

TCR Glossary

Assistance for Areas with High Electricity Distribution Charges (AAHEDC)	Assistance for Areas with High Electricity Distribution Charges (AAHEDC) is a charge paid to assist Scottish Customers with the high cost of electricity distribution. Charge is applied as a single unit based charge to each supplier based on their settled consumption
Avoided GSP Infrastructure Credit (AGIC)	The Avoided GSP Infrastructure Credit (AGIC) represents the unit cost of infrastructure reinforcement at GSPs which is avoided as a consequence of embedded generation connected to the distribution networks served by those GSPs. It is calculated from the average annuitised cost of that infrastructure reinforcement divided by the average capacity delivered by a supergrid transformer.
Balancing Services Use of System (BSUoS charges)	The Balancing Services Use of System (BSUoS) charge recovers the cost of day to day operation of the transmission system. Generators and suppliers are liable for these charges, which are calculated daily as a flat tariff across all users. The methodology that calculates the BSUoS is set out in Section 14 of the CUSC.
Capacity Market (CM)	The Capacity Market (CM) provides a regular retainer payment to reliable forms of capacity (both demand and supply side), in return for such capacity being available when the system is tight.
Charging Futures Forum (CFF)	Charging Futures Forum (CFF): we have set up a new CFF to facilitate better co-ordination of changes to connection and charging arrangements
Common Distribution Charging Methodology (CDCM)	Common Distribution Charging Methodology (CDCM) for DNOs use of system charges at lower voltages.
Connection and Use of System Code (CUSC)	The Connection and Use of System Code (CUSC) is the contractual framework for connection to, and use of, the National Electricity Transmission System
Cost reflective charges	Cost reflective charges are charges (or elements of a charge) that are set to reflect the costs or benefits that a user confers on the network. These could be network investment or operational costs.
Demand side Response (DSR)	Demand side Response (DSR) refers to the ability of sources of demand (for example, and industrial process) to increase or decrease their demand in response to signals (sometimes price-signal) in order to support system or network management.
De-rated capacity margin	The de-rated capacity margin is defined as the expected excess of available generation capacity over demand. Available generation capacity is the

	part of the installed capacity that is expected to be accessible in reasonable operational timelines, i.e. it is not decommissioned or offline due to maintenance or forced outage. The available generation capacity will also take into account any expected intermittency of the generation fleet.
Dispatch	Economic dispatch is the operation of generation plants to produce output at the lowest marginal or operational cost.
Distributed Energy Resource (DER)	Distributed Energy Resource (DER): A decentralised source of energy: DERs are small-scale units of local generation connected to the grid at distribution level.
Distributed generation	Distributed generation (DG) also called embedded generation, and distribution-connected generation. These are generators connected to the distribution system, rather than the transmission system. Smaller (sub-100MW) DG do not pay transmission charges and can receive Embedded Benefits. Larger (over 100MW) DG do pay transmission charges and do not receive Embedded Benefits.
Distribution Demand Residual (DDR)	Distribution Demand Residual (DDR) also referred as scaling charges.
Distribution network	Distribution networks carry electricity from the high voltage transmission grid to industrial, commercial and domestic users. Distribution networks can be either overhead or underground and voltages vary from 230 V to 132 kV.
Distribution Network Operator (DNO)	Distribution Network Operator (DNO) companies own, operate and maintain the distribution networks. They do not sell electricity to consumers, this is done by the electricity suppliers. There are 14 licensed distribution network operators (DNOs) in Britain, and each is responsible for a regional distribution services area.
Distribution Use of System Charges (DUoS)	Distribution Use of System Charges (DUoS) cover the cost of operating and maintaining a safe and reliable electricity infrastructure between the transmission system and end users such as homes and businesses. The electricity infrastructure includes overhead lines, underground cables, as well as substations and transformers.
Electricity network	The electricity network includes both the distribution networks and transmission networks.
Electricity System Operator (ESO)	The party (National Grid System Operator) with the responsibility for the minute-to-minute operation of the system and transmission network, ensuring it is balanced and stable .
Embedded generation	See 'distributed generation'

