

# Annex A – Glossary DRAFT

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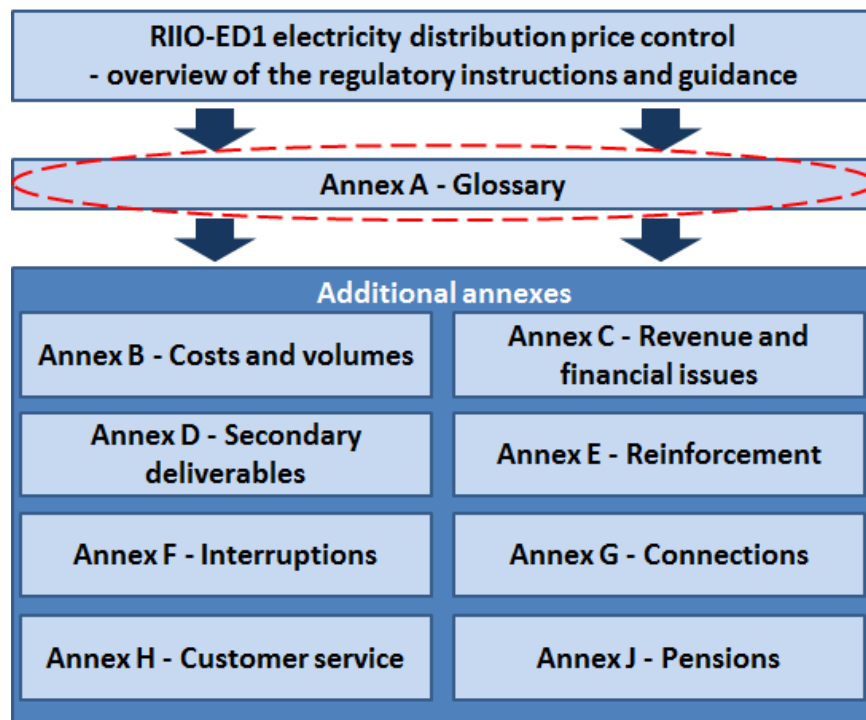
# 1. Introduction

## Scope of this document

1.1. This document is part of the regulatory instructions and guidance (RIGs) for RIIO-ED1. The term RIGs refers to a collection of documents – our instructions and guidance, and the reporting packs and commentaries the DNOs have to fill out.

1.2. Figure 1.1 shows all the instructions and guidance documents for the RIIO-ED1 RIGs. This document, circled in red, is one of a series of annexes containing instructions and guidance. It provides electricity distribution network operators (DNOs) with the definition of terms used in the reporting pack templates and instructions and guidance. It should therefore be read in conjunction with the relevant annex and reporting pack.

**Figure 1.1: Map of RIIO-ED1 instructions and guidance**



## 2. List of definitions

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### A

#### **Acceptance Date**

- a Customer's acceptance of a Quotation relating to an LVSSA or LVSSB connection within the requisite timescale specified by the electricity distributor in that Quotation, and
- payment of any amount due to be paid to the electricity distributor in accordance with the accepted Quotation on acceptance of the quotation, and
- payment of any reasonable security required by the electricity distributor under section 20(1) of the Electricity Act 1989, and
- written acceptance of any additional terms of connection proposed by the electricity distributor under section 21 of the Electricity Act 1989.

#### **Accounting standards**

The term encompasses Financial Reporting Standards ("FRS") 100, 101, 102 and 103 (known as the new UK GAAP) effective from 1 January 2015 and International Financial Reporting Standards and International Accounting Standards (together "IAS") and the International Financial Reporting Interpretations Committee ("IFRIC") interpretations.

#### **Active Network Management - Dynamic Network Reconfiguration**

As featured in the transform model developed through the smart grids forum, the pro-active movement of network split (or open) points to align with the null loading points within the network in real-time.

#### **Activity Volumes - Inspections**

A measure of the amount of inspection work undertaken by the DNO on its assets. This can include the number of assets inspected or the number of surveys undertaken for example. The total recorded should include multiple inspections of the same asset or site if these have been undertaken.

#### **All other LV (with only LV work)**

Connection projects providing point(s) of connection at LV where the highest voltage of the assets involved in providing the point(s) of connection, and any associated works, is LV and the project does not qualify as a Single Service LV connection nor Small project demand connection (LV).

#### **All voltages**

For distribution activities, means the voltages of LV, HV, EHV and 132kV.

## **Alternatives**

Any non-traditional asset with potential economic value that would not be found in a standard investment portfolio.

## **Anti Theft Security Enhancements**

Security works undertaken at DNO assets to deter future incidences of metal theft.

## **Any Other Ex-Gratia/Goodwill Compensation Payments**

Cash payments to customers who have experienced dissatisfaction but where no formal standard exists in either The Electricity (Standards of Performance) Regulations [date to be confirmed], The Electricity (Connection Standards of performance) Regulations [date to be confirmed], or the Distributed Generation Standards Direction issued under Part C of Standard Condition 15A of the electricity distribution licence. For example, for interruptions of 17h 59min, multiple interruptions falling short of multiple interruption standard etc.

EXCLUDES:

- cash payments to customers who have experienced a financial loss (these are classed as Third Party Claims Paid Out by DNO)
- any payments in respect of employees.

## **Applicant**

'Applicant' takes its definition from the Electricity Act 1989. The terms "applicant" and "Customer" are used interchangeably with regard to reporting on connections.

## **Application Received Date**

The date the Customer indicates that they require a new connection (where this is submitted to the email account, postal address, telephone number, online or any other route published by the DNO for the purposes of receiving requests for connection) and provide information on:

- contact details
- work site location including approximate supply point location(s) (up to four locations)
- number of Domestic Premises or the total required load/capacity to be connected for commercial Premises.

## **Areas of Outstanding Natural Beauty (AONB)**

Has the meaning given to it in CRC 3J (Allowed expenditure on Visual Amenity Projects)).

## **Area of public order concern**

An area with a high risk of crime to which a significant contributory factor may be the lack of street lighting.

## **Asbestos management - Meter positions**

Work to replace DNO cut outs and meter boards where the meter board has been found to contain asbestos (eg, syndanio type).

EXCLUDES:

- any works associated with the roll-out of smart meters (which should be included in Asbestos meter board replacement (SM)).

## **Asbestos management – Surveys and Signage**

Where minor work has been carried out at a substation site for management of asbestos. This includes legal risk assessments of ACMs (Asbestos containing materials) and safety notices on site.

## **Asbestos management – Containment/Removal**

Where work has been carried out at a substation site to either remove asbestos or contain the existing asbestos by encapsulation or treatment.

## **Asset register**

The group of worksheets within the Asset Data and Performance report which shows the total volume of network assets. The annual additions and disposals of network assets under various work drivers are also recorded.

## **Asset Register - Other Movements**

The total asset additions and disposals associated with all activities excluding Connection projects; DPCR4, Connection projects , General Reinforcement and Asset Replacement (of prime assets).

Asset additions and disposals associated with the following activities should be reported as Other Asset Register movements:

- Quality of Service
- High Value Projects
- Severe Weather 1-in-20events
- Excluded Services (excluding demand connections)
- Diversion (non fully rechargeable)
- ESQCR
- Connection projects; DG
- Consequential Asset Replacement
- Visual amenity inside designated areas
- Legal & Safety
- Inspection & Maintenance
- Troublecall
- Worst Served Customers
- Environmental Investment
- Dismantlement of redundant assets
- Assets adopted from ICPs.



## Asset replacement

Asset replacement is an activity undertaken by a DNO to remove an existing asset(s) and install a new asset. The asset replacement activity includes:

- the installation of replacement assets
- the dismantlement of existing assets (at all voltage levels) where the dismantlement is undertaken as part of the asset replacement works.

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

The drivers for asset replacement are predominantly asset condition, obsolescence and safety, but also environmental factors may influence the activity. Where the sole driver of the replacement of an asset is an environmental factor, then the work carried out should be classified as Environmental (eg, the early replacement of fluid filled cables due to fluid leakage). Where the sole driver of the replacement is metal theft, the work should be classified as Metal theft remedial work and not asset replacement.

The undertaking of civil works required to facilitate the asset replacement activity are treated as a standalone activity and are specifically excluded from asset replacement activity. The civil structures that support switchgear are considered to be part of the switchgear.

Asset replacement includes:

- Assets replaced following an assessment of their condition or performance. In particular includes replacement of assets which have faulted in the past (on one or more occasions), been repaired and returned to operation and are subsequently replaced as a planned activity due to an assessment of their condition (not in response to a particular incident having occurred).
- The replacement of switchgear support structures when undertaken as part of works to replace the main plant asset.
- Assets replaced where the primary driver is to improve the ability of a network to withstand severe weather (eg, resilience) such as:
  - Replacement of assets that are otherwise fit for purpose (ie, in good condition or performing adequately) where the intention is to reduce the number of unplanned incidents that would occur as a consequence of a severe weather event.
  - Incremental or extra costs associated with the replacement of existing assets that are planned for replacement on condition assessment or are performing poorly with assets which have a specification that exceeds the nearest MEA. (eg, the nearest MEA for a conventional HV overhead line constructed to BS1320 is a conventional HV overhead line constructed to EATS 43-40. A specification that exceeds the nearest MEA would be an HV overhead line using BLX construction. The incremental cost of replacing a poorly-performing BS 1320 HV overhead line with an HV line constructed using BLX should be treated as resilience).
  - Assets procured as Strategic Spares (ie, items of plant and equipment held specifically to cover emergencies), where the equipment is subject to long delivery lead times or it will not be available in the future and where it is of strategic importance to maintain supplies. Purchase of strategic spares in the year held as stock at the year end.

Note: On table C1, the Asset Replacement column also includes Civils costs driven by Asset Replacement.

## **Associated works**

Any works required in order to provide a connection to the Electricity Distributor's distribution system, including any necessary reinforcement and diversionary works.

## **Atypicals**

[tbc]

## **Atypicals Non Severe Weather (RAV)**

[tbc]

## **Atypicals Non Severe Weather non Distribution**

[tbc]

## **Atypicals Non Severe Weather not RAV**

[tbc]

## **Atypicals - Severe Weather 1-in-20 Events**

[tbc]

## **Average asset lives**

The expected average age at replacement as experienced by the DNO for the asset population (this is the mean value of the asset age replacement profile of the particular asset).

## **B**

## **Balancing & Settlement Code (BSC)**

The current Balancing & Settlement Code as published on Elexon's website.

## **Baseline scenario**

The activity that would have been undertaken had the management of distribution losses not been a consideration in the decision to undertake the activity.

## **Basic meter asset provision**

The service of providing Legacy Metering Equipment, which includes the provision of Metering Equipment (which, at the licensee's own choice, may be Metering Equipment owned by itself or by any person other than the person making the application to the licensee under paragraph 34.4 of Standard Condition 34 of the electricity distribution licence) in respect of premises at which such equipment had been installed on or before 31 March 2007 and is of the same functionality as was being provided by the licensee at 1 June 2003.

## **Batteries at GM HV Substations**

A re-chargeable battery, together with its associated charger, comprising a number of individual cells which is used to provide power to operate switchgear and protective equipment at a HV Ground Mounted Distribution Substation.

## **Batteries at 33 kV Substations**

A re-chargeable battery, together with its associated charger, comprising a number of individual cells which is used to provide power to operate switchgear and protective equipment at a substation whose highest voltage of operation is 33kV.

## **Batteries at 66 kV Substations**

A re-chargeable battery, together with its associated charger, comprising a number of individual cells which is used to provide power to operate switchgear and protective equipment at a substation whose highest voltage of operation is 66kV.

## **Batteries at 132 kV Substations**

A re-chargeable battery, together with its associated charger, comprising a number of individual cells which is used to provide power to operate switchgear and protective equipment at a substation whose highest voltage of operation is 132kV.

## **Biomass & energy crops (not CHP)**

A category of DG. Electricity generation from burning biomass and energy crops, but not including combined heat and energy plants and not including generation from burning waste.

## **Black Start**

The series of actions necessary to restore electricity supplies to customers following a total or widespread partial shutdown of the GB Transmission System. Black Start requires distribution substations to be re-energised and reconnected to each other in a controlled way to re-establish a fully interconnected system.

Black Start expenditure is associated with initiatives to improve the resilience of both the distribution network assets and the key telecommunications systems, essential to DNOs for the organisation and coordination of resources, to achieve Black Start Resilience.

## **Black Start Resilience (BSR)**

Resilience of both the distribution network assets and the key telecommunications systems, essential to DNOs for the organisation and coordination of resources, to a prolonged loss of supply in order to implement restoration plans under Black Start conditions. The required level of resilience shall meet the 72 hour recovery recommendations of the Electricity Task Group sub-committee of the Energy Emergency Executive Committee (E3C).

## **Black Start Resilience (BSR) - DC disconnection schemes**

[tbc]

## **Black Start Resilience (BSR) - Land lines & Internal Telephony**

Expenditure on the establishment of Black Start Resilience for:

- telephone land lines to key strategic sites, such as Control Centres and Customer Call Centres, but excluding substation premises
- the DNOs existing internal telephony systems.

## **Black Start Resilience (BSR) - Mobile Voice Communications**

Expenditure on the establishment of Black Start Resilience of the DNOs existing mobile voice communication systems that would be utilised for the coordination of field staff during Black Start recovery. . This excludes systems that are dependent on terrestrial cellular phone networks or public PSTN networks.

## **Black Start Resilience (BSR) - Protection Batteries**

Expenditure on the establishment of Black Start Resilience for battery supplies at substations used for power system protection or tripping of switchgear.

## **Black Start Resilience (BSR) - SCADA Batteries**

Expenditure on the establishment of Black Start Resilience of SCADA battery supplies at substations.

## **Black Start Resilience (BSR) - Securing of Existing Telecommunications Infrastructure**

The establishment of Black Start Resilience for the DNOs existing telecommunications systems that are necessary for the implementation of Black Start recovery.

## **Black Start Resilience (BSR) - Single phase generator**

[tbc]

## **Black Start Resilience (BSR) - Three phase generator**

[tbc]

## **BT 21st Century (BT21CN)**

The roll out of BT's next generation communications network which replaces Public Switched Telephone Network (PSTN) with a Digital Internet Protocol (IP). Whilst effectively changing the communications protocol used on the existing network assets, it also accelerates the replacement of copper communications circuits with non-metallic optical fibre.

## **Budget Estimate**

For the purposes of the Connections RIGs, a statement in writing, which may be produced by a desktop exercise not involving a site visit or system studies, and is an estimate of the likely costs of providing a connection at the time of enquiry, such that it may be used, for example, to determine an indication of costs or to inform the

viability of a project. A Budget Estimate cannot be accepted and is not contractually binding.

## **Building**

A walled construction, from brick, block or concrete, which encapsulates the contents. This excludes GRP and steel enclosures.

Scope of work includes any civil works to a building that are required to enable plant asset replacement, for example:

- complete building replacement
- building extensions
- modifications to building doors or roofs to accommodate installation of plant
- plinth and trenching works within the building
- building foundation works.

## **Buildings - Electricity**

BCF emissions attributed to electricity usage in a DNO's buildings (excluding substation buildings).

## **Buildings energy usage**

A category of BCF reporting which captures carbon emissions attributed to electricity usage in a DNO's premises, including (but not limited to) all offices, workshops, stores, and substation buildings and any other structure where the DNO has authority to introduce and implement its operating policy. This reporting category also includes all building related fuel combustion (natural gas, diesel and other fuels).

## **Buildings - Other Fuels**

BCF emissions attributed to the use of all fuels except electricity in a DNO's buildings (excluding substation buildings).

## **Business Carbon Footprint (BCF)**

A measure of the total greenhouse gas emissions (in tonnes of CO2 equivalent) resulting from operations on which the DNO has full authority to introduce and implement its operating policy and contractors emissions.

## **Business Rates**

Has the meaning given to it in CRC 2B (Calculation of Allowed Pass-Through Items). Also known as Cumulo or network rates.

## **Business Support Costs**

Collectively includes the Activities of:

- Core Business Support which comprises:
  - HR and Non-Operational Training
  - Finance & Regulation
  - CEO etc
- IT & Telecoms

- Property Management.

## **Business transport**

Business Transport is a category of BCF reporting arising from travel undertaken by staff travelling to locations that are other than their normal place of work or moving between sites for purposes such as meetings.

## **C**

### **Cable**

An underground conductor used to distribute electrical power, typically buried directly in the ground or installed in ducts or troughs. This excludes underereaves or mural wiring.

### **Cable Bridge**

An above-ground structure which carries power cables and/or pilot cables external to substation sites. Includes access, security, fire protection, purpose-built free-standing structures and structures attached to or part of third party assets eg, road and rail bridges.

### **Cable Bridge - Inspections**

The inspection of cable bridges (all voltages) including fixtures and fittings and associated plant eg, access arrangements and lighting etc. This includes safety & security and condition/structural surveys.

### **Cable overlays**

An alternative expression for the replacement of an existing underground cable with a new underground cable. The activity includes the installation of the new underground cable, the full decommissioning of the existing underground cable, any necessary underground cable jointing and any associated network operations.

### **Cable Pit**

Work carried out on cable pits (below-ground structures) that allow access to the underground cable network where the primary driver is compliance with legal & safety requirements.

### **Cable Tunnel**

A tunnel (accessible by personnel) either underground or contained within an existing structure, containing power cables and/or pilot cables external to substation sites. Includes access, security, drainage, lighting, ventilation, fire protection, communications, structural integrity.

### **Cable Tunnel - Inspections**

The inspection of cable tunnels (all voltages) including fixtures and fittings and associated plant eg, sump pumps, lighting etc. This includes safety and security and conditional/structural surveys.

## Call Centre

- Managing the main incoming telephone lines used by customers.
- Making the initial response by Call Centre staff to all reports or enquiries.
- Providing subsequent responses by Call Centre staff after additional information has been provided by another part of the business. Any tasks undertaken by another part of the business to provide additional information is not part of the Call Centre activity.
- Maintaining subsequent contact by Call Centre staff with customers through the "No Supply" process.
- Handling and processing Guaranteed Standards of Performance Compensation Payments, Ex-Gratia Compensation Payments and ombudsman payments.

### INCLUDES:

- answering power loss calls, tweets and website fault reporting notifications
- facilitating the reporting of distribution network faults and safety hazards and complaints about the quality and reliability of supply
- responding to queries, for example from retailers, customers, builders and contractors, on new connections, disconnections and reconnections
- responding to queries, for example from customers, builders and contractors
- responding to initial queries on metering
- metering call centre for suppliers, customers and agents
- primary recording of reports or queries and, where appropriate, reporting the information to the appropriate business operation
- handling and processing Guaranteed Standards of Performance Compensation Payments, Ex-Gratia Compensation Payments and ombudsman payments, but not other claims
- for any other customer complaints, handling the initial enquiry and passing on to the relevant department.

### EXCLUDES:

- IT and property costs associated with Call Centre
- handling, processing and administering insurance claims or making associated payments (see definition of Insurance)
- handling, processing and administering claims by the DNO against third parties insurance claims or making associated payments (see definition of Insurance)
- handling, processing and administering customer compensation claims or making associated payments other than those specified above (included under Insurance)
- the cost of any form of payments to customers.

