

Certain costs, as specified in the special conditions of the licensee's distribution licence, which can be passed through to users of the licensee's distribution system through use of system charges.

People reached through safety awareness programmes

The number of school age children receiving a safety education message. This includes face-to face lessons, lesson downloads and video views/downloads.

Perfluorocarbon tracers (PCTs)

A means of detecting the location of fluid losses from cables. For example, when cables are damaged, either by mechanical impact or by corrosion, they leak insulant into the environment. By adding PCTs to the insulant, leaks and damage can be found more quickly.

Photovoltaic (PV)

A method of generating electrical power by converting solar radiation into direct current electricity using semiconductors that exhibit the photovoltaic effect.

Polychlorinated biphenyls (PCBs)

A chemical compound found in transformer oil. Since its widespread introduction, this class of chemical has been identified as carcinogenic. As such, our transformer oil is carefully managed to keep people safe.

PowerOn Fusion

Software used to manage the status of the electricity network, including safety documents and identification/mitigation of faults.

Preventable Vehicle Accident (PVA)

A vehicle accident that occurs when a colleague is travelling for business purposes and in circumstances where the accident is preventable. E.g. driver error.

Price control (control)

The control developed by Ofgem to set targets and allowed revenues for us and other network companies. The characteristics and mechanisms of a price control are developed by Ofgem in the price control review period depending on network company performance over the last price control period and predicted expenditure in the next.

Priority Service Membership/Priority Service Register (PSM)

A database of customers within our region who are of pensionable age, disabled, chronically sick, require special communication needs, depend on electricity for medical reasons, or require certain information and advice about supply interruptions. We provide all PSM customers with prior advice and information about planned power cuts and appropriate information and advice about what precautions to take in the event of an unplanned power.

Q***Quality of Service (QoS) costs***

Costs where the prime purpose is to improve performance against the IIS targets or to improve the overall fault rate per km of the distribution network.

R***Regulatory asset value (RAV)***

A measure of the value of the capital employed in the regulated network business. RAV is a financial construct based on historical investment costs and represents the value upon which the companies earn a return in accordance with the regulatory cost of capital (i.e. the weighted average cost of capital) and receive a regulatory depreciation allowance. In effect, this rewards licensees for investing in the assets that make up their regulated business.

Real Price Effects (RPE)

The amount by which a particular cost is expected to increase, or decrease, relative to the rate of inflation. For example, if a category of cost is not expected to rise as quickly as inflation, then it will have a negative real price effect.

Real-time thermal ratings (RTTR)

Monitoring equipment to allow overhead line, cable and transformer ratings to be pushed higher under certain ambient conditions, thereby releasing capacity at these times.

Re-openers

A process undertaken by Ofgem to re-set the revenue allowances (or the parameters that give rise to revenue allowances) under a price control before the scheduled next formal review date for the relevant price control.

Regulatory Instructions and Guidance (RIGs)

A set of documents that are published by Ofgem, which set out further detail on how the price control is to be implemented and how compliance with it will be monitored.

Retail Prices Index (RPI)

The RPI is an aggregate measure of changes in the cost of living in the UK. It differs from the CPI in that it measures changes in housing costs and mortgage interest repayments, whereas the CPI does not. RPI and CPI are calculated using different formulae and have a number of other more subtle differences.

Return on Regulatory Equity (RORE)

The financial return achieved by shareholders in a licensee during a price control period from the licensee's out-turn performance under the price control. The return is measured using income and cost definitions contained in the price control regime (as opposed to accounting conventions) and is expressed as a percentage of (share) equity in the business. Importantly in the calculation, the gearing (proportions of share equity and debt financing in the RAV) and cost of debt figures used are those given as the 'assumed' levels in the relevant price control final proposals. The aim of the RoRE measure is to provide an indication of the return achieved by the owners of a licensee which can be compared to the cost of equity originally allowed in the price control settlement and to the return achieved by other licensees on an equivalent basis.

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)

The measure of the number of accidents we have that are reportable under RIDDOR. These accidents are reportable to HSE and include fatal, major injury and lost-time accidents resulting in over three days' absence from work. RIDDOR puts duties on employers, the self-employed and people in control of work premises (the Responsible Person) to report certain serious workplace accidents, occupational diseases and specified dangerous occurrences (near misses). See <http://www.hse.gov.uk/riddor/index.htm>.

RIIO (Revenue = Incentives + Innovation + Outputs)

Ofgem's regulatory framework, stemming from the conclusions of the RPI-X@20 project, to be implemented in forthcoming price controls. It builds on the success of the previous RPI-X regime, but better meets the investment and innovation challenge by placing much more emphasis on incentives to drive the innovation needed to deliver a sustainable energy network at value for money to existing and future consumers

Royal Society for the Prevention of Accidents (ROSPA)

A British charity which promotes safety.

S***Safety audits***

Audits undertaken by our in-house safety auditors.

Secondary deliverables

Indicators of performance which may be used in support of our primary outputs.

SilentPower vehicle

Electric vehicles with on-board energy storage systems that we can use as generators for customers during power cuts and planned works. They replace noisy and polluting diesel generators. SilentPower is a low-carbon innovation trial consisting of three vans to provide a sustainable solution to restoring power to customers – particularly the most vulnerable and those with domestic solar generation. A SilentPower vehicle can power up to three houses or a small community centre for 24 hours and can be deployed in places that traditionally could not have a diesel generator, such as an apartment with no ventilation.