Embedded Export Tariff (EET)	Embedded Export Tariff (EET): A separate Embedded Export Tariff payment is made to embedded generators which generate over triad periods.
Energy Demand Research Project (EDRP)	Energy Demand Research Project (EDRP) was a suite of large scale trials across Great Britain. The aim was to understand how consumers react to improved information about their energy consumption over the long term.
Expected Energy Unserved' (EEU)	<p>Expected Energy Unserved' (EEU) represents a metric which could be used to measure security of supply as well as to set a reliability standard.</p> <p>This is the amount of electricity demand - measured in MWh – that is expected not to be met by generation in a given year.</p> <p>EEUS makes it possible to monetize the shortfall in a system where VoLL has also been calculated since the amount of EEUS can then be multiplied by VoLL.</p>
Extra High Distribution Charging Methodology (CDCM)	Extra High Distribution Charging Methodology (CDCM) for distribution use of system charges at extra-high voltage (above 22kV).
Extra High Voltage (EHV)	Extra High Voltage (EHV) refers to the extra high voltage infrastructure on distribution networks. These are distribution network assets with nominal voltages of at least 22kV .
Flexibility	Flexibility refers to the ability of users on the network to quickly change their operations in order to provide system services, such as supporting system balancing and network constraint management. Sources of flexibility are demand side response, storage, and dispatchable generation.
Forward looking charges	The elements of network charges that signal to users how their actions can either increase or decrease future network costs. They typically provide signals about the costs or benefits of locating at different points on the network (sometimes called "locational charges") and/or of using the network at different times .
Future Energy Scenarios (FES)	Future Energy Scenarios (FES): National Grid publishes a range of plausible and credible pathways for the future of energy, from today out to 2050.
Grid Supply Point (GSP)	A Grid Supply Point (GSP) is a Systems Connection Point at which the Transmission System is connected to a Distribution System.
Half-hourly metering	A form of interval energy data. Some metering equipment can measure energy on a half hourly (HH) basis and where this is the case, network charges based on measures of usage within different half-hourly periods.

High voltage (HV)	High voltage (HV): Distribution network assets with nominal voltages over 1kV but less than 22kV.
Interface between transmission and distribution	Where we discuss the interface between transmission and distribution, we are referring to the fact that there are different regulations and charging methodologies across the networks. This creates 'interface issues' whereby the fact that there are different regulations may influence investment and operation decisions that don't necessarily reflect the underlying economics.
Larger generators	Those generators with a generating capacity greater than or equal to 100MW.
Large User	By large users, here, we are referring to those distribution-connected users who have an agreed capacity (eg the majority of users with current transformer metering), and transmission-connected users.
Line Loss Factor Classes (LLFC's)	Line Loss Factor Classes (LLFC's): Line Loss Factors are multipliers which are used to scale energy consumed or generated to account for losses on the UK's Distribution Networks.
Loss of load expectation (LOLE)	Loss of load expectation is a key metric when assessing security of supply. This is the average number of hours in a year when we expect that there will be insufficient supply available in the market, and National Grid may need to take action that goes beyond the normal market operations to balance the system.
Low Carbon London (LCL)	Low Carbon London (LCL) is a game-changing initiative and has achieved a number of firsts during its ambitious and pioneering work. It has successfully investigated and tested a number of innovative approaches and technologies to developing and managing sustainable low carbon electricity distribution networks.
Low carbon technology (LCT)	Low carbon technology (LCT): Technologies that produce power with a substantially lower CO ₂ emission than fossil fuels.
Low voltage	Distribution network assets with nominal voltages below 1kV.
Meter Point Administration Numbers (MPANs)	Meter Point Administration Numbers (MPANs) is a 21-digit reference used in Great Britain to uniquely identify electricity supply points such as individual domestic residences.
Network access arrangements	Network access arrangements refers to how the network access rights are allocated to users.
Network access rights	Network access rights define the nature of users' access to the networks – how much they can import or export, when and for how long, where to/from, and how likely their access is to be interrupted and what happens if it is