## Capacity released

The net impact of a reinforcement intervention (including alternatives to traditional reinforcement) on the peak demand in the year in which it is enacted.

## Capital Expenditure

This includes all costs associated with the following activities of groups of activities:

- Load related expenditure (see definition)
- Non-load capex (excluding non-op capex) comprising (see definition)
- High Value projects

- Standalone funding (RAV)
- Standalone funding (not RAV).

## Carbon Emission

The release of carbon into the atmosphere; when considering carbon emissions greenhouse gas emissions are often also being taken into account. Within the BCF GHG emissions eg, SF6 emissions, are calculated as equivalent carbon dioxide emissions.

## Carbon Reduction Commitment Scheme

The government scheme which was established to incentivise companies to reduce their energy usage and therefore their carbon emissions. The costs incurred by DNOs each year relate to the purchase of carbon allowances equivalent to the amount of carbon emitted as a result of business energy use.

## Cash Basis

All costs incurred and paid in cash or normally paid in cash, subject to short timing differences, as part of the ordinary level of business.

### INCLUDES:

- all accruals and prepayments that are incurred as part of ordinary level of business activities, these include holiday pay provisions, normal trade accruals and prepayments, and which are expected to be paid within the entities standard terms of business
- exceptional events that do not meet the Severe Weather 1-in-20 event definition
- the cost of assets acquired under a finance lease excluding finance interest
- cash payments for the utilisation of a provision.

### EXCLUDES:

- all provisions (as defined by CA2006 and accounting standards) whether incurred as part of ordinary level of business activities or otherwise
- the cost or transfer value of assets acquired from a related party which have been previously used in or by the distribution business
- all accruals and prepayments that relate to atypical events
- atypical cash costs.

## CEO etc

Combines the activities of:

- Non-executive & group directors labour & Board meeting costs
- Management charges from Affiliates of a general non-specific nature
- Corporate communications/Community Awareness
- Legal services
- Company secretarial services.

### INCLUDES:

- **Non-executive & group directors labour costs & Board meeting costs**
  - the labour and any other costs of the CEO
  - the labour and any other costs of non-executive directors of the DNO



- the charges for senior group management and group directors not directly attributable to a specific activity
- the costs of hosting and attending board meetings
- where a board member provides a service to the DNO under any of the other activities (eg, Finance Director of DNO is also board member), the labour costs for that board member attending board meetings should be allocated here and the remainder of his or her labour should be allocated to his or her usual activity.
- **Management charges from Affiliates of a general non-specific nature**
  - management charges from a parent or related undertaking not for a specific purpose or defined activity.
- **Provision of corporate communications/Community Awareness**
  - the provision of shareholder communications, and any meetings of shareholders of the company, or of any controlling undertaking
  - corporate communications
  - brand advertising, including corporate image-making and notifying the public about telephone contact numbers
  - customer satisfaction and similar surveys
  - branding or rebranding of vehicles or buildings
  - PR and general promotional activities
  - sponsorship and donations.
- **Provision of legal services**
  - all legal services, whether in-house or external, excluding those relating to wayleaves/servitudes/easements.
- **Provision of company secretarial services.**
- **External entertaining.**

**EXCLUDES:**

- Insurance management (include Insurance Total)
- Legal advice relating to wayleaves/servitudes/easements (include under wayleaves/servitudes/easements).

## **CI - Customers interrupted per year**

The number of customers interrupted per year (CI) – the number of customers whose supplies have been interrupted per 100 customers per year over all incidents, where an interruption of supply lasts for three minutes or longer, excluding re-interruptions to the supply of customers previously interrupted during the same incident (see below for further details). It is calculated as:

$$\frac{\text{The sum of the number of customers interrupted for all incidents} \times 100}{\text{The total number of customers}}$$

## **Circuit breaker**

Device capable of making, carrying and breaking currents under normal circuit operation and also making, carrying for a specified time and breaking, fault current. Also includes auto-reclosers. It does not include any circuit breakers that form part of an RMU.

## **Circuit reinforcement**

Reinforcement relating to addressing a constraint on a circuit.

## **Civil Works**

Civil engineering work associated with DNO network assets, including buildings and site works at substations.

### **Civil Works At 33kV & 66kV Substation**

Civils works at a substation where the highest voltage of operation is either 33 kV or 66 kV.

### **Civil Works At 132kV Substation**

Civils works at a substation where the highest voltage of operation is 132 kV.

### **Civil Works Driven By Condition Of Civil Items**

Civil works undertaken to replace the civils item primarily due to the condition of the civil item itself.

The reporting of Civil Works Driven By Condition Of Civil Items uses categorisations based upon the voltage of the site where the works are undertaken, which shall be taken to be the highest voltage of operation of DNO network assets used at the site.

### **Civil Works Driven By Plant Asset Replacement**

Civil works undertaken to replace or modify existing civils items primarily required to facilitate, or enable, the replacement of plant assets. Excludes works on civil structures in outdoor compounds, the costs of which are reported as part of Asset Replacement for the relevant plant asset being replaced.

The reporting of Civil Works Driven By Plant Asset Condition uses categorisations based upon the operating voltage of the replacement plant assets with which it is associated.

### **Clerical Support – see Engineering Management and Clerical Support**

## **Clock stopping**

Clock stopped is defined as the ability, in circumstances as described in the Interruptions RIGs, to legitimately stop the count of the number of minutes that customers are off supply even though supply has not been restored.

### **Closely Associated Indirects**

Collectively includes the activities of:

- Core CAIs - Network Design and Engineering, Network Policy, Project Management, Engineering Management and Clerical Support, System Mapping
- Wayleaves
- Call & Control Centres
- Stores
- Operational Training
- Vehicles and Transport.

## **CML - Duration of interruptions to supply per year**

The duration of interruptions to supply per year (CML) - average customer minutes lost per customer per year, where an interruption of supply to customer(s) lasts for three minutes or longer, calculated as:

$$\frac{\text{The sum of the customer minutes lost for all restoration stages for all incidents}}{\text{The total number of customers}}$$

## **CNI (Critical National Infrastructure)**

Critical National Infrastructure (CNI) refers to sites designated as CNI by DECC, and includes [all](#) associated costs of complying with DECC requirements.

## **Common Connection Charging Document**

The Common Document comprises a DNO's Connection Charging Methodology, Connection Charging Statement and other information relevant to connecting Customers. The DNOs have each separately proposed to adopt a version of the Common Connection Charging Document.

## **Communications for switching & monitoring**

IT and/or communications systems and equipment which are used exclusively in the real time management of network assets, but which do not form part of those network assets.

This includes communication solely for the purpose of switching (SCADA, antenna, pacnet etc.) and communication equipment receivers at the control centre.

This excludes auxiliary cables that form part of a pilot cable or are integral with/supported from a main.

## **Complaint**

Has the meaning given to it in CRC 2C (Broad Measure of Customer Service Adjustment).

## **Completion Date**

For the purposes of connections reporting, the financial completion of a project and is the latter of the following:

- energisation of the cut-out
- all cost transactions completed
- all invoices have been raised.

## **Conductor replacement**

Removal of existing conductors and installation of new conductors. The driver for this replacement may be due to poor asset condition, obsolescence or for safety reasons.

## **Congestion charges**

Charges paid under congestion charge schemes (such as that operated by TfL in London) for the carrying out of street works and other operational activities covered by DUoS charges.

## **Connected for**

Within the detailed Unmetered Connections sheets (CR3 and CR6 of the Connections Reporting Pack), this column should be completed with either:

- name of Local Authority, if a Local authority connection
- name of PFI agent if a PFI connection
- company funding other connection (eg, BT).

## **Connected MPANs/points of connection provided as part of a Connection Project which has an element subject to the apportionment rules**

MPANs/points of connection connected as part of a Connection Project which involves some element of the work funded via the apportionment rules

## **Connected MPANs/points of connection provided as part of a Connection Project which has no element subject to the apportionment rules**

MPANs/points of connection connected as part of a Connection Project which is fully funded by the connecting customer due to none of the work being funded via the apportionment rules.

## **Connecting party**

The customer or representative/agent of the customer for which a connection project is being provided.

## **Connection**

Within the connections reporting pack for RIIO-ED1, the term 'connection' refers to the provision or upgrading of individual MPANs, points of connection for independent networks, ICPs or unmetered connections to end customers. All provisions of new MPANs/points of connection or upgrades of existing MPANs/points of connection must be referred to as connections within the annual reporting for connections. The provision of each of these 'connections' must be delivered via a connections project, which refers to each project covered by a connection quotation offered to a customer. It is the scope of work within a particular connections project that determines which market segment it is classified as belonging to.

## **Connection projects**

Metered Connection Projects where a quotation was offered to the connecting party after the required systems and processes were in place to provide the level of project specific detail required for a RIIO-ED1 project

## **Connection projects completed within year**

Connection projects that are financially closed within the reporting year.

### **Connection projects - direct costs**

The direct costs associated with completed "Connection projects", ie not in-year costs, the full costs across all years of the projects that have financially closed within the year in question.

### **Connection projects; DG**

Any connection project that connects a post 2005 DG and does not require an electrical supply, or where electrical supply is completely subject to the connection of the DG export.

### **Connection projects; DG (DPCR4)**

Any "Connection projects; DG" on which expenditure was incurred by the DNO prior to 1 April 2010.

### **Connection projects; DPCR4**

Metered connection projects where a quotation was offered to the connecting party before the required systems and processes were in place to provide the level of project specific detail required for a DPCR5 project. "Before the required systems and processes are in place" refers to before the earlier of:

- the introduction of the new connection guaranteed standards on 1 October 2010, or
- the date on which the DNO started charging a regulated margin under their regulated margin notice.

## **Connection projects not completed within year**

Any Connection projects that are not financially closed within the reporting year.

### **Connection projects UMC**

Connection projects that do not involve any metered exit points, or ICP/IDNO POCs.

## **Connections Guaranteed Standards of Performance Compensation Payments**

Payments to customers made under The Electricity (Connection Standards of Performance) Regulations [date to be confirmed].

### **Connection/Customer type**

Within the Connections Reporting pack all connection jobs should be categorised into one of the market segments as explained within the guidance.

## **Connection work in year**

Activity undertaken and costs incurred as part of a Connection Project within the reporting year.

## **Consac**

A type of cable with paper insulation and aluminium sheathing, used for distribution of electricity at low voltage.

## **Consequential assets**

Assets which are replaced along with and to facilitate the replacement of a prime asset. See also the definition for asset replacement.

## **Consumer complaint**

A complaint, other than a network outage report, which is made against a regulated provider either (a) by a person in that person's capacity as a relevant consumer in relation to that regulated provider; or (b) by a person acting on behalf of such a relevant consumer.

## **Contaminated Land**

Land that is contaminated due to containing substances in or under the land that are actually or potentially hazardous to health or the environment.

## **Contaminated Land Clean Up**

The activity of cleaning up or other risk mitigation works associated with contaminated land including initial risk assessments.

## **Contestable**

Contestable refers to contestable connections work; work that can be carried out by a non-affiliated third party with relevant accreditation.

## **Contingent Pension Asset Costs**

The cost incurred by sponsor(s) of a defined benefit pension scheme in providing a contingent asset to support pension scheme technical provisions or a recovery plan. These costs should only include costs paid by the licensee and other pension scheme co-sponsors.

## **Contractors**

An organisation that contracts with the DNO for the provision of services.

### **INCLUDES:**

- Professional Services - services provided on a consultancy basis, typically items such as legal services, audit fees, taxation services.
- Subcontractor - an organisation that performs part or all of the obligations of another's contract.

### **EXCLUDES:**

- charges for materials provided by the contractor where the cost of such materials has been separately identified by the contractor (include in Materials)
- ex principal related party services provider (costs should be reported as if company remains a related party).

## **Contractors - Direct including embedded Indirect services**

For those contracts which include embedded indirect activities: the cost of direct contractors less estimated material costs.

## **Contractors - Direct Materials**

An estimation of the cost of materials reported as part of contractors in the direct tables, as not separately identified by contractor billings.

## **Contractors - Direct Only**

Direct contractor costs which do not contain materials or embedded indirect costs (other than own transport).

## **Contractor types**

### **Type 1**

Contractor works effectively as an extension to DNO's direct labour force.

The DNO would undertake:

- All network design
- Engineering design
- Project management
- Resource scheduling
- Engineering management
- Procurement of majority of "materials" used by contractors.

The "indirect costs" embedded in the contractors costs (and reported as direct activities within RRP and FBPQ) would predominantly be:

- Vehicle and transport costs
- Supervisory costs associated with running direct labour organisation
- Business Support indirect costs that can be expected of any company eg, Finance, HR etc.

### **Type 2**

Contractor works effectively as an extension to DNO's direct labour force and undertakes some indirect activities.

It is likely that there is no single definition to this type of contractor, as this type of contractor is intended to be the "catch all" between Type 1 and Types 3/4.

The nature of the work undertaken by such contractors could include:

- Overhead line work, when the contractor, in addition to the direct activity would also typically undertake the following indirect activities:
  - resource scheduling
  - procurement of some of the materials used
  - vehicle and transport

- supervisory costs associated with running direct
  - labour organisation.
- Provision of new connections; when the contractor in addition to the direct activity would also typically undertake the following indirect activities:
  - resource scheduling
  - minor engineering design in compliance with DNO prescribed standards
  - vehicle and transport
  - supervisory costs associated with running direct labour organisation.

In all cases the contractor costs would include Business Support indirect costs that can be expected of any company eg, Finance, HR etc.

All contractors' costs would be reported as direct activities within the cost tables.

### **Type 3**

The contractor works effectively as an extension to both the DNO's direct labour and indirect labour force.

Contractor undertakes significant amount of "indirect" activities for DNO as part of their delivery of direct activities. The total contractors' costs would be reported as direct activities within the cost tables. The indirect activities undertaken by the contractor could include:

- Network design
- Engineering design
- Project management
- Resource scheduling
- Engineering management
- Procurement of materials used by contractors
- Vehicle and transport costs
- Supervisory costs associated with running direct labour organisation
- Business Support indirect costs that can be expected of any company eg, Finance, HR etc.

### **Type 4**

This type of contractor operates in the same way as Type 3. However, the DNO & contractor have an open book arrangement such that:

- the indirect activity costs embedded in the contractors overall costs are revealed
- the DNO reports the "indirect activity costs embedded in the contractors overall costs" and indirect activities in cost tables.

For type 4 contractors describe the levels of "indirect" costs that remain within directs, not the amount already unwound.

## **Control & Call Centre**

This combines the activities of Control Centre and Call Centre. These items are explained separately in this glossary.

### **Control Centre**

The Control Centre activity relates to:

- Operational management and control of the network



- Outage planning and management.

#### INCLUDES:

- Approval of planned incident proposals and switching schedules submitted by either DNO's own staff or related parties' staff.
- Liaison with transmission companies in order to agree and prepare planned incidents that affect the transmission/DNO interface.
- Real time control and monitoring including:
  - Instructing and controlling the execution of network switching, adjusting of protection relays, issuing of safety documentation associated with both planned and unplanned incidents
  - Instructing and undertaking the remote control operation of switchgear during both planned and unplanned incidents
  - Dressing the network control diagram in line with network switching etc. Undertaken during both planned and unplanned incidents
  - Updating the network control diagram in respect of sustained changes to the network
  - Prioritising incidents, including managing resource in terms of the appropriate response to HV and EHV unplanned incidents, ensuring appropriate decisions are taken regarding network response and customer service drivers
  - Completion of fault reports and entry into fault recording systems (eg NAFIRS)
  - Updating IT systems with information from site.
- Dispatch, which relates to the activity of dispatching resources in response to Troublecall (both supply related and safety related incidents) and includes:
  - Interrogation of information systems to determine most appropriate resource to dispatch
  - Dispatching resources
  - Calling customers back with appropriate information regarding unplanned incident
  - Updating messaging systems
  - Completion of fault reports and entry into fault recording systems (eg NAFIRS) for LV incidents
  - Maintaining an up-to-date, real time information log for unplanned incidents in Troublecall
  - Creation of unplanned incidents in the Troublecall system and reporting of these incidents into the fault recording system (eg, NAFIRS).
- Major incidents and emergency planning:
  - Relates to the liaison with National and Regional Emergency planning committees in respect of network operations, security of supply, civil contingency, business recovery, servicing local resilience forums and preparing for/participating in exercise scenarios both internal and external to the DNO.

#### EXCLUDES:

- raising and sending NRSWA notices in respect of unplanned incidents (include in Engineering Management and Clerical Support)
- completing, where appropriate environmental notifications (include in Engineering Management and Clerical Support)
- raising of service orders (include in Engineering Management & Clerical Support)
- processing Guaranteed Standard failures and associated payments (include in Call Centre (including compensation claims) activity)

- customer call taking at any time of day
- IT and property costs associated with the Control Centre.

## **Control centre hardware and software**

IT systems and equipment which are used exclusively by the Control Centre for the real time management of network assets, but which does not form part of those network assets.

## **Conventional Solution**

A Conventional Solution is any work, activity, asset or other solution other than those listed in the Innovative Solutions worksheet.

## **Conversion of Wayleaves to Easements**

The activity involved in retaining assets in place through purchasing easements, land or agreeing other consents in response to the potential cancellation of terminable arrangements (for example in response to injurious affection claims) or upon expiry of termed agreements. Volumes should be reported once the new agreement is established.

## **Core CAI**

This combines the activities of: Network Design and Engineering, Network Policy, Project Management, Engineering Management and Clerical Support, System Mapping. These items are explained separately in the glossary.

## **Cost App Future Comer - Original Job id**

The unique job reference must be entered for instances where a particular project involves a future comer funding a rebate to either the original customer or DNO (or both).

## **Cost App Future Comer - Rebate to DNO**

Part of the connection quotation that relates to a value assigned to cover a rebate to the DNO where the connection involves the utilisation of capacity of assets installed as part of a new connections project completed within the previous 5 years. The value entered must equate to a relevant proportion of the DUoS funded cost of the installation of the original asset under the apportionment rule.

## **Cost App Future Comer - Rebate to initial connectee**

Part of the connect charge that relates to a value assigned to cover a customer-to-customer rebate where the connection involves the utilisation of capacity of assets installed as part of a new connections project completed within the previous 5 years. The value entered must equate to a relevant proportion of the customer funded cost of the installation of the original asset under the apportionment rule.

## **Cost of Items Sold**

The gross cost before charging depreciation recorded as a fixed asset prior to sale/disposal of specific asset.

## **Cost of scheme (£m)**

The cost of a scheme (project or programme) excluding any allocation of Indirect costs or Non-Operational Capex and gross of any income (including capital contributions).

## **Cost per unit p/MWh**

Is the cost in £ per MWh of electricity consumed at a DNO's substations.

## **Cost Recoveries**

The recovery of costs, relating to activities.

INCLUDES:

- Insurance claim receipts
- Government funding for training schemes (In Operational and Non-Operational Training)
- Cable damage recovery payment
- Recovery of design costs for quotations where the payee does not proceed with the connection.