Small works connections

New connections to our LV network. For example, connecting two new build houses or new electric vehicle chargers.

Smart energy network

An electricity network that harnesses digital technology to actively manage growing levels of distributed renewable generation and growing electricity demand as well reducing power cuts and their duration.

Smart grid

An electricity network that can intelligently integrate the actions of all the users connected to it - generators, customers and those that do both - in order to efficiently deliver sustainable, economic and secure electricity supplies.

Social Issues Expert Group (SIEG)

An external group of industry experts that supports the development of support services for vulnerable customers and wider social impact programmes.

Social Responsibility Management Group (SRMG)

Our internal expert group that supports the development and delivery of our consumer vulnerability strategy and wider social impact programmes.

Stakeholder

Those parties that are affected by, or represent those affected by, decisions made by network companies and Ofgem. As well as customers, stakeholders would include, for example, Government and environmental groups.

Street works reinstatement

As one of the organisations that are permitted to dig up the street, we are subject to independent inspections by local authorities. If our work is not good enough, we face fines and potential prosecution.

Supervisory Control and Data Acquisition (SCADA)

A type of industrial control system (ICS). An ICS is a computer controlled system that monitors and controls industrial processes that exist in the physical world. SCADA systems historically distinguish themselves from other ICS systems by being large scale processes that can include multiple sites and large distances.

Sulphur Hexafluoride (SF₆)

A potent greenhouse gas frequently used in electrical equipment.

SF₆ Leakage

Loss of integrity of the gas-tight enclosure in which electrical plant utilising SF₆ for insulation purposes is held leading to an escape or leakage of the gas.

Switchgear

Equipment that controls other assets on our network, protecting them while in operation and used to power down assets for maintenance or repair.

T

Tailored schemes

Where a percentage of the overall expenditure on projects is allocated to deliver community-supporting programmes in the area local to the investment project. For example, if we carry out a cable upgrade programme, we will work with the local community to identify the best way to invest in the area – from supporting tree-planting initiatives to helping school pupils learn about decarbonisation and energy efficiency.

Third party aggregator

Organisations outside of Northern Powergrid that provide services, such as flexibility, to our network.

Traffic Management Act (TMA)

Introduced in 2004 to tackle congestion and disruption on the road network. The TMA places a duty on local traffic authorities to ensure the expeditious movement of traffic on their road networks and those networks of surrounding authorities. It gives authorities additional tools to better manage parking policies, moving traffic enforcement and the coordination of street works.

Total expenditure (Totex)

Totex generally consists of all the expenditure relating to a licensee's regulated activities but with the exception of some specified expenditure items. The annual net additions to RAV are calculated as a percentage of the totex.

U

Ultra-low emission vehicle (ULEV)

A vehicle that emits 75g/km CO₂ or less.

Uncertainty mechanisms

Mechanisms that allow changes to the base allowed revenue during the price control period to reflect significant cost changes that are expected to be outside our control. Examples include revenue triggers and volume drivers.

Undergrounding

Is the process of replacing overhead power cables with buried electricity distribution cables.

Unmetered connection

A connection where the charges for electricity consumption are not measured via a meter. The Electricity (Unmetered) Supply Regulations 2001 describe the circumstances in which a supply of electricity may be unmetered, for example small electricity loads that have predictable consumption.

V

Vegetation management

The term we use for cutting back, pruning or removing trees, bushes and anything that grows near our assets. It is a key part of storm protection. If long branches swaying in the wind and hit our power lines, they could interrupt the power to our customers. By managing this vegetation, we reduce the chances of it coming into contact with our assets and causing a power cut.

Vulnerable customer

A customer who meets Ofgem's definition of vulnerable customer. This includes those that rely on medical equipment, have a critical medical condition, require on an alternative communication method and/or have a long-term, short-term or age-related support requirement.

W

Wayleaves

An agreement for access to property with a landowner including provision for constructing, retaining, using and maintaining an overhead line or underground cable.

Weighted Average Cost of Capital (WACC)

The weighted average of the cost of equity and the cost of debt, where the weighting is provided by the gearing ratio. This represents the cost to us of raising the funds for its activities (specifically, our capex programme). As part of the price control process, Ofgem sets an allowance for the expected WACC that we pay.

Whole system energy sources

Fuel sources located across the electricity, gas, heat and transport sectors that make up the whole energy system.

Worst-served customers

In RIIO-ED1, a worst served customers is a customer experiencing on average at least four higher voltage interruptions per year over a three year period (ie 12 or more over three years), with a minimum of three higher voltage interruptions in each year. This changed for RIIO-ED2, where a worst served customer is defined as a customer experiencing on average at least four higher voltage interruptions power cuts per year, over a three year period (i.e. 12 or more over three years), with a minimum of two interruptions power cuts per year.

Workforce renewal programme

Workforce renewal involves the recruitment and training of new staff and the upskilling of existing staff to replace leavers from the operational workforce (e.g. roles meeting definitions of 'craftsperson', 'engineers' and 'non-engineering roles'). It includes learner costs associated with both classroom and new recruits and upskilling, trainer and course material costs associated with classroom training, training centre and training administration costs associated with new recruits and upskilling and recruitment costs associated with operational trainers.

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