Network capacity	The amount of electricity flows that the network is able to accommodate.
Ofgem	Ofgem is the Office of Gas and Electricity Markets. Our governing body is the Gas and Electricity Markets Authority and is referred to variously as GEMA or the Authority. We use 'the Authority', 'Ofgem' and 'we' interchangeably in this document.
Peak demand (times, demand)	Peak refers to the times when demands on the network are highest. These times can vary in different parts of the network.
Residual Cashflow Reallocation Cashflow (RCRC)	The Residual Cashflow Reallocation Cashflow (RCRC) is a surplus or deficit of funds remaining to be reallocated after settlement of charge in the Balancing Mechanism.
RIIO	RIIO (Revenue=Incentives+Innovation+Outputs) is Ofgem's performance-based framework to set the price controls.
Security of Supply	Security of supply is ensuring the uninterrupted availability of energy sources at an affordable price. National Grid publish an outlook report on the availability of gas and electricity supplies ahead of each winter. The report contains an assessment of the risk to suppliers in Britain over the next winter.
Significant Code Review	A Significant Code Review (SCR) provides a tool for Ofgem to initiate wide ranging and holistic change and to implement reform to a code based issue, as introduced under the Code Governance Review - https://www.ofgem.gov.uk/licences-industry-codes-and-standards/industry-code-governance/code-governance-review
Small embedded generators (SEG)	Small embedded generators (SEG): Those generators with a generating capacity less than 100MW connected to the distribution network.
Small users	By small users, here, we are referring to those users who do not have a specified capacity. These users are typically not Current Transformer metered
Solar photovoltaics (PV) panels	Solar photovoltaics panels
Targeting Charging Review (TCR)	Targeting Charging Review
TNUoS Demand Residual (TDR)	TNUoS Demand Residual (TDR) charges are top-up charges which ensure that the appropriate amount of allowed revenue is collected from demand users once locational, cost reflective, charges have been levied. The amount of revenue which needs to be recovered from TDR charges does not change when individuals use the system differently. Any TDR charges avoided by the use of smaller EG have to be recovered from other users of the network, leading to higher charges for everyone

	else.
Transmission Generation Residuals (TGR)	TNUoS Generation Residual (TGR) charges are top-up charges which ensure that the appropriate amount of allowed revenue is collected from generators users once locational, cost reflective, charges have been levied. If too much revenue has been collected from the locational charges, the TGR can be a negative charge that pays revenue back to generators.
Transmission Network Use of System Charges (TNUoS)	Transmission Network Use of System Charges (TNUoS) recover the TNOs allowed revenues under the price control settlements and are charged to both demand users and generators. They are broadly separated into forward-looking charges, which relate to the incremental cost of using the network in a specific location, and residual charges that recover the remaining costs and are non-locational.
Transmission network	The transmission network comprises of circuits operating at high-voltage, defined as 400kV, 275kV, and 132kV (in Scotland only). The system is responsible for the transmission of energy from generators to lower voltage distribution networks, which subsequently distribute the supply to users.
Transmission owners	The high-voltage electricity transmission network in England and Wales is owned by National Grid Electricity Transmission plc (NGET), in south and central Scotland it is owned by Scottish Power Transmission plc (SPT), and in north Scotland by Scottish Hydro Electric Transmission plc (SHET). These companies are designated as Transmission Owners (TOs) in legislation.
Transport Model	The Transport Model is the name of the charging methodology used to calculate the element of TNUoS charges that provides forward-looking signals about the impact of users on the wider network.
Triad periods	The triad refers to the three half-hour settlement periods with highest system demand between November and February, separated by at least ten clear days. National Grid uses the triad to determine TNUoS charges for customers with half-hour metering. The triads for each financial year are calculated after the end of February, using system demand data for the half-hour settlement periods between November and February.
Value of Lost Load (VoLL)	Value of Lost Load (VoLL) represents the value that electricity users attribute to security of electricity supply and the estimates could be used to provide a price signal about the adequate level of security of supply in GB.

Wholesale market	Electricity cannot be stored in large amounts. Supply and demand for electricity must be matched, or balanced, at all times. In GB, this is primarily done by suppliers, generators, traders and customers trading in the competitive wholesale electricity market.
Wider network tariffs	TNUoS charges have two components – a wider network tariff and a local charge. The wider network tariff reflects the incremental cost of power being added to the system at different geographical points.