EXCLUDES:

- Any income received primarily for other activities where a proportion of the income relates to the recovery of the costs of Indirect Activities or Non-Operational Capex (eg, capital contributions relating to connections).

## **Costs charged to DNO**

In relation to the Calculation of Allowed Related Party Margin, this means the costs of the related party that have been charged to the DNO for which the worksheets have been completed.

## **Costs charged to external customers**

In relation to the Calculation of Allowed Related Party Margin, this means the costs of the related party that have been charged to external customers.

## **Costs charged to other related parties**

In relation to the Calculation of Allowed Related Party Margin, this means the costs of the related party that have been charged to its related parties excluding the DNO for whom the RIGs Reporting Packs have been completed and other related DNOs.

## **Costs charged to related DNO(s)**

In relation to the Calculation of Allowed Related Party Margin, this means the costs of the related party that have been charged to related party DNO(s) excluding the DNO for whom the RIGs Reporting Packs have been completed.

## **Cost type**

The categorisation of the type of costs incurred by the DNOs consisting of:

- Labour

- Pensions
- Contractors
- Materials
- Wayleaves (including easements/servitudes)
- Road Charges
- Other (includes Rent and Subscriptions)
- Related Party Margins
- Cost recoveries
- Customer contributions.

## **Craftsperson**

Craftsperson employed by DNO or related party to undertake craft or mate roles such as linesman, jointer, fitter and mates.

Includes people employed to undertake the following activities:

- Conduct routine overhead line activities such as condition assessment, fault repair, maintenance, quality assurance, refurbishment and dismantlement in line with approved, safe and environmental standards.
- Carry out complex, non routine activities such as fault investigation, whilst also controlling and directing resources. Undertake routine cable jointing activities such as repair, replacement and termination to approved, safe and environmental standards.
- Provide onsite support under direct supervision, to craft activities in line with approved, safe and environmental standards.
- Carry out complex, non routine activities such as fault investigation, whilst also controlling and directing resources. Undertake routine substation activities such as installation, maintenance, inspection and repair of plant and apparatus to maintain the asset to approved, safe and environmental standards.
- Undertake routine installation, removal, replacement and commissioning of metering equipment to approved, safe and environmental standards.

Includes persons in the following standard occupation classification codes: [to be completed]

Excludes any craftsperson employed by third parties.

## **Critical customers**

Connected customers that provide a vital service to the community, where the loss of supply to these sites is likely to lead to mass evacuation. For example:

- sewage works
- water treatment plant.

## **CT600**

The annual corporation tax return form that an entity makes to HM Revenue & Customs.

## **Currency overlay**

Where currency risk management is outsourced to a specialist firm.

## Currency Swaps

A currency swap is an agreement to exchange the principal and/or interest payments of a loan in one currency for equivalent aspects of an equal (in net present value) loan in another currency.

## Customer

For the purposes of, CRC 2D (Adjustment of licensee's revenues to reflect interruptions-related quality of service performance) and the Interruptions Reporting Pack only, customer means in relation to any energised or de-energised entry or exit point to the DNO's distribution system, where metering equipment is used for the purpose of calculating charges for electricity consumption, the person who is providing or is deemed to be providing a supply of electricity through that entry point, or the person who is taking or is deemed to be taking a supply of electricity through that exit point. Customers should be identified from Metering Point Administration Numbers (MPANs)<sup>1</sup>, such that an individual customer is identified at each connection point.

Except for the purposes of interruptions reporting (under CRC 2D), customer means any person who is supplied or requires to be supplied with electricity at any premises in Great Britain, but does not include any Authorised Electricity Operator in its capacity as such. In the case of unmetered connection this person is the Relevant Authority with responsibility for street lighting or street furniture.

The terms "applicant" and "customer" are used interchangeably in relation to reporting on connections.

## Customer contributions

The income, including normal accruals (ie, matching income and cost), for an activity.

INCLUDES:

- Customer Contributions received by the DNO or related parties in respect of the provision of a new connection
- any pre-1 April 2005 Tariff Support Allowance which is held on the balance sheet as being potentially refundable contributions held at 31 March 2005 which are subsequently released should be reported as customer contributions under Connections or Reinforcement at the time of the release.

## Cut Out

A cut out assembly is defined in BS 7657: 2010 as a combination of fuse-link(s), neutral terminal(s), earth terminal(s), combined neutral and earth terminal(s),

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<sup>1</sup>The Master Registration Agreement (MRA) is an agreement that sets out, amongst other things, the terms for metering point administration services and the requirements for the change of supplier process. Schedule 5 of the MRA sets out the form in which a supplier is obliged to print the supply number (attributed to a metering point) on a customer's bill. Within the industry the supply number is known as the metering point administration number (MPAN).

ancillary terminal block(s), connecting units and anti-tamper facilities, as applicable, so as to provide facilities for terminating service cables and a means of protection, isolation, and earthing of electricity supplies to buildings. Outside of the RIGs cut outs are sometimes referred to as "service terminations".

### **Cut Out (Metered)**

A cut out which is associated with a metered LV service connection.

### **D**

### **Damage fault rates**

A damage fault rate is the incidence (per unit) of faults (ie, unplanned incident where it is necessary to effect the repair of equipment) for a specific category of distribution assets.

### **Damage incident**

A damage incident is defined as any unplanned incident where it is necessary to affect the repair of equipment. For example, the changing of a damaged insulator is considered to be a repair.

### **Data cleansing**

Data cleansing is the activity of detecting and correcting missing or inaccurate records.

### **Data Services (MPAS and data transfer)**

Has the meaning given to it in Standard Condition 1 of the electricity distribution licence.

### **Deadlock letters**

A final response (by post or email) from the DNO to the customer in which the position of the DNO is different from that of the customer.

### **Debt - see Net Debt**

### **Debt cap disallowance**

Where the aggregate net debt of the relevant group company exceeds 75% of the worldwide gross debt of the group then the Worldwide Debt Cap is applicable. If the calculated net finance expense exceeds the tested expense amount (as per HMRC rules) then the excess is disallowed as a deduction for tax purposes.

### **Deferred revenue expenditure**

Expenditure in the current accounting period for which benefits only crystallise in future accounting periods eg, work-in-progress. This expenditure is recorded in the non-current assets of the statement of financial position.

## **Defined Benefit pension scheme (DB)**

A pension scheme where the benefits accrue to members independently of the contributions payable and not directly related to the investment in the scheme. These are normally based on a set formula taking into account the final salary and accrual of service in the scheme. It is also known as a final salary pension scheme.

## **Defined Contribution pension scheme (DC)**

A pension scheme where the benefits that accrue to members are based on the level of cash contributions made to an individual account and the investment returns thereon. These are used to provide a cash amount to purchase an annuity on retirement.

## **Demand Connection**

A new or modified connection (excluding any modification comprising only an alteration as a result of an alteration to the position of the meter) the purpose of which is to enable the premises to receive a supply of electricity from an Electricity Distributor's distribution system.

## **Demand driver**

One or more of the causes identified for increasing (or decreasing) demand on the network. Usually associated with new network connections, industry closures or increased load requests.

## **Demand forecasting**

For the purposes of the IT and Telecoms Systems Overview worksheet of the Cost and Volumes Reporting Pack, are IT systems that assist with the activity undertaken to predict the future demand on an electricity network due to changing supply and demand metrics.

## **Demand group**

A Demand Group is an individual substation or group of interconnected substations for which the DNO is required to provide Load Index information.

## **Demand side management payments**

Includes payments made to customers to manage or reduce their maximum demand on the network at certain times. See Expenditure on DSM to avoid general reinforcement.

## **De minimis business**

Has the meaning given to it in Standard Condition 1 of the electricity distribution licence.

## **Depreciation (non activity based costs table)**

The cumulative depreciation charged against fixed assets at point of sale/disposal of specific asset.

## **Derogation**

A derogation is either a complete or partial revocation of a DNO's licence requirement that can be granted by the Authority subject to such conditions and for such periods as the Authority may consider appropriate.

## **Designated Areas**

Areas in which Visual Amenity Projects may be undertaken, according to the relevant definitions in CRC 3J (Allowed expenditure on Visual Amenity Projects).

## **DG – see Distributed Generation**

## **DG connection at LV involving LV assets only**

A low-voltage DG connection where the highest voltage of the assets involved in providing such connection, and any associated works, is low voltage.

## **DG connection at any voltage that includes assets of HV and above**

A DG connection where the highest voltage involved in providing such connection, or associated works, is HV, EHV or 132 kV.

## **DG Network Unavailability (MWh)**

The energy in MWh that could not be produced by Distributed Generation due to restrictions imposed by the Distribution Network.

## **DG Network Unavailability Rebate Payments**

Payments made to Generator Customers (HV & above) due to a failure of Distribution Network. Failure payments made to LV Generator Customers are reported under Guaranteed Standards of Performance Compensation Payments.

## **DG Standards Direction payments**

Payments to customers made under the Distributed Generation Standards Direction issued under Part C of Standard Condition 15A of the electricity distribution licence.

## **DG Voltage Level**

The voltage level at the point of metering the DG, and is classified as LV, HV, EHV or 132kV.

## **Direct Activities**

Those activities which involve physical contact with system assets.

INCLUDES:

- Labour cost of staff whose work involves physical contact with system assets. This can include the element of labour costs associated with trench excavation staff, craftsmen, technicians, technical engineers,



administration and support staff, network planners and designers where a portion of their time involves physical contact with system assets, however only that portion spent on direct activities may be included. It will include idle, sick, non-operational training and other downtime of staff, which cost should follow their normal time allocations.

- Operational engineers working on commissioning of assets, physically changing protection settings, issuing safety documentation or liaising with the control centre are considered direct activities.
- The cost of contractors being the total charges invoiced by external contractors for the primary purpose of performing direct activities.
- The cost of materials drawn from stores or purchased and delivered directly to site for use in performing direct activities. In addition, this includes the cost of small tools and consumables; and the materials (stores issues) for refurbishing system assets.
- Servitude and easement payments to enable the direct activity to be performed. This does not include the cost of management or administration of these.
- Related Party Margins charged by a related party for work performed on direct activities. In addition, includes, for the purposes of flooding, site surveys and non site based costs.

## **Direct Expenditure**

Expenditure incurred undertaking Direct Activities.

## **Directly Attributable Costs**

Has the meaning given to it in CRC 5A (The Network Innovation Competition).

## **Directly remunerated services**

Has the meaning given to it in CRC 1B (Interpretation of Part 4).

## **Directly remunerated services (exc connections)**

Costs incurred in the directly remunerated services categories DRS2 to DRS9.

## **Disallowed Expenditure (LCN Fund)**

Has the meaning given to it in CRC 2J (Low Carbon Networks Fund).

## **Disallowed Expenditure (NIC)**

Has the meaning given to it in CRC 5A (The Network Innovation Competition).

## **Disallowed Related Party Margins**

The portion of the related party margins which will not be included within the RAV Additions calculation for the year in accordance with the relevant price control settlement. Also see Related Party Margin Adjustment.

## **Discretionary Funding**

Has the meaning given to it in CRC 2J (Low Carbon Networks Fund).

## **Dismantlement**

Dismantlement is the activity of de-energising, disconnecting and removing (where appropriate) Network Assets where the cost of dismantlement is not chargeable to a third party and no new assets are to be installed.

## **Distributed Generation (DG)**

Has the meaning given to it in Standard Condition 1 of the electricity distribution licence.

## **Distributed Generation Standards Direction issued under Standard Condition 15A**

Has the meaning given to 'DG Standards Direction' in Part C of Standard Condition 15A of the electricity distribution licence.

## **Distribution Asset**

Any of the electric lines, cables, plant and equipment included within the licensee's Distribution System.

## **Distribution losses**

Has the meaning given in Standard Condition 1 of the electricity distribution licence.

## **Distribution Losses-justified costs**

The component of the unit cost that is justified by distribution losses benefits. This is the difference in costs between the adopted activity and the baseline scenario.

## **Distribution Losses Strategy**

Has the meaning given in Standard Condition 49 (Electricity Distribution Losses Management Obligation and Distribution Losses Strategy) of the electricity distribution licence.

## **Distribution Network Operator (DNO)**

Any electricity distributor in whose electricity distribution licence the requirements of Section B of the standard conditions of that licence have effect (whether in whole or in part).

## **Distribution system**

Has the meaning given to it in Standard Condition 1 of the electricity distribution licence.

## **Diversiory works**

The service consisting of the moving of any electric lines or electrical plant in order to facilitate the extension, redesign or redevelopment of any premises on which those things are located and/or to which they are connected. Diversiory works are

related to the provision of new connections, and not where the works are unrelated to new connections.

## **Diversions**

Diversions activity that is not fully recharged to any third party or agent, Diversions is a generic category that includes:

- Conversion of wayleaves to easements, easements and injurious affection;
- Diversions due to wayleave terminations, termination of a lease (s.25 Landlord & Tenant Act) or where a re-development clause exists within an existing easement or other consent documentation.
- Diversion for Highways (funded as detailed in NRSWA).

### **Diversions due to Wayleave terminations**

The raising or rerouting of a circuit and/or the relocation of plant following the termination of a wayleave or lease.

Volumes of diversions for highways should be reported once the diversion scheme is completed. A single diversion may require work to be undertaken upon different assets, possibly at different voltages. In these instances, the diversion should only be reported once, and where multiple voltages are involved, should be reported against the highest voltage of the works.

### **Diversions for Highways**

The raising or rerouting of a circuit or repositioning of plant associated with new roads or street works. The costs to be reported in table CV6 Diversions and CV7 Diversions for Rail Electrification represent the DNO-funded proportion of the costs as defined in NRSWA. The proportion that is charged to the roadworks authority is reported in C19 - DRS. Volumes of diversions for highways should be reported once the diversion scheme is completed. A single diversion may require work to be undertaken upon different assets, possibly at different voltages. In these instances, the diversion should only be reported once, and where multiple voltages are involved, should be reported against the highest voltage of the works.

### **DNO provided exit points or POCs for IDNO/ICP**

This refers to the count of new or augmented:

- MPANs provided by the DNO to end customers as part of connections projects, or
- Points of Connections (POCs) provided by the DNO to IDNOs or ICPs as part of connections projects. One POC should be counted for each Connection Project, irrespective of whether an IDNO or ICP is connected

## **Domestic Premises**

Premises at which a supply of electricity is taken wholly or mainly for domestic purposes.

## **Door**

A wood, concrete, GRP or metal barrier for closing and opening an entrance to a building.

INCLUDES:

- full replacement of the door (and door frame if required) only that is driven by the condition of the door.

#### EXCLUDES:

- door replaced as part of full building replacement (cost and activity should be recorded against 'buildings' category)
- repair and painting
- replacement of doors driven by the replacement of plant assets.

### **DPCR4**

Distribution Price Control Review 4 - the price control regime imposed by the charge restriction conditions of DNO licences and applicable for the period from 1 April 2005 to 31 March 2010.

### **DPCR5**

Distribution Price Control Review 5 - the price control regime imposed by the charge restriction conditions of DNO licences and applicable for the period from 1 April 2010 to 31 March 2015.

### **DRS1. Connection services**

Has the meaning given to it in Appendix 1 of CRC 5C (Directly Remunerated Services).

### **DRS2. Diversionary works under an obligation**

Has the meaning given to it in Appendix 1 of CRC 5C (Directly Remunerated Services).

### **DRS3. Works required by an alteration of premises**

Has the meaning given to it in Appendix 1 of CRC 5C (Directly Remunerated Services).

### **DRS4. Top-up, standby, and enhanced system security**

Has the meaning given to it in Appendix 1 of CRC 5C (Directly Remunerated Services).

### **DRS5. Revenue protection services**

Has the meaning given to it in Appendix 1 of CRC 5C (Directly Remunerated Services).

### **DRS6. Metering Services**

Has the meaning given to it in Appendix 1 of CRC 5C (Directly Remunerated Services).

### **DRS7. Smart Meter Roll-out rechargeable services**

Has the meaning given to it in Appendix 1 of CRC 5C (Directly Remunerated Services).

## **DRS8. Value Added Services**

Has the meaning given to it in Appendix 1 of CRC 5C (Directly Remunerated Services).

## **DRS9. Miscellaneous**

Has the meaning given to it in Appendix 1 of CRC 5C (Directly Remunerated Services..

## **DSCP (Distribution Systems Connection Point)**

A connection point between two Distribution Systems that are the responsibility of different licensees, who are each, a DNO. In accordance with the BSC, a DSCP is a Systems Connection Point at which two Distribution Systems are connected.

## **Dual quote**

A connections project quote to one customer that contain both a contestable and non-contestable connections work.

## **DUoS - see Distribution Use of System**

## **E**

## **Early Retirement Deficiency Contributions (ERDCs)**

Early retirement programmes which have been financed by the employer making additional contributions to their pension scheme(s) to offset the associated increase in liabilities arising because of such programmes.

Cost of providing enhanced pension benefits granted under severance arrangements which have not been fully matched by increased contributions.

## **Earthing upgrades**

The activity of upgrading the earthing installation at an existing substation:

- to mitigate against high earth potential rise (EPR) or step and touch potentials in excess of tolerable limits where identified as an issue with the existing earthing installation, and
- where the cost of the earthing upgrade is not chargeable to a third party.

This excludes sites where earthing has been replaced due to fault or theft.

## **Easements**

The activity involved in securing locations for distribution network assets through purchasing easements. An easement is the legal right for a DNO to retain assets in a location for a determined period of time or in perpetuity without risk of interference from the owner.

Volumes should be reported once the easement is established.

## **ECCR**

The Electricity (Connection Charges) Regulations 2002 (SI 2002/93) as amended from time to time.

## **ECDGS - Electricity Connections Distributed Generation Standards**

Standards of performance pertaining to electricity distributed generation connections services provided by Electricity Distributors.

## **ECGS - Electricity Connections Guaranteed Standards**

Standards of performance pertaining to electricity connections services provided by Electricity Distributors. Outlined in the Electricity (Connection Standards of Performance).

## **EHV (Extra High Voltage)**

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

## **EHV end connection involving only EHV work**

Connection projects providing exit point(s) at EHV level where the only voltage of the assets involved in providing the exit point(s), and any associated works, is EHV.

## **EHV metered DPCR4 Connection Projects**

Connection projects; DPCR4 providing exit point(s) at EHV level. This category is identical to the "EHV" RRP reporting category used in DPCR4 reporting, but with 132kV connections stripped out.

## **EHV Sub Cable**

EHV cable which is placed below the surface of the water and laid on or under the sea bed or the bed of a river or estuary whether or not designed for this purpose.

## **Elective Communication Services**

Payments for discretionary data service purchased through bilateral agreements with the Data Communications Company (DCC). These payments may extend beyond the smart meter roll-out period.

## **Electrical Energy Storage**

As featured in the transform model developed through the smart grids forum, the Electrical Energy Storage (EES) technologies deployed on a network to either deliver the peak demand, or absorb high levels of generation at key times of the day/year.

## **Electricity Distributor**

Has the meaning given to it in Standard Condition 1 of the electricity distribution licence.

## **Electronic/Electric Vehicle Charging Point**

An installation which allows an electric vehicle to be charged from the distribution network.

### **Element of connection that is Sole Use funded**

This is defined as the element of a connection that will only be used by the connecting party [at the time of completing the work] and is therefore fully funded by this party.

### **Element of connection that is subject to the apportionment rules - Customer Funded**

Where a Connection Project requires the reinforcement of existing assets or involves the installation of new assets that will not be used solely by the connecting party, the funding will be split between the new connectee and the wider customer base through DUoS funding. This funding is split using the apportionment rules as detailed in DNO connections charging methodologies. The portion funded by the connecting customer is referred to as the Connectee funded element of connection subject to the apportionment rule.

### **Element of connection that is subject to the apportionment rules - DUoS Funded**

Where a Connection Project requires the reinforcement of existing assets or involves the installation of new assets that will not be used solely by the connecting party, the funding will be split between the new connectee and the wider customer base through DUoS funding. This funding is split using the apportionment rules as detailed in DNO connections charging methodologies.

The portion that is funded by the wider customer base through DUoS is referred to as the DUoS funded element of connection subject to apportionment rule.

### **Eligible NIA Expenditure**

Has the meaning given to it in CRC 2H (The Network Innovation Allowance).

### **Eligible NIC Bid Preparation Costs**

Has the meaning given to it in CRC 2H (The Network Innovation Allowance).

### **Eligible NIC Project**

As defined in the NIC Governance Document.

### **Embedded DC Networks**

As featured in the transform model developed through the smart grids forum, the application of point-to-point DC circuits to feed specific loads. A retrofit solution to existing circuits.

## Emergency Fault Repair Response

An emergency is a scenario where there is immediate danger to the public from the electricity network. This standard requires the Electricity Distributor to attend the site to remove immediate danger to the public.

## Energisation

The insertion of a fuse or operation of a switch that will allow an electrical current to flow from an Electricity Distributor's distribution system to the Customer's installation, or from the Customer's installation to that distribution system, when the action in question is required to be carried out by the Electricity Distributor and is subject to standard industry requirements.

## Energy Ombudsman Findings Against the Licensee

Has the meaning given to it in CRC 2C (Broad Measure of Customer Service Adjustment).

## Engineering Management & Clerical Support

Engineering Management and Clerical Support (EM&CS) is a closely associated indirect activity included in the Design and Management table.

This activity relates to the activities of engineering and clerical support staff (ie executive managers, engineering managers, work/resource planners and clerical staff, etc) managing or assisting employees undertaking direct activities.

INCLUDES:

### **Strategic Network Business Plan Development and Implementation**

- Development of strategic business plan for the overall distribution business
- Setting the operational and capital network investment priorities for the overall distribution business
- Establishing annual operational and capital plans to achieve strategic goals for the overall distribution business
- Managing the delivery organisational structure to achieve the long and short term company goals
- Agreeing overall resource requirements for the business (own employees, contractors, finances and outcome targets)
- Managing the overall allocation and distribution of delivery resources to achieve plans
- Managing key corporate policies and standards for service delivery;
- Leading the management team for service delivery
- Monitoring the achievement of plans
- Overseeing compliance monitoring to company technical and health & safety requirements
- Overseeing the management of teams with responsibility for service delivery.

### **Work Planning, Budgeting, Allocation and Control**

- Monitoring delivery of major works programme
- Monitoring delivery of overall works programme
- Monitoring fault activity
- Managing budgets for inspections and maintenance, faults and major works



- Setting and agreeing performance targets, monitoring actual performance;
- Reporting and analysis of Key Performance Indicators ("KPIs")
- Line management of staff undertaking direct activity work, including
  - Standards of performance, disciplinary and sickness absence procedures
  - Monitoring absence, back-to-work-interviews and welfare visits
- Establishing day to day work plans
- Managing the allocation tasks to achieve the delivery of operational and capital plans
- Ensuring work activity adheres to company technical and health & safety requirements.

### **Operational Performance Management**

- Health and Safety checks on work and personnel
- Compliance checks on staff and contractors
- Site safety inspections
- Providing safety advice to cable contractors and others (to help prevent damage)
- Investigation, report and corrective action following an accident or environmental incident
- Authorisation of team members for operational and non-operational duties
- Operational safety checks.

### **Health and Safety**

- Promoting and maintaining health and safety of employees, contractors, customers and the public, including:
  - Developing the company's overall health and safety policy
  - Establishing procedures to comply with best practice for health and safety
  - Maintenance of records to show compliance with Factory and Health and Safety at Work Acts
  - Providing advice on security matters both for property and personnel and provision of advice on fire prevention
  - Providing safety advice to persons working in proximity to network assets.

### **Street works admin: Customer Funded/DUoS Funded**

- Processing of NRSWA notifications, permits and lane rentals
- Processing the payment of notification penalties, permit penalties and lane rental overstay fines (but not the cost of the penalties)
- Permit set-up costs
- Processing permit applications (but not the costs of the permits)
- Processing the payment of permit penalties (but not the cost of the penalties)
- Processing lane rental applications (but not the costs of the lane rental)
- Processing the payment of lane rental overstay fines (but not the cost of the fines)
- Processing payment of inspection penalties (but not the costs of the penalties)
- Liaising with contractors and direct labour force to undertake remedial works following inspections (but not the cost of the remedial works)
- Processing of congestion charges payments (but not the cost of the payments)
- Processing of lane rentals payments (but not the cost of the payments)
- Processing of overstay fines (but not the cost of the fines)
- Updating the Street Gazetteer.

## **Clerical Support**

### **The office based activities undertaken by Clerical Support staff includes:**

- Updating plant and overhead line support asset inventory databases following asset commissioning and decommissioning
- Updating plant and overhead line support asset condition data following inspection and maintenance
- Dealing with verbal and written enquires for new connections, street lighting or faults
- Programming of minor works
- Issuing of work instructions
- Preparation of quotations for minor works
- Sending quotations to customers
- Customer liaison
- Liaising with contractors
- Preparing plans, schematics, notices, materials schedules and work instructions
- Preparing shutdown notices
- Environmental notifications
- Processing of claims for third party damage to the DNO's assets
- Clerical support for staff undertaking street lighting, including answering verbal and written enquiries regarding street lighting faults, dealing with instructions from lighting authorities, liaising with contractors and lighting authorities and providing statistics to local authorities
- Data gathering and the provision of evidence to support claims against third parties for damage to DNO property.

### **Identification and implementation of Network improvement initiatives**

- Redesign of business processes
- Customer service improvements
- Where staff are specifically engaged in change and improvement activities.

#### **EXCLUDES:**

- Any Employees managing indirect activities (eg logistics manager) (include under the relevant indirect activity heading)
- Development of high level plans that facilitate the economic development of the distribution network (classified as Network Design and Engineering)
- Specific planning and design necessary for individual projects (classified as Network Design and Engineering)
- Responding to NRSWA notices sent to the DNO by other parties (include under System Mapping)
- Maintenance of mobile generation plant (include under Vehicles and Transport)
- Any employees engaged in maintaining the financial asset register (include under Finance and Regulation)
- Idle, down and sick time of direct field staff (include with their normal direct time in the appropriate direct activity)
- Costs of operational staff attending operational training courses (include under Operational Training)
- Training courses and training centre costs for staff relating to working on system assets (include under Operational Training)
- Engineering and health and safety training courses for staff involved in direct activities (include under Operational Training)
- Engineering and health and safety training courses for staff involved in indirect activities (include under HR & Non Operational Training)

- Apprentices undertaking classroom and on the job training (include under Operational Training)
- Time of employees attending non-operational training (include as labour cost under the relevant activity of that employee)
- IT or property costs associated with Engineering Management & Clerical Support (include in IT&T and Property Management indirect activities); Updating of underground cable and overhead line asset databases (include under System Mapping)
- Purchase of equipment (include under Non-Operational Capex).

### **Engineering Recommendation G83/2 (and successor documents)**

The Engineering Recommendations are a series of documents that set out standards and guidance on technical requirements. G83/2 is the "Recommendations for the Connection of Type Tested Small-scale Embedded Generators (Up to 16 A per Phase) in Parallel with Low-Voltage Distribution Systems" document.

### **Engineering Recommendation G59/2 (and successor documents)**

The Engineering Recommendations are a series of documents that set out standards and guidance on technical requirements. G59/2 is the "Recommendations for the Connection of Generating Plant to the Distribution Systems of Licenced Distribution Network Operators" document.

### **Engineers**

Employees whose intended role requires the skills and abilities of incorporated or professional engineers.

Includes persons in the following standard occupation classification codes: [tbc]

### **Enhanced Automatic voltage Control (EAVC)**

As featured in the transform model developed through the smart grids forum, the introduction of additional automatic voltage control devices over and above those located at the grid and primary transformers. Together these new and existing voltage control devices will constitute an EAVC system.

### **Environment Agency (EA)**

An Executive Non-departmental Public Body responsible to the Secretary of State for Environment, Food and Rural Affairs and an Assembly Sponsored Public Body responsible to the National Assembly in Wales concerned mainly with rivers, flooding, and pollution.

### **Environmental Caution - see Environmental Civil Sanction**

### **Environmental Civil Sanction**

An umbrella term relating to a range of civil sanctions in respect of environmental issues.

INCLUDES:

- Environmental Cautions
- Environmental Compliance Notices
- Environmental Enforcement Undertakings
- Environmental Fixed Monetary Penalties
- Environmental Prosecutions
- Environmental Reportable incidents
- Environmental Restoration Notices
- Environmental Stop Notices
- Environmental Variable Monetary Penalties
- Environmental Warnings.

An **Environmental Caution** is a written notice from the Environment Agency, Natural England, CCW, DEFRA, WAG, English Heritage, CADW or local authority requiring actions to comply with the law, or to return to compliance, within a specified period.

An **Environmental Compliance Notice** is defined by the Environmental Civil Sanctions Order (England and Wales) as a Regulator's written notice requiring actions to comply with the law, or to return to compliance, within a specified period.

An **Environmental Enforcement Undertaking** is defined by the Environmental Civil Sanctions Order (England and Wales) as an offer, formally accepted by the Regulator, to take steps that would make amends for non-compliance and its effects.

An **Environmental Fixed Monetary Penalty** is defined by the Environmental Civil Sanctions Order (England and Wales) as a low-level fine fixed by legislation that the regulator may impose for a specified minor offence.

**Environmental Prosecutions** are Criminal or civil charges brought against someone for environmental damage.

**Environmental Reportable Incidents** are environmental incidents likely to cause damage or danger to the natural environment (pollution - air, land, water, illegal waste disposal, watercourse damage, or poaching).

An **Environmental Restoration Notice** is defined by the Environmental Civil Sanctions Order (England and Wales) as a Regulator's written notice requiring steps to be taken, within a stated period, to restore harm caused by non-compliance, so far as possible.

An **Environmental Stop Notice** is defined by the Environmental Civil Sanctions Order (England and Wales) as a written notice which requires an immediate stop to an activity that is causing serious harm or presents a significant risk of causing serious harm.

An **Environmental Variable Monetary Penalty** is defined by the Environmental Civil Sanctions Order (England and Wales) as a proportionate monetary penalty, which the Regulator may impose for a more serious offence.

An **Environmental Warning** is a written notice received from the Environment Agency, Natural England, Countryside Council for Wales (CCW), DEFRA, Welsh Assembly Government (WAG), English Heritage, CADW or local authority which requires immediate action to stop an activity that is causing harm or which may cause significant harm.

**Environmental Compliance Notice - see Environmental Civil Sanction**

**Environmental Enforcement Undertaking - see Environmental Civil Sanction**

## **Environmental Fixed Monetary Penalty - see Environmental Civil Sanction**

## **Environmentally beneficial technologies**

Qualifying items where HMRC allows a claim for a 100% First Year Allowance (FYA) to be claimed against the cost of the item, which include:

- certain energy-saving and water efficient equipment, but only if the item appears on a specific list of qualifying equipment (these are known as 'Enhanced Capital Allowances (ECA)')
- new cars with very low carbon dioxide emissions
- certain vehicle gas refueling equipment
- zero emission goods vehicles
- plant and machinery for use in certain enterprise zones.

## **Environmental Management System (EMS Scheme)**

Processes, procedures and systems in place that are accredited and certified, typically in accordance with ISO 14001 Environmental Management System standard. The certification can be applicable to a company's whole operations or specific parts of a company's operations.

## **Environmental Prosecution - see Environmental Civil Sanction**

## **Environmental Reportable Incident - see Environmental Civil Sanction**

## **Environment Report**

Has the meaning given to it in Standard Condition 47 of the electricity distribution licence.

## **Environmental Reporting**

Information provided under the environmental categories specified in Worksheet CV24 – Environmental Reporting.

## **Environmental Restoration Notice - see Environmental Civil Sanction**

## **Environmental Stop Notice - see Environmental Civil Sanction**

## **Environmental Variable Monetary Penalty - see Environmental Civil Sanction**

## **Environmental Warning - see Environmental Civil Sanction**

## **Equipment to manage losses**

Assets or capital projects undertaken where the primary driver is management of technical losses. Initiatives which have losses benefits but where managing distribution losses is not the primary driver, are not within the scope of this definition (for example, if the installation of a low loss transformer is primarily driven by asset health reasons rather than losses).

## **ERDCs - see Early Retirement Deficiency Contributions**

## **ESPS**

Electricity Supply Pension Scheme - a scheme with a number of sub groups covering many employees in the industry. A number of Groups participate in the Scheme, principally those electricity distribution companies based in England and Wales which were privatised in 1990. The Scheme is administered by a Trust Company called Electricity Pensions Trustee Limited (EPTL). Directors of EPTL are drawn from the Trustee and from the Group Trustees of the other Groups participating in the Scheme.

## **ETR 132 – Other work to achieve compliance**

Used in Table Tree Cutting Table CV29 and describes circumstances where Tree Cutting ETR 132 compliance is declared and achieved without the requirement for physical work or where compliance is achieved due to work on other capital schemes.

## **ETR 132 – Overall Network Length Cleared and Meeting ETR 132 Compliance**

Used in Table CV29 Tree Cutting and represents the amount of physical and non-physical work that has been undertaken to achieve ETR132 Compliance

## **ETR 132 – Physical Cut**

Used in Tree Cutting Table CV29 and describes Tree Cutting ETR 132 activity that is a result of physical activity undertaken felling or trimming vegetation from around network assets. The whole circuit should be clear in order for it to be counted towards being compliant.

## **ETR 138**

ETR 138 – 'Resilience to Flooding of Grid and Primary Substations' (2009) was issued as a result of the ENA Substation Resilience to Flooding Task Group to develop a risk-based methodology, providing guidance on how to improve the resilience of electricity substations to flooding.

The ETR introduced the need to consider the risk of extreme flooding (represented by the Environmental Agency's 1 in 1000 flood maps) at larger installations (supply and grid supply points), and prescribed the use of cost/benefit analysis and the analysis of the societal impact of a flooding event.

ETR 138 addresses the risk management of floods due to coastal, river, surface water and groundwater flooding and will also issue guidance on the impact of coastal/tidal surges.

## Exceptional events

Where a licensee's CIIS and or CMLIS [incentivised interruptions performance] is affected by exceptional circumstances, as set out in Part F of CRC 2D (Adjustment of licensee's revenues to reflect interruptions-related quality of service performance), an exceptional event has occurred.

Exceptional events are classified as one of the following:

### 1) Exceptional Severe Weather event:

- is deemed to begin at the beginning of a 24-hour period when the number of incidents caused by the event at distribution higher voltage in that period is equal to or greater than the severe weather exceptionality threshold in the table below, and
- is deemed to end at the earlier of:
  - the time of restoration of the last customer off supply due to an LV incident linked to the underlying cause of the severe weather, or
  - the end of a 48-hour period when the number of customers off supply due to high voltage incidents linked to the underlying cause of the severe weather has fallen to zero.

For the purposes of the Cost and Volumes Reporting Pack, where a Severe Weather exceptional event that qualifies against the criteria above, also passes the Severe Weather 1-in-20 event threshold, the full duration of this event is to be considered a Severe Weather 1-in-20 event.

DNO	Exceptionality thresholds (weather)	
	Severe Weather exceptional event	Severe Weather 1-in-20 event
ENWL	55	290
NPGN	37	194
NPGY	40	209
WMID	63	332
EMID	64	336
SWALES	41	217
SWEST	60	316
LPN	14	74
SPN	54	285
EPN	91	479
SPD	76	400
SPMW	68	359

DNO	Exceptionality thresholds (weather)	
	Severe Weather exceptional event	Severe Weather 1-in-20 event
<b>SSEH</b>	60	315
<b>SSES</b>	67	351

## 2) Other event:

An other event has the following criteria:

- the first is that the occurrence of the event was a consequence of either:
  - an external cause (including, without limitation, an event arising from an incident on a Transmission System or other connected network, or from terrorism or vandalism), or
  - an internal cause:
    - that was not attributable to any culpable error by the licensee in relation to the installation, operation or maintenance of an asset forming part of its Distribution System, or
    - the consequence of which could not reasonably have been avoided by the licensee
- the second requirement is that the event contributes more than the relevant threshold amount to CIIS or CMLIS in a three-month period as detailed below:

DNO	Other event exceptionality thresholds	
	CIIS	CMLS
<b>ENWL</b>	1.1	0.8
<b>NPGN</b>	1.6	1.3
<b>NPGY</b>	1.1	0.9
<b>WMID</b>	1.0	0.8
<b>EMID</b>	1.0	0.8
<b>SWALES</b>	2.3	1.8
<b>SWEST</b>	1.6	1.3
<b>LPN</b>	1.1	0.9
<b>SPN</b>	1.1	0.9
<b>EPN</b>	0.7	0.6
<b>SPD</b>	1.3	1.0



DNO	Other event exceptionality thresholds	
	CIIS	CMLS
<b>SPMW</b>	1.7	1.3
<b>SSEH</b>	3.3	2.7
<b>SSES</b>	0.8	0.7

## Exemptions (for Connections)

Exemptions specified in Regulation 15 of the Electricity (Connection Standards of Performance, Condition 5 of the DG Standards Direction and paragraph 15.5 of Standard Condition 15 of the electricity distribution licence.

## Ex-Gratia Compensation Payments

Cash payments made by a DNO to a customer in lieu of a payment that the customer would have been entitled to under The Electricity (Standards of Performance) Regulations 2010 had the customer chosen to do so.

## Ex-Gratia Compensation Payments (Connections)

Cash payments made by a DNO to a customer in lieu of a payment that the customer would have been entitled to under The Electricity (Connection Standards of performance) Regulations 2010 had the customer chosen to do so.

## Ex-Gratia Compensation Payments (Distributed Generation Standards Direction issued under Standard Condition 15A)

Cash payments made by a DNO to a customer in lieu of a payment that the customer would have been entitled to, under Distributed Generation Standards Direction issued under Part C of Standard Condition 15A of the electricity distribution licence, had the customer chosen to do so.

## Expenditure on DSM to avoid general reinforcement

Direct or indirect expenditure on systems or payments to customers that enable demand to be constrained at times to reduce the requirement to reinforce the network.

## Export MPAN in quote

Where the quotation for a Connection Project includes the installation of an MPAN for the exporting of an electricity supply to the DNO's network. A "Y" should be used in the appropriate column of table CN2 where an Export MPAN is included in the quote.

## External Customers

For the purposes of reporting Related Party Margins, are customers of a related party to the DNO that are not themselves related parties of the DNO.

## External Parties

Any party which is not an affiliate, joint venture, associate or an affiliate of a relevant associate of the licensee (Opposite of related party definition).

## External Rent

A charge for property rental reflecting actual lease payments on normal accruals basis.

## Extra-high voltage (EHV)

A nominal voltage of more than 22,000 volts up to and including 132,000 volts in England and Wales and up to but excluding 132,000 volts in Scotland.

## F

### Fair value

IFRS 13 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (ie, an exit price).

FRS 102 defines fair value as the amount for which an asset could be exchanged, a liability settled, or an equity instrument granted could be exchanged, between knowledgeable, willing parties in an arm's length transaction.

### Fault

Any incident arising on the licensee's distribution system, where statutory notification<sup>2</sup> has not been given to all customers affected at least 48 hours before the commencement of the earliest interruption (or such notice period of less than 48 hours where this has been agreed with the customer(s) involved).

### Fault Current Limiters

As featured in the transform model developed through the smart grids forum, the use of superconducting materials, as a form of non-linear resistor, to clamp fault current levels at HV to within predefined limits, or the application of reactors part way down a HV circuit to limit fault current.

### Fault level

The maximum fault current flowing into a direct short circuit fault (ie, with no fault impedance), as would be measured at the point of fault. For a particular location a number of different fault levels may be determined. These can represent different conditions that consider nature of the fault (eg, three phase - earth, or single phase - earth), duration of the fault current/operation (and operating time) of plant (eg,

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<sup>2</sup> Regulation 14 of the Electricity (Standards of Performance) Regulations 2010.

subtransient, transient or steady state currents, 'make' conditions or 'break' conditions etc) and consideration of ac and dc components, as appropriate.

The duty imposed upon an item of plant or apparatus, during short circuit fault conditions, requires consideration of the fault current flow that results in the item itself.

### **Fault level duty > 95% of rating**

Switchboards/substation busbars and is the prescribed criteria to be applied in respect of reporting the number of Switchboards/substation busbars where the fault level exceeds the prescribed criteria. In this context the prescribed criteria is where one or more items of switchgear have a fault level duty upon them that exceeds 95% of their individual fault current rating, for either three phase or single phase fault conditions.

The fault level duty upon an item of switchgear considers the maximum fault current flowing through the switchgear itself, under both 'make' and 'break' operating conditions (as appropriate), against the relevant fault current ratings for the operating conditions.

### **Fault level operational restrictions**

The use of operational procedures to manage the risks associated with fault level issues, including restrictions upon the operation of, or access to, switchgear or other equipment. This may require the network to be rearranged, to reduce the fault level, to permit operation or access, which in some cases may temporarily reduce security of supply.

### **Fault level - Other**

Investment schemes to address fault level issues where the scope of the scheme does not involve replacement of the transformer or Switchboards/substation busbars.

### **Fault level reinforcement**

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

### **Fault level reinforcement schemes**

Schemes undertaken with the primary objective of alleviating fault level issues associated with switchgear or other equipment.

Fault level reinforcement schemes should be categorised on the basis of the solution to the works. For example, where the solution, to overcome the problem of fault level duty exceeding capability of a switchboard, is to install a high impedance transformer, then the fault level reinforcement scheme should be categorised as transformers.

### **Fault Level Risk Mitigation**

Measures to mitigate the risks associated with fault level issues.

## **Fault Level Status At Year End**

Fault level reporting requirements in respect of Switchboards/substation busbars at the end of the reporting year. The reporting requirements relate to reporting of the number of Switchboards/substation busbars where the fault level exceeds the prescribed criteria.

## **Fault rate**

The incidence (per unit) of unplanned incidents for a specific category of distribution assets.

## **Fault rate asset category**

Any category of Distribution Assets for which the DNO is required to provide Fault Rate information.

## **Fault Repair**

In relation to unmetered connections, fault repair means the restoration of supply to a street light or street furniture.

## **Final Connection Date**

- For LVSSA projects and LVSSB projects with only one connection, the date of the completion of electrical works to the point that, subject only to the fitting of an appropriate meter where necessary, Energisation would be possible, or
- For LVSSB projects with more than one connection, the date of the completion of electrical works to the point that, subject only to the fitting of an appropriate meter where necessary, Energisation would be possible to the last connection covered by the project.

## **Final contracted value - Element of connection that is Sole Use funded - Direct & Indirect including margin**

The total amount, once the relevant level of margin has been applied, in a connection project's connection charges that covers the direct and indirect costs of the Element of connection that is Sole Use funded.

## **Final contracted value - Element of connection that is Sole Use funded - Direct including margin**

The total amount, once the relevant level of margin has been applied, in a connection project's connection charges that covers the direct cost of the Element of connection that is Sole Use funded.

## **Final contracted value - Element of connection that is Sole Use funded - Indirect including margin**

The total amount, once the relevant level of margin has been applied, in a connection project's connection charges that covers the indirect cost of the Element of connection that is Sole Use funded.

## **Final contracted value - Total charged to customer**

The total amount, once the relevant level of margin has been applied, in a connection project's connection charges that relate to work that is funded by the connecting customer.

## **Final contracted value - Total direct costs of project**

The total amount, once the relevant level of margin has been applied, in a connection project's connection charges that covers the entire direct cost of the work, including the element of the connection that is subject to the apportionment rules - DUoS funded.

## **Finance and Regulation**

Performing the statutory, regulatory and internal management cost and performance reporting requirements; and customary financial and regulatory compliance activities for the DNO.

Accounts Processing:

- Payments and receipts
- Duos billing
- Credit and debit control
- Billing and credit control associated with claims against third parties for damage to DNO property.

Connections policy and agreement management:

- Connection charge policy formulation
- Un-metered connections records
- Connection agreement administration.

Financial Management:

- Internal and external
- Financial planning, forecasting and strategy
- Financial accounting
- Management accounting
- Statutory reporting (excluding regulatory reporting, which is in the definition for Regulation)
- Banking and treasury management
- Maintaining the financial asset register
- Taxation: Compliance, planning and management – internal and external.

Income management:

- Transmission exit charges administration
- Tariff formulation
- Revenue forecasting.

Procurement:

- Identify strategic needs for materials and services
- Conduct market analysis
- Identify potential suppliers
- Undertake background review
- Select suppliers and negotiate contracts
- Purchase order fulfilment
- Monitoring supplier performance.

#### Regulation:

- All costs of monitoring, complying with and updating the regulatory licence (includes collaborative work with Ofgem)
- Regulatory reporting of costs, revenues, asset data and financial resources
- Reporting of quality of service data and of other non-financial regulatory reporting required by the regulator
- The cost of any other activities imposed by a licence condition which are unique to a regulated company.

Subscription to trade associations eg, ENA

#### Settlements data management:

- Costs associated with monitoring and auditing the quality of data received from Settlements and used in DUoS and losses reporting.

The overall Finance and Regulation activity EXCLUDES:

- Insurance related costs and recoveries
- Maintaining the physical asset register(s); and any of the IT systems associated with finance and regulation (include under IT & Telecoms)
- Ex gratia compensation payments and Guaranteed Standards of Performance compensation payments (include in Non Activity Based Costs).

## Financial Year

For the purposes of regulatory reporting is a period of 12 months ending on 31 March of any year. A financial year to be reported under the year in which it ends (ie, a financial year 1 April 2010 to 31 March 2011 to be reported as financial year '2011').

## Fines and Penalties

- Includes any fines or penalties paid by the DNO that do not fall within the categories of:
  - Cost of Notification Penalties
  - Inspection Penalties
  - Overstay Fines
  - Permitting Penalties

Include all Tax Penalties, Fines and Interest

## Fire protection Substation

The provision of fire protection system improvements including emulsifier and inert gas systems but excluding improvements to fire prevention or fire detection systems only.

## Firm (n-1) capacity

The maximum capacity that is immediately available at a substation post an (n-1) incident without manual intervention. The maximum capacity will be based on the cyclic or dynamic rating of equipment taking into consideration:

- the prior loading on the equipment
- the prevailing winter or summer ambient conditions when maximum loading on the substation occurs; and any capacity that is made available

under such circumstances through normally connected interconnection or by automatic transfer schemes.

## **Firm capacity (FC)**

The amount of energy available for distribution which can be (and in many cases must be) guaranteed to be available at a given time.

A network's firm capacity is likely to change due to network load growth or DNO interactions.

## **Fixed**

In relation to charges means a charge or mortgage secured on particular property, eg, land and buildings, machinery, shares, intellectual property.

## **Flats**

Properties including tenement, cottage flats, and other flats. Excludes, houses and multi-storey flats.

## **Flexible AC Transmission Systems**

As featured in the transform model developed through the smart grids forum, the series or shunt connected static power electronics as a means to enhance controllability and increase power transfer capability of the network.

## **Floating**

In relation to charges means a particular type of security, available only to companies. It is based upon an equitable charge on all the company's assets both present and future, on terms that the company may deal with the assets in the ordinary course of business.

## **Flood Defences**

Existing or proposed physical measures to limit or eliminate the risk of flood damage to a substation or operational asset. These measures may take a number of forms:

- The construction of a waterproof subterranean "wall" around the perimeter, extending above ground (eg, concrete, sheet piling).
- The construction of a waterproof wall within the site to protect specific assets eg switchgear, transformers or individual buildings (switch rooms). Specific improvements to the design of a building eg raising walls, tanking, sealing cable troughs, demountable barriers, flood doors.
- The erection of a portable flood barrier around the perimeter of the substation using a bespoke flood defence system (if the cost/benefit assessment cannot justify a permanent defence).
- The raising of substation assets to a level above the indicated flood height
- The relocation of the substation to a location away from or above flood risk.

## **Flooding Level of Protection**

This is the designed level of protection input in the Flood Mitigation (site) table. It refers to the level of flooding risk that is to be provided ( 1/100,1/200,1/1000) once flood defences have been installed.

## **Flooding Non-Site Specific Costs**

Costs associated with the purchase of temporary equipment to act either as flood defences or to offset/mitigate flood risk. Costs associated with undertaking independent site specific flood risk assessment and modelling to provide information for feasibility studies and detailed design.

The definition is used in Tables CV17 Flood Mitigation.

## **Flooding Risk**

The probability of flooding, as identified as part of the ENA Substation Resilience to Flooding Task Group, is to be measured as a "return period" in years to the nearest whole number ie, the average period in years that will pass without the site flooding. For example, if there is a risk of a substation flooding once in 20 years, this must be categorised as a flood risk of 1/20 (to be measured to the nearest whole number).

## **Flooding Risk (ETR 138)**

Refers to the probability of flooding for each substation identified in ETR138 (q.v.). ETR 138 sets out to establish predicted flood depth and other key factors that determine which substations are "at risk" ie where the predicted depth of flooding is likely to cause damage to electrical assets at the substation resulting in the loss of supplies to customers.

The fluvial flooding risk (q.v.) is expressed in terms of the risk of damage to a substation as a result of flooding in any 1 year. Where detailed analysis is not available to determine the exact level of risk to the nearest whole number, the level of risk to a site should be determined from the EA/SEPA indicative flood map contours and should therefore be categorised into one of the following, in accordance with ETR 138:

- 1/100 - The probability that a site experiences damage as a result of flooding that statistically has a 1% chance of occurring during any 1 year.
- 1/200 - The probability that a site experiences damage as a result of flooding that statistically has a 0.5% chance of occurring during any 1 year.
- 1/1000 - The probability that a site experiences damage as a result of flooding that statistically has a 0.1% chance of occurring during any 1 year.

## **Flooding Site Surveys**

These surveys take two forms:

- Detailed flooding site survey - Comprehensive assessment of flood risk at an individual site containing topographical survey; likely level of flood risk from potential flooding due to water courses; flooding from other sources including surface water, groundwater, reservoir failure and inadequate drainage; Hydraulic modelling where appropriate.



- Simple flooding site survey - Flooding survey to determine modelled flood zone (expressed in terms of return period); min., max. and mean depth of flooding.

## **Flood Mitigation**

Current physical and non-physical measures of flood prevention in place on a site and/or potential improvements that reduce the risk of flooding.

The definition is used in Tables CV17 Flood Mitigation and M1 Flood Mitigation (site).

## **Flood Mitigation Scheme**

Physical works undertaken with the primary purpose of providing Flood Mitigation at a substation.

## **Flood Plain**

An area of land adjacent to a water course ie, stream or river that is subject to periodic flooding whenever water levels rise and exceed those of the banks of the water course.

## **Fluid Filled Cables**

Pressurised fluid filled underground cables.

## **Fluid Recovered**

Fluid associated with pressurised fluid filled underground cables that has leaked from a cable and is subsequently recovered and includes:

- fluid captured in a container whilst jointing works are being undertaken
- spoil removed from site because it has become saturated with fluid during a cable leak.

In order to avoid double counting, the volume of fluid used to top up a cable in order to prevent pressure reaching the Pressure emergency level prior to jointing or repair should be excluded.

## **Fluid Used to Top Up Cables**

Fluid pumped into pressurised fluid filled underground cables and includes fluid used to:

- bring a circuit back up to pressure from a lower pressure level
- sustain a circuit fluid pressure from reaching Pressure emergency (Pe) level prior to jointing or repair of a leak.

## **Fluvial Flooding**

Fluvial flooding occurs as a result of flooding from rivers and watercourses. It is closely related to Coastal Flooding and Fluvial & Coastal Flooding schemes are analysed together in the Flood Mitigation table. These two are distinguished from Pluvial or Surface Water Flooding. Flood mitigation schemes and flooding surveys will be targeted at mitigating the risk from fluvial flooding to their electrical assets.

## Forecast amount of revenue relating to theft recovery

This amount is zero for all DNOs, except ENWL, where the value for each Regulatory Year is set out in Appendix 1 of CRC 5F (Treatment of income from recovery in respect of Relevant Theft of Electricity).

## Free Cashflow

A measure of financial performance calculated as operating cash flow minus capital expenditures. Free cash flow (FCF) represents the cash that a company is able to generate after laying out the money required to maintain or expand its asset base.

## FRS 101/102

*FRS 101 Reduced Disclosure Framework* permits qualifying entities to apply accounting policies that are consistent with EU-adopted IFRS, but allows exemptions from certain disclosure requirements. As a result it diverges from IFRS by permitting reduced disclosures.

*FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland* is based on the International Accounting Standards Board's (IASB) International Financial Reporting Standard for Small and Medium-sized Entities (IFRS for SMEs) issued in 2009 and applies to the general purpose financial statements with full disclosures produced under UK GAAP.

## Fuel Combustion

A category of BCF reporting which captures the emissions caused by non-building fuel usage, such as mobile plants and the stand-by diesel mobile generators that are deployed from time to time in response to planned outages or faults. This excludes fuel consumed by business or operational activities.

## Fuels Other

A category of BCF reporting which captures the emissions caused by the combustion of fuels other than diesel or natural gas for non-building fuel usage, such as mobile plants and the standby mobile generators that are deployed from time to time in response to planned outages or faults. This excludes fuel consumed by business or operational vehicles.

## Fugitive Emissions

Emissions that are not physically controlled but result from the intentional or unintentional releases of greenhouse gases. They commonly arise from the production, processing transmission storage and use of fuels and other chemicals, often through joints, seals, packing, gaskets etc.

## Full Time equivalent (FTE)

The number of normal hours worked by an employee divided by the normal hours of a full-time member of staff in an equivalent role according to his or her contract of employment.

## **Funds from Operations**

Net income from continuing operations, depreciation and amortisation, deferred income taxes and other non-cash items. (Definition from Standard and Poor's Corporate Ratings Criteria 2006)

### **Fuses (PM)**

Low voltage fuses which are pole mounted.

### **Fuses (GM) (TM)**

Low voltage fuses which are ground mounted or transformer mounted, including fuseways in LV pillars.

## **G**

### **Gas Insulated Switchgear (GIS)**

Switchgear with gas-insulated busbars.

### **Gas Natural**

BCF emissions resulting from fuel combustion attributed to natural gas.

### **Gases Other**

Fugitive BCF emissions attributed to all gases except SF6.

## **General and fault level reinforcement – See Network Design and Engineering**

### **General reinforcement**

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

### **General reinforcement (EHV & 132kV N-1)**

Work carried out on the network required to maintain or restore compliance with ER P2/6 or avert future non-compliance for first circuit outages.

### **General reinforcement (EHV & 132kV N-2)**

Work carried out on the network required to maintain or restore compliance with ER P2/6 or avert future non-compliance for second circuit outages (a fault outage following an arranged outage).

### **General reinforcement (EHV & 132kV Other)**

Work carried out on the network which fall outside of 'General Reinforcement (EHV and 132kV N-1)' and 'General Reinforcement (EHV and 132kV N-2)' such as:

- reinforcement to correct potential voltage non-compliance
- reinforcement to correct issues at a lower voltage where it is the most efficient and economic solution.

## **Generation Connection**

A new or modified connection (excluding any modification comprising only an alteration to the position of a meter) the purpose of which is to enable the Electricity Distributor's distribution system to receive a supply of electricity from the premises.

## **Generator Providing Network Support**

As featured in the transform model developed through the smart grids forum, the contracting with a generator for them to operate their sets in PV (Real power and volts) mode rather than the conventional PQ (Real and Reactive power). The generator will draw VARs from the network at certain times, but ensure that the voltage on the network is not excessively raised at the point of connection.

## **Global Tactical Asset Allocation (GTAA)**

A flexible strategy implemented through myriad asset classes and approaches. GTAA funds are designed to offer risk reduction, uncorrelated returns and liquidity.

## **GM Indoor substation**

A ground mounted substation where one or more items of plant are completely enclosed within a DNO owned building or enclosure.

## **GM Outdoor substation**

A ground mounted DNO owned substation where all the associated plant and apparatus is outside any building or enclosure and is exposed to the elements.

## **GM Third party substation**

A ground mounted substation where any building, enclosure or surround is owned and maintained by a third party.

## **Greenhouse gas emission**

The release of greenhouse gases into the atmosphere, including carbon emissions. Within the BCF, greenhouse gas emissions eg, SF6 , are calculated as equivalent carbon dioxide emissions.

## **Grid Supply Point (GSP)**

In accordance with the BSC, a GSP is a Systems Connection Point at which the Transmission System is connected to a Distribution System.

## **GS Compensation Payments**

Payments to customers made under The Electricity (Standards of Performance) Regulations. The values reported in this cell should be consistent with the guaranteed standard volumes reported within the Interruptions Reporting Pack.

## **GS Payments paid in year and residual from previous year - Payment Reconciliation Table**

These tables are for recording the payments made to customers in the reporting year, and any payments which were not made until the following year and include the following:

- GS Compensation Payments
- Ex-Gratia Compensation Payments
- Connections Guaranteed Standards of Performance Compensation Payments
- Ex-Gratia Compensation Payments (Connections)
- DG Standards Direction payments
- Ex-Gratia Compensation Payments (Distributed Generation Standards Direction issued under Standard Condition 15A)
- Any Other Ex-Gratia/Goodwill Compensation Payments.

### **GSPs new**

Total number of new GSPs in DNO area causing a consequential increase in Transmission Connection Point Charges.

### **GSPs new - licensee requirement**

Of the GSPs new, the number of new GSPs due to licensee requirement.

### **GSPs reinforced**

Total number of GSPs in DNO area that have undergone/will undergo reinforcement work causing a consequential increase in Transmission Connection Point Charges in the relevant reporting year.

### **GSPs reinforced - licensee requirement**

Of the GSPs reinforced, the number of GSPs reinforced due to licensee requirement.

### **GSR**

As featured in the transform model developed through the smart grids forum, the use of commercial contracts, underpinned with automated signalling, between a DNO and generation customer(s) to ramp down export under certain network conditions.

### **Guaranteed Standards of Performance Compensation Payments**

Payments to customers made following failures against the Guaranteed Standards of Performance, including:

- The Electricity (Standards of Performance) Regulations
- The Electricity (Connections Standards of Performance) Regulations
- Distributed Generation Standards Direction issued under Standard Condition 15A.

### **GWh**

Gigawatt hours (1,000,000,000 watt hours).

## **H**

### **Halted Project Revenues (LCN Fund)**

Has the meaning given to it in CRC 2J (Low Carbon Networks Fund).

### **Halted Project Revenues (NIC)**

Has the meaning given to it in CRC 5A (The Network Innovation Competition).

### **Health & Safety - See Engineering Management and Clerical Support**

### **Health Index (HI)**

Tier 2 Network Output Measure related to asset condition. The Health Index (HI) is a framework for collating information on the health (or condition) of Distribution Assets and for tracking changes in their condition over time.

The HI will be used to inform an assessment of the efficacy of the DNOs' asset management decisions over the price control period. Under the HI framework, each relevant asset is assigned a ranking between HI1 and HI5 by the DNO based on the DNO's assessment of its overall health or condition, and for the forecast period based on the DNO's views about future degradation, the options for Intervention and their impacts.

- HI1 - New or as New
- HI2 - Good or serviceable condition
- HI3 - Deterioration requires assessment and monitoring
- HI4 - Material deterioration, intervention requires consideration
- HI5 - End of serviceable life, intervention required.

### **Health Index Asset category**

Any category of Distribution Assets which the DNO is required to provide Health Index information for.

### **HHSCP (Half-hourly Settled Connection Point)**

A connection point that, in accordance with the BSC, is registered in SMRS as having a Half Hourly Metering System (which may include an Equivalent Meter). Energy may enter or exit the Distribution System at a Half-hourly Settled Connection Point.

### **High priority fault repair - non Traffic Light Controlled**

Work that is urgent but would not require attendance outside normal working hours to restore electricity supplies to street lighting or street furniture other than traffic lights.

### **High priority fault repair - Traffic Light Controlled**

Work that is urgent and would require attendance outside normal working hours to restore electricity supplies to traffic lights.

## High Voltage (HV)

Nominal voltages over 1kV but not more than 22kV.

## Higher voltages

Higher voltages, for the purposes of quality of service reporting, include HV, EHV and 132 kV networks.

## Horizontal Clearance

The horizontal distance between an overhead line and a building or structure.

## Houses

Premises including detached, semi-detached and terraced houses.

## HR and Non-Operational Training

The personnel management of all staff, and the provision of training to non-operational staff (defined separately in the glossary).

### INCLUDES:

- Provision of the Human Resources function
- Industrial and employee relations, including developing HR strategy, policies and procedures
- All costs of providing non-engineering and engineering training courses to non-operational staff (including training non-operational staff for standby activities)
- All costs of recruiting non-operational new staff
- Monitoring equal employment opportunity
- HR involvement in staff performance development and reviews
- Payroll management
- Cost of communications to staff, including staff magazine and internal websites
- Cost of IT & Telecoms training for non-operational staff
- Pension administration costs that cannot be easily apportioned to activity costs.

### EXCLUDES:

- Time of employees attending training (include as labour cost under the relevant activity of that employee)
- Costs associated with staff whose line management responsibilities require them to apply HR policies (include as labour cost under the relevant activity of that employee)
- IT and property management costs of operating a training centre (include under IT and property for non-operational training and within Operational Training for operational training)
- The cost of recruiting operational staff (include under Operational Training)
- Any PPF levy and pensions admin cost paid directly by the company rather than via contributions; which should be apportioned across all pension costs following the activities, where possible.

## **HV end connections involving EHV work**

Connection projects providing exit point(s) at HV level where the highest voltage of the assets involved in providing the exit point(s)on, and any associated works, is extra high voltage.

## **HV end connections involving only HV work**

Connection projects providing exit point(s) at HV level where the only voltage of the assets involved in providing the exit point(s), and any associated works, is high voltage.

## **HV metered DPCR4 Connection Projectss projects**

Connection projects; DPCR4 providing exit point(s) at HV level. This category is identical to the "HV" RRP reporting category used in DPCR4 reporting.

## **HV network**

The DNO network that operates at all voltages above 1kV up to and including 20kV.

## **HV or EHV end connections involving 132kV work**

Connection projects providing exit point(s) at either HV or EHV, where the highest voltage of the assets involved in providing the exit point(s), and any associated works, is 132kV.

## **HVP (High Value Projects)**

Schemes specified and agreed with individual DNOs to be undertaken during RIIO-ED1 that were specified in the RIIO-ED1 Final Determination or included during the price control period in accordance with CRC 3F (Arrangements for the recovery of uncertain costs).

## **HVP (High Value Projects) – DPCR5**

HVP schemes specified and agreed with individual DNOs to be undertaken during DPCR5 and continued in RIIO-ED1.

## **HV Sub Cables**

HV cable which is placed below the surface of the water and laid on or under the sea bed or the bed of a river or estuary whether or not designed for this purpose.

## **Hydro**

A category of DG. Electricity generation using a hydroelectric generator.

## **I**

## **Identification and Implementation of Network Improvement Initiatives - see Engineering Management and Clerical Support**



## **IDNO (Independent Distribution Network Operator)**

Any Electricity Distributor in whose Electricity Distribution Licence the requirements of Section B of the standard conditions of that licence have no effect (whether in whole or in part).

## **IFRS - see International Financial Reporting Standards**

## **Independent Connections Provider (ICP)**

A person or body with sufficient accreditation to carry out all or part of the Contestable Work related to a connection.

## **Intelligent control devices (EVs)**

As featured in the transform model developed through the smart grids forum, the novel monitoring and control solution to manage the supply of electricity to EVs connected to distribution networks, ensuring that the load of all EV chargers does not take the load above the rating of the LV circuit.

## **Incident**

Any occurrence on the DNO's Distribution System or other connected distributed generation, transmission or Distribution System, 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.

## **Incident on other systems**

Any incident arising on other connected electricity systems which leads to the interruption of supply to the customers of the licensee, including:

- National Grid Electricity Transmission (NGET) or transmission companies (in Scotland)
- distributed generators
- any other connected systems – which should be identified.

## **Income from contractors**

Income received from the contractor within the reporting year specific to street works.

## **Income from theft recovery**

Has the meaning given in CRC 5F (Treatment of income from recovery in respect of Relevant Theft of Electricity).

## **Independent connection provider (ICP)**

A provider of connections other than a DNO with sufficient National Electricity Registration Scheme accreditation to carry out all Contestable works.

## Indirect Activities

Activities listed below, which in most cases support work being physically carried out on network assets, and could not on their own be classed as a direct network activity. It is generally the case that indirect activities normally do not involve physical contact with system assets, whereas direct activities do.

### INCLUDES:

- Closely associated indirects which include:
  - Network Policy
  - Network Design & Engineering
  - Project Management
  - Engineering Mgt & Clerical Support
  - System Mapping
  - Stores
  - Wayleaves
  - Call Centre
  - Control Centre Vehicles & Transport
  - Operational Training
- Business support costs which include:
  - IT & Telecoms
  - Property Management
  - HR & Non-operational Training
  - Finance and Regulation
  - CEO etc

Note that operational engineers working on planning and project mobilisation, preparing and planning associated with protection settings, administration of outages, contract specification and liaising with contractors and customers are considered indirect activities.

### EXCLUDES:

- site surveys and non site based costs associated with flooding (in Direct Activities)
- resourcing and project preparation and Second Tier bid preparation associated with Low Carbon Networks (in Direct Activities).

## **Indirect Activity Allocation to Network Investment Costs (RAV) - Connections (Excluding where 3rd Party carries out DUoS funded work)**

The amount of Total Gross Indirect Costs that relates to Connection projects within Network Investment Costs where the DNO carried out the work that is DUoS funded.

## **Indirect Activity Allocation to Network Investment Costs (RAV) - Connections (Where 3rd Party carries out DUoS funded work)**

The amount of Total Gross Indirect Costs that relates to Connection projects within Network Investment Costs where an ICP carried out the work that is DUoS funded.

## Indirect Costs

The costs incurred undertaking Indirect Activities.

## **Inflation**

The change in prices as measured by the Retail Prices Index (RPI). Calculated from the arithmetic average of the monthly RPI figures for the regulatory financial year under review compared to the average of the index for the previous year.

## **Inflation adjustment**

Adjustment applied to the brought forward RAV balance each regulatory financial year for movements in RPI (either inflation or deflation).

## **Information**

Information means, in relation to any service to be provided by the Electricity Distributor, accurate information relating to contestable and/or non-contestable connection services.

## **Infrastructure and Management**

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## **Injurious affection**

Claims made for the detrimental effect upon property of the location of Distribution Network Assets.

Volumes of injurious affection should be reported only when the claim has been settled and a new agreement is in place.

## **Innovation Roll-out Mechanism (IRM)**

The mechanism for funding the roll-out of proven innovations as provided for under CRC 3D (The Innovation Roll-out mechanism).

## **Innovative Solution**

An Innovative Solution is any work, activity, asset or other solution that is listed in the Innovative Solutions worksheet.

## **Insourcing**

Performances of a business function internally. Insourcing is the opposite of outsourcing. Insourcing is a business decision that is often made to maintain control of critical production or competencies. For the avoidance of doubt, where a role within the organisational structure (or within a project or programme team) is filled by individual sub-contractors the cost should be included here.

## **Inspection Costs (Road Charges)**

Costs paid to Highway Authorities in respect of random sample inspections.

## **Inspection Penalties (Road Charges)**

The total cost and volume of individual reinstatements that do not comply with the Specification as identified by Street Works – Sample Inspections and Street Works –

Investigatory Inspections. This total cost and volume is essentially the number of defects and inadequacies that enter the Defect Process.

## **Inspections**

The visual checking of the external condition of system assets including any associated civil constructions such as buildings, substation surrounds, support structures, cable tunnels and cable bridges.

### **INCLUDES:**

- Helicopter and foot patrols
- Hammer testing of poles
- High resolution photography
- All asset surveys of whatsoever nature and purpose, including asset condition surveys
- Inspection of tools (including lifting tackle inspections and pat testing)
- Reading gauges.

### **EXCLUDES:**

- Use of diagnostic testing equipment (hammers used to test poles are not regarded as diagnostic testing equipment)
- Supervisory input to plan workloads and manage staff (include under EMCS)
- Data review except the initial recording on site (include under EMCS)
- Inspection of non-system assets (include under Property Management)
- Site surveys for flooding
- Any of the costs associated with the indirect activities as defined in this appendix
- Any of the costs associated with repair and maintenance.

## **Inspections - Foot Patrol**

The inspection of overhead lines via foot patrols, carried out either as a routine activity or as a non routine activity.

## **Inspections - Helicopter**

The inspection of overhead lines through the use of helicopters, carried out either as a routine activity or as a non routine activity.

## **Insulated Conductor**

An overhead conductor covered with insulating material which will prevent danger in the event of accidental contact with other objects and is deemed safe to touch.

## **Insulating Fluid**

For the purposes of environmental reporting, in general takes the form of an electrically insulating oil used in pressure assisted cable systems and transformers.

## **Insurance Totals**

The cost of managing the insurance function and insurance premiums and claims paid out.

### **INCLUDES:**

- the costs of managing the insurance function within the DNO or within related parties, including the arrangement and renewal of all insurance cover
- costs of Insurance Premiums
- any fees paid by the DNO to brokers for managing their insurance portfolio
- the activities of handling, processing and managing claims made against the DNO, whether covered by insurance or not
- the actual payments to Third Parties by DNO or by related party on DNO's behalf.

## **Insurance - claims paid out to the DNOs**

The income recovered from insurance companies in respect of insurance claims made by the DNO or related party.

## **Intact capacity**

With respect to the substations at Transmission Connection Points, the capacity with no local outages.

## **Interest – see Net Interest**

## **Interest Rate Swaps**

An agreement between two parties (known as counterparties) where one stream of future interest payments is exchanged for another based on a specified principal amount. Interest rate swaps often exchange a fixed payment for a floating payment that is linked to an interest rate (most often the LIBOR).

## **International financial reporting standards (IFRS)**

IFRS are standards, interpretations and a framework (being a foundation of accounting standards). They are principles based and are a broad set of rules as well as directing specific treatment for preparing financial statements.

## **Interruptible contracts**

Interruptible contracts are ones where the DNO has an agreement with the customer, such that supply to this customer could if required by the DNO have part/all of their supplies subject to interruption/reduction eg, demand side response. Interruptions and minutes lost due to these contracts do not need to be reported.

## **Interruption**

The loss of supply of electricity to one or more customers due to an incident but excluding voltage quality<sup>3</sup> and frequency abnormalities, such as dips, spikes or harmonics.

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<sup>3</sup> Where a customer (or customers) reports "low volts" then this should not be treated as a loss of supply, until the DNO confirms that the customer(s) is off supply. Equally, where a report of "reverse polarity" is

## Intervention

A deliberate action taken by a DNO to physically alter the health or capacity of the distribution network. For example, Interventions may include:

- Asset replacement
- Asset refurbishment
- Reinforcement to increase firm capacity for a Demand Group
- Increasing equipment fault level ratings
- Operational measures
- Permanent load transfers
- Execution of a contract for demand side response or distributed generation.

## Involving onsite diversionary works as part of project

Where a connection project involves any diversion work wrapped up within the quotation to the customer.

## IT applications costs

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## IT costs associated with SM roll-out

IT costs (both opex and capex) required to enable the DNO to effectively use smart metering data, including data aggregation systems. For example DCC integration costs, costs associated with integrated 'last gasp' data flows into network management system, system changes necessary to manage data flows associated with scheduling attendance to support smart meter roll-out. Does not include costs recorded in worksheets C2, C14 or CV12 .

## IT & Telecoms (business support)

The purchase, development, installation, and maintenance of non-operational computer and telecommunications systems and applications.

INCLUDES:

- All the operating and maintenance costs of the IT infrastructure, including:
  - Configuration and new requests, for client's personal computers, laptops, printers, hand held devices and monitors
  - Security administration
  - IT procurement
  - Help desk fault management
  - Disposals

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received by the DNO, the customer(s) should be considered "on supply" until the DNO confirms that the customer(s) is off supply, or needs to be disconnected in order to carry out repairs to the DNO's network.

- Hardware maintenance and operating systems (servers, firewalls, switches & ISDXs)
- Physical IT environmental costs and maintenance (ie, air conditioning, uninterruptible power supply, fire and flood prevention and detection) where these can be differentiated from the costs of property management
- Maintenance and all the operating costs of the IT infrastructure and management costs and Applications costs
- First and third party application software maintenance
- Software licence and licensing costs
- Annual fees for the maintenance of software licences, whether or not they include the right for standard upgrades or 'patches' to the software as they become available
- Hardware maintenance and operating systems
- IT environmental control systems
- Data centre operations
- IT Server/Communication Rooms maintenance
- Server/System administration
- Database administration
- Email administration
- Firewall administration
- Voice/Data LAN administration including Telephone handsets
- Enterprise management covering monitoring, backup, scheduling and capacity planning
- Disaster recovery.
- All the management and applications costs, including:
  - senior IT and Telecoms department management labour costs, except when engaged on specific infrastructure or applications;
  - administration support within the IT and Telecoms activity / department;
  - consumables (eg, stationery, disks, moveable storage mediums); and
  - other costs not relating specifically to other defined infrastructure or applications categories.
  - Provision, maintenance & usage costs of the Telecoms network including:
    - The cost of voice and data network circuit rentals for inter-office, home to office, Private Mobile Networks (PMRs) and field handhelds. Voice and data network, PABX, private mobile "voice" radio circuits ("PMR"), router and switch maintenance costs; Related licence fees; Usage charges for land line, mobile phones, facsimiles, field handhelds and PMR services wherever situated;
    - Data usage charges;
    - Call centre usage; and
    - Authorised home telephone account usage.
- Fees for the maintenance of software licences.

#### EXCLUDES:

- Ordnance survey data / licences.
- Any of the property costs associated with IT & Telecoms (include under Property Mgt), except where the cost of specific IT environmental control systems can be distinguished from other property costs.
- Operational IT & Telecoms ie IT equipment which is used exclusively in the real time management of network assets, but which does not form part of those network assets.

- BT 21st Century costs.
- Non Operational IT & Telecoms expenditure (see definition for IT & Telecoms (Non Op)).

## **IT & Telecoms (Non-Operational)**

Expenditure on new and replacement IT assets which are not system assets. These include Hardware and Infrastructure and Application Software Development.

### **Hardware and Infrastructure Costs**

#### **INCLUDES:**

- Purchase of IT equipment that is either located away from network assets, or does not directly relate to the control of those assets.
- Purchase and installation of new hardware systems (eg servers, firewalls, switches & ISDXs).
- Purchase of equipment for the physical IT environment (ie air conditioning, fire and flood prevention and detection), where these can be differentiated from Property costs.
- Purchase of Client equipment (eg desktops, laptops, monitors, printers, plotters).
- Purchase of Telecoms equipment (eg staff mobile devices) where not used exclusively in the real time management of network assets.

#### **EXCLUDES:**

- Software development and upgrade costs (report under Application Software Development).
- Operational IT & Telecoms ie IT equipment which is used exclusively in the real time management of network assets, but which does not form part of those network assets (include in Operational IT & Telecoms).
- Assets associated with the telecontrol of the network (Include in Operational IT & Telecoms).
- BT 21st Century costs.
- Ordnance survey data / licences (include under System Mapping).
- Any of the property costs associated with IT & Telecoms (include under Property Mgt), except where the cost of specific IT environmental control systems can be distinguished from other property costs.

### **Application Software Development Costs**

#### **INCLUDES:**

- Purchase of IT equipment that is either located away from network assets, or does not directly relate to the control of those assets.
- IT software upgrade costs: New and upgraded software licences where the benefit is received over more than one year.
- Cost of software development staff employed directly by the DNO or contracted to undertake development work during the reporting year.
- Purchase and installation of new application software and their license fees.

#### **EXCLUDES:**

- Annual maintenance charges whether or not they include standard upgrades to the software (include in IT & Telecoms (BS)).



- Operational IT & Telecoms ie IT equipment which is used exclusively in the real time management of network assets, but which does not form part of those network assets (include in Operational IT & Telecoms).
- Ordnance survey data / licences (include in System Mapping)
- Any of the property costs associated with IT & Telecoms (include under Property Mgt), except where the cost of specific IT environmental control systems can be distinguished from other property costs.
- BT 21st Century costs.

## IT End User

An individual (typically either an employee or contractor) that spends at least 10% of his or her time using a network company provided, funded, supported computing device that is part of the network company's IT infrastructure (ie, desktops, laptops, hand held devices etc) to support his or her business functions.

N.B. typically IT end users' relates to individuals (FTEs) and not devices, except where individuals share devices. A single individual using multiple devices counts as one IT end user. The number of end-users will never exceed the FTE count of employees plus contractors plus other users.

- The user must have direct access to internal applications/systems to execute specific transactions on behalf of the network company. Examples: (i) full time employee, working 40 hours per week uses several devices for a total 20 hours per week – counts as one IT end user, (ii) a part-time employee working 20 hrs per week uses several devices for a total of 2 hours per week – counts as 0.5 IT end users, (iii) a contractor engaged 20 hours per week on network company business using his or her own devices for 10 hours and network company devices for one hour – counts as zero IT end users.
- The IT end user count does NOT include casual users of voice response systems, mobile phones, and pagers.
- The IT end user MAY include some users that are not employees or contractors (ie, agents/brokers/dealers/distributors/supply chain partners), but only if they are using a computing device provided, funded, and supported by the network company at least 10% of their time, and use network company applications/systems to execute specific business transactions. These 'other' users must be named users on the network company systems and use the network company's IT support organisation.
- Smart phone users should only be counted if the user uses the smart phone as the primary device to access internal applications and does this for at least 10% of his or her time. Smart phone users are NOT to be counted if the phone is only used for voice calls and email.
- Only count IT end users once even if they have multiple devices.
- Shared devices used in multiple labour shifts or for groups of people should be counted as a single IT end user per shift. Do not count each user separately since the device is shared. Network printers should not be counted as a workstation. Example: there are 4 employees using one PC at a workstation. This would count as 1 IT end user. If the scenario occurs across 3 shifts, this should be counted as 3 IT end users.

**J**

**K**

**L**

## **Labour**

Costs including any form of payment, consideration or other benefit, paid or due to or in respect of employees, including the costs of temporary or agency staff.

### **INCLUDES:**

- Gross salaries and wages of all employees, including payments resulting from bonus and profit-related payment schemes
- Employer's national insurance contributions
- Salary sacrifice payments
- Sick pay
- Sickness benefits
- Private health insurance
- (non pension related) retirement awards
- Death in service benefits
- Paid leave
- Company cars or payments in lieu thereof
- Standby costs -are the costs incurred when employees are on standby to be called upon if required in the event of a specified occurrence in accordance with their terms of employment
- Agency staff - persons who are not under a direct contract of employment with the licensee or an affiliate of the licensee but are hired through a third party or employment agency
- Subsistence
- Travel
- Entertainment expenses
- Share options (including employee share purchase plans, employee share option plans)
- Medical insurance costs
- Childcare assistance
- Protective clothing
- Welfare costs.

### **EXCLUDES:**

- Professional services
- Contractors
- Company vehicles take home over night, other than company cars (include under vehicles and transport activity)
- Small tools and equipment (include under non-operational new assets and replacement)
- Pension costs (employer only)
- Pension deficit repair payments.

For all activities except operational training excludes time spent on operational training courses (include in labour under operational training).

## **Landfill gas, sewage gas, biogas (not CHP)**

A category of DG. Electricity generation by burning gasses from landfill, sewage or biogas, but not including combined heat and power.

## **Lane Rental Admin Costs**

The costs from processing lane rental applications.

## **Lane rentals**

Charges paid to a Highway Authority under Section 74A of NRSWA requiring undertakers to pay a daily charge for occupation of the highway.

## **Lane Rental Scheme - Existing**

A lane rental scheme which was implemented as at 1 July 2013 and where the DNO had 12 months of cost data relating to this scheme.

## **Lane Rental Scheme - New**

A lane rental scheme which was not operational by 1 July 2013 or where the scheme has been implemented by this date but the DNO did not have 12 months of cost data relating to the scheme.

## **Large CHP ( $\geq 50\text{MW}$ )**

A category of DG. Electricity generation using combined heat and power plant that is greater or equal to 50MW.

## **LCN Fund**

An annual competition in DPCR5 for funding larger-scale innovative projects that had the potential to deliver carbon or other environmental benefits to consumers. The LCN Fund has been replaced by the Network Innovation Competition (NIC) for RIIO-ED1.

## **LCN Fund Directly Attributable Costs**

As defined as directly attributable costs in CRC 2J (Low Carbon Networks Fund).

## **LCN Fund Royalties**

Royalties earned through LCN Fund projects.

## **Learner Costs**

The costs of operational employees undertaking operational training, net of any third party funding contribution (to be reported as Cost Recoveries in cost type split).

Learner costs can include both time spent on classroom training and time spent on on-the-job training.

INCLUDES (on a pro-rated basis based on the proportion of employee's time spent on operational training):

- Labour
- Pensions
- Any travel and accommodation costs associated with attending operational training courses/ on the job training activities Any external funding for trainees (net off costs, report in Cost Recoveries).

#### EXCLUDES:

- Labour costs of third party employees undertaking training within DNO training facilities (include in Non Price Control De-Minimis)
- Overtime costs of staff on operational training programmes, unless specifically training related (report as Labour under the relevant activity being undertaken)
- Non-operational training learner costs (reported within labour against activities undertaken by that employee).

## Leaver

An employee performing a role that falls within the definition of Craftsperson or Engineer leaving the licensee (or related party undertaking work for DNO) during the year. Count 1 leaver for one full time employee leaving at any time in the year. If leaver worked part time then report on full time equivalent basis eg if employee worked 3 days per week report 0.6 FTE regardless of when in year leaver left company.

### Leaver - due to retirement

A Leaver who retires from the company and immediately receives pension (ie, not deferred pensioner).

### Leaver due to other reasons than retirement

A Leaver who leaves the company but does not immediately take pension.

## Legacy Metering Equipment

Has the meaning given to it in Standard Condition 1 of the electricity distribution licence.

## Legal and Safety

Investment or intervention where the primary driver is to meet safety requirements and to protect staff and the public. This does not include assets replaced because of condition assessment or to meet ESQCR regulations 17 and 18.

## Licence fee payments

Payments by the licensee to the Authority determined in accordance with Standard Condition 5 of the electricity distribution licence.

## Load Index (LI)

Tier 2 Network Output Measure related to network utilisation. The Load Index (LI) is a framework for collating information on the utilisation of the Distribution Assets supplying each Demand Group and for tracking changes in their utilisation over time.

The LI will be used to inform an assessment of the efficacy of the DNOs' general reinforcement decisions over the price control period. Under the LI framework, each Demand Group is assigned a ranking of LI1 to LI5 by the DNO based on the loading and firm capacity at the site, and for the forecast period based on the DNO's views about future load growth, the options for Intervention and their impacts.

Using the Load Index Logic, each Demand Group is assigned an LI ranking in accordance with the definitions below:

- LI1 - Significant spare capacity
- LI2 - Adequate spare capacity
- LI3 - Highly utilised
- LI4 - Fully utilised, mitigation requires consideration
- LI5 - Fully utilised, mitigation required.

## **Load index firm capacity**

The maximum capacity that is available at a substation, or within a substation group, immediately following the occurrence of an (n-1) incident.

The Firm (n-1) Capacity shall only include capacity that is immediately available, under such circumstances, without requiring manual intervention.

The Firm (n-1) Capacity shall consider:

- The capability of the remaining circuits that normally supply the demand group, following the most onerous (n-1) incident.
  - In determining the capabilities of circuits, and their components, to supply the demand group, the appropriate component ratings shall be used. These ratings shall take into account:
    - asset design
    - the prevailing winter or summer ambient conditions when the maximum demand on the substation occurs
    - the general nature of the load profile (ie, continuous, cyclic etc) and duration of the maximum demand
    - the prior loading on the equipment.
  - Specific analysis of load profiles and prior loading is likely to only be undertaken in examining the reinforcement need at highly utilised substations, or substation groups. Where specific analysis has not taken place for a given circuit and in the absence of other evidence:
    - the rating of Continuous Emergency Rated (CER) power transformers (in accordance with EA-TS 35-2, or equivalent specification), or transformers traditionally run as such, shall be considered as being the appropriate emergency rating for the season in which the maximum demand occurs
    - the rating of non-CER power transformers, and underground cables, shall be considered as being the normal cyclic rating for the season in which the maximum demand occurs. This shall be the rating that is considered by the DNO as being applicable for typical load profiles, and shall consider the appropriate operation of any forced cooling, where available.
  - Where specific analysis has been undertaken, the appropriate rating for the profile (continuous, cyclic or emergency) shall be considered for power transformers and/or distribution ratings for underground cables.
- In the case of substations and circuits supplying a single customer and forming part of that customer's sole use assets the substation should be noted as such in the load indices. Reinforcement costs would normally fall to the customer.

- Any transfer capacity that is made immediately available through normally connected interconnection (closed parallel operation) or by automatic transfer schemes.
- Any capacity that is made immediately available through commercial contracts associated with Demand Side Response.
- Any assessed contribution to security of supply from distributed generation (in accordance with the principles outlined in Engineering Recommendation P2/6).

## **Load index logic**

Decision criteria adopted by all DNOs to allocate sites a Load Index (LI) ranking LI1 to LI5.

Demand driver: measure of the maximum demand of the Demand Group relative to the firm (n-1) capacity of the Demand Group

Duration driver: measure of the hours/energy at risk per annum brought about by the capacity utilisation for the Demand Group.

## **Load index max demand**

The maximum demand that is normally supplied from a substation, or substation group and it shall be based upon recorded data that has been cleansed and validated.

The maximum demand shall consider:

- the maximum demand associated with normal running arrangements
  - DNOs have discretion in the methodology behind this adjustment. But this methodology should be consistent throughout the period
- the application of suitable weather correction, where considered to be appropriate
  - DNO can choose whether or not a weather correction is appropriate for their network. Any adjustment should be relevant to Average Cold Spell conditions
  - DNO's decision to opt in or out of making this adjustment will be binding throughout the price control period
- that the latent demand, supplied from distributed generation, is accounted for in accordance with the guidance contained in Engineering Technical Report 130
- where identified, any non-firm demand shall be excluded from the maximum demand.

## **Load related expenditure**

Load related expenditure includes all costs associated with the following activities of groups of activities:

- Load related expenditure comprising:
  - Connections (within the price control)
  - Reinforcement (primary, secondary and fault level)
  - Transmission Connection Points.

## Long Life Assets Pool

A long life asset is an asset whose expected working life when new is more than 25 years. Long life assets should be included in the special rate pool where a writing down allowance of 10% per annum is applicable.

## Losses

A measure of the difference between units entering and units exiting the DNO network through different connection points.

## Loss management actions

Actions taken (which are not related to equipment to manage losses) where the primary driver is managing distribution losses. For example, actions to tackle theft in conveyance.

## Low Carbon Technologies (LCTs)

LCTs is the collective term for the following technologies:

- Heat pumps at existing connections that does not lead to a new or modified connection
- Electric vehicle (EV) chargers, both slow and fast charging, at existing connections that does not lead to a new or modified connection
- Photovoltaics (PV) connected under Engineering Recommendation G83
- Other generation technologies (excluding PV) connected under Engineering Recommendation G83.

## LV (Low Voltage)

Voltages of 1kV and below.

## LV board (WM)

Wall-mounted distribution boards within indoor substations with open type assembly usually used for live withdrawal/insertion of fuse-links. Excludes LV board (X-type network) (WM).

## LV board (X-type network) (WM)

Wall-mounted distribution boards with open type assembly usually used for live withdrawal/insertion of fuse-links. Used on interconnected networks with unit type protection.

## LV circuit breaker

All non-integral Ground mounted Circuit Breakers (both indoor and outdoor) free-standing or part of an LV pillar. This includes LV circuit breakers which terminate large LV services.

## LV end connections involving EHV work

Connection projects providing exit point(s) at LV where the highest voltage of the assets involved in providing the exit point(s), and any associated works, is EHV.

## **LV end connections involving HV work**

Connection projects providing exit point(s) at LV where the highest voltage of the assets involved in providing the exit point(s), and any associated works, is HV.

### **LV main (OHL) conductor**

Open wire or covered conductor (ABC etc) associated with LV overhead lines. This excludes services.

Any associated poles are separately reported.

### **LV Main (UG Consac)**

A specific construction of 3 phase LV underground cable utilising paper insulation and a concentric aluminium neutral/earth sheath. This excludes any other cables design and services.

### **LV Main (UG Plastic)**

Underground cable designs utilising plastic insulation (typically PVC) (eg, Waveform etc). This excludes any other cable designs and services.

### **LV Main (UG Paper)**

Underground cable designs utilising paper insulation (eg, PILC etc). This excludes any other cables designs and services.

## **LV metered DPCR4 connections projects**

Connection projects; DPCR4 providing exit point(s) at LV level. This category is identical to the "LV" RRP reporting used in DPCR4 reporting.

## **LV network**

The DNO network that operates at voltages of 1 kV and below.

### **LV Pillar (ID)**

A free standing or transformer mounted LV cable connection pillar with busbars, circuit protection and isolation facilities located indoors.

### **LV Pillar (OD)**

A free standing or transformer mounted LV cable connection pillar with busbars, circuit protection and isolation facilities located outdoors within or adjacent to a substation and connected directly to the substation distribution transformer.

### **LV Pillars (OD Street Located)**

LV Pillar (OD Street Located) is a free standing LV cable connection pillar with busbars, circuit protection and isolation facilities located outdoors remotely from an HV/LV substation.



## **LV Poles**

Support for LV overhead line constructed of wood, concrete, or steel (includes small footprint steel masts).

## **LV Service (OHL)**

A LV overhead line which connects either a street electrical fixture, or no more than four consumers' installations in adjacent buildings, to an overhead main.

## **LV service (UG)**

An underground cable which connects either a street electrical fixture, or normally no more than four consumers' installations in adjacent buildings (with the exception of looped underground services), to either an LV Underground Main or LV Overhead Main.

## **LVSSA**

A single Low Voltage Demand Connection (other than of a load that could reasonably be expected to cause disruption to other Customers) to single Premises, involving a single-phase connection and no significant work other than the provision of a service line and the Electricity Distributor's fuses.

## **LVSSB**

LVSSB means a Demand Connection (other than of a load that could reasonably be expected to cause disruption to other Customers) via low-voltage circuits fused at 100 amperes or less per phase with whole-current metering, and where the highest voltage of the assets involved in providing such connection, and any associated works, is Low Voltage, to

- a development scheme requiring more than one but fewer than five single-phase connections at Domestic Premises and involving only the provision of a service line and the Electricity Distributor's fuses
- a development scheme requiring fewer than five single-phase connections at Domestic Premises and involving an extension of the existing low-voltage network, or
- single Premises requiring a two-phase or three-phase connection and involving only the provision of a service line and the Electricity Distributor's fuses.

## **LV Street Furniture**

Civil works associated with the 'LV UGB & LV Pillars (OD not at Substation)' asset category. This includes replacement of UGB covers, repairs to UGB structures and civil repairs to LV pillars not involving full replacement of the pillar.

## **LV UGB**

LV UGB is defined as an underground LV cable marshalling point with the facilities for the insertion and removal of links

## **LV UGB & LV Pillars (OD Street Located)**

A category of assets that relates to both LV UGB and LV Pillars (OD Street Located), where:

- LV UGB is defined as an underground LV cable marshalling point with the facilities for the insertion and removal of links
- LV Pillar (OD Street Located) is a free standing LV cable connection pillar with busbars, circuit protection and isolation facilities located outdoors remotely from an HV/LV substation.

## **LV Underground Service Transfers**

A refurbishment activity associated with the asset replacement of all types of LV underground cables (ie, cable overlays). LV underground service transfers relates to the activity of connecting existing LV underground services to a new LV underground (mains) cable as required when the existing LV underground (mains) cable is the subject of asset replacement.

INCLUDES:

- LV underground service cable installation required to extend the existing LV underground service
- jointing of the new length of LV underground service cable onto the existing LV underground service cable
- jointing of the new length of LV underground service cable onto the new LV underground (mains) cable.

EXCLUDES:

- replacement of a complete LV underground service
- any LV service underground service transfers undertaken as part of an unplanned incident on power system voltage equipment that is dealt with via Troublecall.

## **M**

### **Maintenance Period Demand**

The demand level (MVA) experienced at a Transmission Connection Point substation and is the maximum demand level expected during the normal maintenance period. This level is such that the period in which maintenance could be undertaken is not unduly limited. Unless better data is available this should be the level corresponding to demand conditions of 67% of overall group demand (which, for groups supplied through multiple Transmission Connection Point substations, is the total demand at all Transmission Connection Points in the group).

### **Major Incidents and Emergency Planning – see Control Centre**

## **Margin**

For the purpose of connections reporting, is the difference between the receipts from customers and the costs incurred to provide connections.

For the purpose of Related Party Margin reporting, is the difference between the costs incurred by the related party and the charge to the DNO or other body.

## **Margin included in quotation offer**

The level of margin that is applied to the Element of connection that is Sole Use funded - contestable within the quotation accepted by the customer.

## **Market Rent**

A charge for property rental based on the rental assessment of the value of the premises on the open market and not actual payments made under the lease.

## **Marshalling kiosk - see Substation RTU, Marshalling Kiosk and Receivers**

## **Material change**

A change (from forecast) identified by the DNO during the price control period, and reported with the Secondary Deliverables RIGs, and discussed with Ofgem, that the DNO considers is likely to have a material impact on its performance against the Agreed Secondary Deliverables.

A Material Change can fall into one of the following four categories:

- (a) changes to input data
- (b) changes to the assessment technique/calculation methodology
- (c) changes due to external factors, and
- (d) changes to the DNO's asset management strategy and approach, which could include a change in attitude to risk overall, or a shift in priorities from one risk to another because of one of the changes identified in (a), (b), and (c) above.

## **Material change log**

Formal record of all Material Changes identified by the DNO over RIIO-ED1, reported with the Secondary Deliverables RIGs, and discussed with Ofgem. The Material Change Log is to include details on the nature of the Material Change discussed, the DNO's views on the impact of each Material Change on performance relative to the Agreed Secondary Deliverables, and any issues or concerns raised by Ofgem as part of discussions.

The information contained in the Material Change Log is to assist Ofgem in forming its conclusions as part of the assessment of Secondary Deliverables at the end of RIIO-ED1.

## **Materials**

The physical components that go into the make-up of a tangible asset or are used for maintenance or other duties for the activities undertaken by the licensee and related parties.

INCLUDES:

- tangible items that become part of the network assets

- small tools, equipment and consumables utilised to allow work on the network and to undertake other activities
- purchase, rent or lease of vehicles (only where they are “non-operational assets”)
- fuel for the operational fleet (include under the vehicles and transport activity)
- materials provided by a contractor where the costs have been separately identified
- delivery costs of materials or stock to stores or site from the manufacturer/supplier
- postage and stationery.

**EXCLUDES:**

- company cars
- procurement management
- delivery costs from stores to another stores or to site
- storage of the materials, unless the purchase price includes the cost of storage by the supplier.

### **Medium CHP ( $\geq 5\text{MW}$ , $< 50\text{MW}$ )**

A category of DG. Electricity generation using a combined heat and power plant, of size 5MW and over, but less than 50MW.

### **Medium Term Performance (MTP)**

Reporting under the Secondary Deliverables RIGs and the Cost and Volumes RIGs.

### **Meshing (permanent)**

As featured in the transform model developed through the smart grids forum, the converting the operation of the network from a radial feeder or ring (with split points) to a solid mesh configuration.

### **Meshing (temporary)**

As featured in the transform model developed through the smart grids forum, this refers to running the network solid, utilising latent capacity, and relying on the use of automation to restore the network following a fault.

### **Metered Quotations standards**

The following standards - ECGS 1A, 1B, 2A, 2B, 3A, 3B and 3C. These, measured quarterly, in aggregate have a 90% performance standard set in Standard Condition 15A of the electricity distribution licence.

### **Metering Equipment**

Has the meaning given to it in Standard Condition 1 of the electricity distribution licence.

### **Metering Services – see DRS6. Metering Services**

## **Micro CHP (domestic)**

A category of DG. Electricity generation using a combined heat and power plant on a domestic premise.

## **Mini CHP (<1MW)**

A category of DG. Electricity generation using a combined heat and power plant, of size less than 1 MW, but excludes Micro CHP (domestic) generation.

## **Miscellaneous**

In relation to directly remunerated services see DRS9. Miscellaneous.

## **Miscellaneous repairs/Safety repairs (SM)**

Additional repair work carried out by a DNO as part of the smart meter roll-out, not covered in any other reporting category.

## **Modelling Assets**

Utilising optimisation tools and techniques to maximise the use of assets and forecast performance in future years. The modelling should take into account risk and likelihood of failure of particular assets, the impact and consequences. DNOs will use the outputs from network modelling to inform decisions and develop network operating plans.

## **Modern Equivalent Asset (MEA)**

In relation to an existing asset, a modern asset with the same service capability.

## **MPANs/points of connection adopted from ICPs**

MPANs/points of connection which are obtained by the DNO by making adoption payment to the ICP owner of the relevant assets.

## **Multiple circuit**

Two or more circuits of the same construction voltage at HV or above which are laid in close proximity and would be expected to be installed in a common trench, set of ducts or tunnel.

A dual circuit refers to two circuits, which is the most common multiple circuit arrangement.

## **Multiple unit fault**

For the purposes of unmetered connections, means a fault which is affecting more than one unit of street lighting or other unmetered supplies. This may be by virtue of their being privately fed units fed from a lamp that is serviced by the Electricity Distributor.

## **MWh**

Megawatt hours (1,000,000 Watt hours).

## N

### n-1 capacity

The capacity (MVA) to meet demand at a Transmission Connection Point substation available under first circuit outage conditions.

The n-1 capacity shall be determined from:

- the available transformation capacity (from the transmission system) at the Transmission Connection Point substation
- the transfer capacity to adjacent Transmission Connection Point substations through circuits within the DNOs network (or, where agreement exists, through circuits within other DNO networks), available either through a normally interconnected network and/or immediate automatic switching.

The available transformation capacity and transfer capacity shall consider the capacity available following a worst case single first circuit outage (with the remainder of the system considered as intact).

The assessment of 'n-1 capacity' requires consideration of the ratings appropriate for the time of day, time of year and nature of load (eg, continuous or cyclic load cycle) of the demand that is to be met by the capacity.

### n-2 capacity

The capacity (MVA) to meet Maintenance Period Demand at a Transmission Connection Point substation available under second circuit outage conditions.

The n-2 capacity shall be determined from:

- the available transformation capacity (from the transmission system) at the Transmission Connection Point substation
- the transfer capacity to adjacent Transmission Connection Point substations through circuits within the DNOs network (or, where agreement exists, through circuits within other DNO networks), available either through a normally interconnected network and/or immediate automatic switching.

The available transformation capacity and transfer capacity shall consider the capacity available following worst case conditions of an unplanned circuit outage following an arranged circuit outage (with the remainder of the system considered as intact).

The assessment of 'n-2 capacity' requires consideration of the ratings appropriate for the time of day, time of year and nature of load (eg, continuous or cyclic load cycle) of the Maintenance Period Demand that is to be met by the capacity.

### National Parks

Has the meaning given to it in CRC 3J (Allowed expenditure on Visual Amenity Projects).

### National Scenic Areas

Has the meaning given to it in CRC 3J (Allowed expenditure on Visual Amenity Projects).

## Net Debt

The net borrowing of a business at a given date.

### INCLUDES:

- cash at bank
- bank overdrafts
- short term investments
- external borrowings (adjusted to reflect the ultimate liability in sterling resulting from any cross currency swaps relating to that debt instrument and excluding the impact of fair value adjustments and accrued interest).
- inter-company borrowings
- short term loans to related parties (except where they have demonstrated the characteristics of being long term in nature, for example by repeated renewal)
- long term loans to related parties only where they can be justified as for the benefit of the regulated business and are not in the nature of a distribution.

Inter-company debtors/creditors/working capital: where these can clearly be identified as such, they are excluded. However, if they cannot, because the licensee does not clear these balances on a regular basis, they will be treated as effective intercompany loans and included in net debt.

### EXCLUDES:

- year end balances of fair value adjustments on derivatives in regulatory accounts (except cross currency swaps)
- unamortised issue costs
- fixed asset investments where not readily converted to cash
- preference shares
- long term loans to related parties except where they can be demonstrated as for the benefit of the regulated business and are not in the nature of a distribution
- short term loans to related parties except where they have characteristics of long term loans.

## Net Interest

Actual net interest (payable less receivable) for the price controlled business extracted from regulatory accounts, used on an accruals basis and total interest on index-linked debt based on the charge to the income statement in regulatory accounts.

### INCLUDES:

- actual net interest (payable less receivable) for the price controlled business extracted from regulatory accounts, used on an accruals basis
- interest on index-linked debt based on the charge to the income statement in regulatory accounts (ie, on an accruals basis) .

### EXCLUDES:

- any interest that would otherwise be included, but which does not qualify for corporation tax relief
- movements relating to pension fund liabilities reported in the regulatory accounts within net interest
- fair value adjustments (eg, losses on derivatives)
- dividends on preference shares

- the cost of retiring long term debt early (including exceptional debt redemption costs)
- debt issuance expenses (including amortisation charges relating to discounts on debt issuance that had previously benefitted from a deduction against taxable profits)
- the cost of maintaining committed undrawn liquidity backup lines (ie, commitment fees).

## Net Sale Proceeds

Sale proceeds received less sale expenses incurred on disposal of a specific fixed asset.

## Network Asset Indices

Indices relating to asset health, criticality and risk, as defined for the RIIO-ED1 period in Standard Condition 51 of the electricity distribution licence.

## Network Assets

Operational Network Assets (excluding metering related costs) recorded in Balance sheet as Fixed assets, which are subsequently sold/disposed.

## Network Asset Secondary Deliverables

Secondary Deliverables relating to asset health, criticality and risk, as defined for the RIIO-ED1 period in Standard Condition 51 of the electricity distribution licence.

## Network Design & Engineering

Network Design and Engineering (ND&E) is a closely associated indirect activity included in the Core CAI worksheet.

Network Design and Engineering activity falls into two main categories

- Development of high level plans that facilitate the economic development of the distribution network;
- Specific planning and design necessary for individual projects.

### **Development of high level plans that facilitate the economic development of the distribution network includes:**

- Maintenance of network design data models
- Network-wide demand forecasting
- Systematic identification of network design deficiencies (eg, network modelling and analysis to identify of the need to undertake general or fault level reinforcement on 132 kV & EHV networks)
- Preparation of long term development statements
- Network Modelling associated with determination of Use of System charges.

### **Specific planning and design of individual projects includes:** Connection projects

- Load forecasting
- Network modelling
- Network and engineering design of the network to accommodate Connection projects, specific changes in either demand or distributed



generation and all aspects of the “non-load new and replacement asset installation” activity

- Provision of connection charge quotations
- Approval of network designs undertaken by other parties, such as independent connection providers, IDNOs and related parties
- The surveying of a specific overhead line in order to identify the detailed work required to address an identified problem/issue
- The determination of land profiles to select the routes and pole sizes for new or replacement lines
- The surveying associated with new and existing operational sites in order to identify detailed work requirements
- Network performance monitoring and evaluation of impact of salient policies
- Planning and design of connections projects including those which do not progress beyond the enquiry stage
- Planning new projects up to the point of authorisation.

Network Design and Engineering excludes:

- The surveying, patrolling or inspection of system assets to collect condition information (include in Inspection and Maintenance)
- Any IT or property costs relating to Network Design & Engineering (include in IT&T and Property Management indirect activities).

### **Network Innovation Allowance (NIA)**

Has the meaning given to it in CRC 2H (The Network Innovation Allowance).

### **Network Investment**

Includes all costs associated with the following activities:

- Load Related Expenditure (see definition)
- Non-load capex (excluding non-op capex) (see definition)
- Standalone funding (RAV).

### **Network Operating Costs**

Collectively includes the activities of:

- Faults
- Severe Weather one-in-twenty events
- Occurrences not incentivised (ONIs)
- Tree Cutting
- Inspections
- Repair and Maintenance
- Dismantlement
- Substation Electricity
- Remote Location Generation Operating Costs
- Smart Metering Roll Out.

### **Network outputs revenue adjustment**

Financial amendment to the DNO's revenue following the conclusion of the Network Outputs assessment for DPCR5.

## Network Policy

Network Policy is a closely associated indirect activity included in the Core CAI table (C7).

This activity consists of the development and review of environmental, technical and engineering policies, including all research and development apart from any defined as NIA (see exclusions).

### INCLUDES:

- evaluating the impact of changes in relevant legislation
- development, regular review and updating of engineering policies, such as those for:
  - Asset inspection
  - Asset maintenance
  - Asset replacement
  - Asset risk management
  - Technical standards and specifications
  - Plant, equipment and component specifications
  - Vegetation management
  - Network design and protection
- analysis and interpretation of asset condition data, for the purpose of informing the process of improving policies
- development, regular review and updating of the environmental policy
- research and development (inc. Fees paid to research and development organisations, such as EATL).

### EXCLUDES:

- NIA related research and development.
- Development, review and updating of Health and Safety policies (include under Engineering Management and Clerical Support)
- Development, review and updating of policies relating to industrial and employee relations (include under HR & Non Operational Training).

## Network Regulation

Any reasonable costs associated with network regulation ie, any costs that the network company would not reasonably have incurred were it operating in a non-regulated environment.

## New Recruits

New employee recruited to be trained to fill an operational role (craftsperson or engineer) and reported within Operational Training.

- there are insufficient appropriately skilled employees available in the market-place
- where there is difficulty recruiting sufficient employees
- where market rates charged by suitably skilled candidates mean that internal training is more efficient option.

## New Recruit – craftsperson

Trainee on a formal apprenticeship, higher apprenticeships or equivalent training scheme with the objective of becoming a craftsperson (see definition).

## **New Recruit – engineer**

Trainee of a formal Graduate, A Level, HNC scheme or equivalent training scheme with the objective of becoming an engineer (see definition).

## **New Transmission Capacity Charges – see Transmission Connection Point Charges**

## **New Types of Circuit Infrastructure**

As featured in the transform model developed through the smart grids forum, the deployment of new, higher capacity circuit infrastructure, incorporating modern conductor types and designed in a way to minimise electrical resistance and reactance.

## **New Works**

In relation to unmetered connections, it includes new connections to existing mains, service transfers and disconnections.

## **NHHSCP (Non-half-hourly Settled Connection Point)**

A connection point that, in accordance with the BSC, is registered in SMRS as having a Non Half Hourly Metering System (which may include an Equivalent Meter). Energy may enter or exit the Distribution System at a Non-half-hourly Settled Connection Point.

## **NIC Funding**

Has the meaning given to it in CRC 5A (The Network Innovation Competition).

## **NIC Royalties**

Royalties earned with through NIC projects.

## **Noise Pollution**

The activity of investigating reports of noise pollution, and consequential remedial works (if necessary). In this context, noise pollution is defined as levels of noise associated with the normal operational characteristics of electrical distribution assets that may be deemed to be a nuisance and subject to Part III of the Environmental Protection Act 1990 (EPA).

## **Non-contestable**

Non-contestable connection work. This is work that can only be carried out by the host DNO/licence holder.

## **Non-damage incident**

A non-damage incident is defined as any unplanned incident where supply can be restored from the original source by network switching and without the need for the repair of equipment. For example:

- the remote or manual operation of a pole mounted auto recloser that had previously completed its duty cycle and locked out, to restore supplies, is regarded as network switching
- the changing of a blown LV fuse in an LV feeder pillar is regarded as network switching and is therefore not considered to be a repair of equipment
- the removal of trees from an otherwise healthy overhead line is not considered to be the repair of equipment.

## **Non-DNO Connection Point**

A connection point between two licensed Electricity Distributors, where one of the Electricity Distributors is not a DNO (eg, they are an Independent Distribution Network Operator (IDNO)).

## **Non-DUoS**

Revenues and related cost in generating those revenues that are not remunerated by charges from the operation of CRC 2A (Restriction of Allowed Distribution Network Revenue), specifically in the Revenue and Financial Issues Reporting Pack the PU term in Part C of that condition for attributing and reporting costs and tax data analysis.

## **Non-embedded BMU**

A BMU that is not an Embedded BMU Connection Point.

## **Non-embedded DCSP**

A DCSP that is not an Embedded DSCP.

## **Non firm contracts**

Non firm contracts are ones where the DNO has an agreement with the customer, such that during an interruption to this customer they will have part/all of their supplies subject to potentially delayed restoration eg, non-firm supply. These contracts can arise as part of projects funded through Ofgem's the Low Carbon Networks Fund. Interruptions and minutes lost due to these contracts before firm load is restored do need to be reported, and clock stopping can be used.

## **Non-Load Capex (excluding non-op capex)**

- Diversions
- Diversions (Rail Electrification)
- Asset Replacement
- Refurbishment
- Civils Works
- Operational IT&T
- Black Start
- BT21C
- Legal and Safety
- Flood Mitigation
- Critical National Infrastructure (CNOI)
- Rising Laterals and Mains (RLM)
- Overhead Line Clearances

- Worst Served Customers (WSC)
- Visual Amenity
- Losses
- Environmental Reporting.

## **Non Load Related Investment**

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

## **Non-Operational Assets**

Assets which are not system assets.

INCLUDES:

- Vehicles and Transport (Non Operational)
- Small tools, equipment, plant and machinery (STEPM)
- Non-Operational Property:
- IT & Telecoms:

(Non-Operational).EXCLUDES:

- System assets
- Company cars (except where included under the labour cost).

## **Non-Operational Capex**

Expenditure on new and replacement Non-Operational Assets which are not system assets.

## **Non-Operational Property**

Expenditure on new and replacement property assets which are not system or operational assets.

INCLUDES:

- Premises used by people (eg stores, depots and offices) which are not operational premises (eg, substations)
- Office equipment.

## **Non-Operational Staff**

Employed by the DNO or related party and does not meet definition of Craftsperson or Engineer.

## **Non-technical losses**

Electricity units lost for non-physical reasons, including theft and measurement inaccuracy.

## **Non Trading Rechargeables (NTRs)**

Are defined as DRS2 and DRS3.

INCLUDES:

- The dismantlement of network assets (at all voltage levels) where new assets are being installed as part of an NTR project (including service alterations).
- The dismantlement of network assets (at all voltage levels) at the request of a third party and where the cost of dismantlement is chargeable to the third party.
- Short term de-energisation (and subsequent re-energisation) of a metering point, at the customer's request, in order to allow customer to undertake work on their own electrical installation. The physical work undertaken by the DNO would typically be the removal and subsequent re-installation of a cut out fuse.
- Dismantling services to street lighting at the request of a third party and where the cost is wholly or partially chargeable to a third party.

## **Non-undergrounding visual amenity schemes**

Schemes undertaken to reduce the visual impact on the landscape of distribution assets other than undergrounding of overhead lines. These may include re-siting or modifying of assets where the driver for the activity is reducing visual impact. The visual amenity activity does not include any works undertaken as a consequence of wilful interference with the appearance of DNOs' assets eg, graffiti on substations.

## **Non-Valid Referrals (SM)**

DNO attendance at customer site (at request of supplier or meter operator) as part of the smart meter roll-out, where on attendance it is discovered that the referral was not valid according to the Service Level Agreement criteria. Includes abortive calls.

## **Non-Variant Costs**

Costs which are not subject to uncertainty mechanisms.

## **North of Scotland Resilience**

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## **Notification Penalties**

Fixed Penalty Notices issued by a Highway Authority if the data in a notification is incorrect or if the notification is sent late.

## **Notifications**

An electronic notice required by NRSWA or the Transport (Scotland) Act 2005 which is sent to a Highway Authority relating to an occupation of the Highway. This is a parent definition to describe all Permit (PAA and Permit), Notice (s54, s55 and s57 notices), Work Start and Stop (s74) and Registration (s70) notifications.

For the tables this category only considers street works notices also known as s54, s55, s57, s70 and s74 notices.

EXCLUDES:

- Permits.

## **NP – see National Parks**

## **NRSWA - New Roads and Street Works Act (1991)**

### **O**

#### **O&M Charges**

Ongoing operation and maintenance costs paid for by the connecting party within a connection offer.

#### **Occurrences not Incentivised (ONIs)**

Any occurrence logged on the enquiry service operated by the licensee under standard condition 8 (Safety and Security of Supplies Enquiry Service) which is not an incident and which is not as a result of being identified during the installation of, or attempted installation of, a smart meter.

These are recorded in two categories:

- Power System Voltage Equipment / No Unplanned Incident
- Other Occurrences (Not Affecting Power System Voltage Equipment).

#### **Occurrences not requiring site visits**

A Troublecall occurrence resolved or closed without requiring a site visit. Excludes occurrences reported as Meters or Abortive Visits.

#### **Offshore wind**

A category of DG. Electricity generation using a wind turbine situated offshore.

#### **OH Clearance Sites**

Is a span of overhead line that has one or more instances of non-compliance with the Electricity Supply Quality & Continuity Regulations (2002) (as amended) regulations 17 and 18, for vertical and horizontal clearances respectively.

Where a span of overhead line has more than one non-compliance issue it will only be counted once. For the avoidance of doubt this also means that where a span has both horizontal and vertical clearance issues then this will be counted as one Overhead Clearance Site.

Two adjacent spans of overhead line, each of which has one or more instances of non-compliance will be counted as two Overhead Clearances Sites. This applies even where the reason for the non-compliance is the same for both spans (for example where a building has been built next to two spans of overhead line).

#### **OH Horizontal or Vertical Clearance - Outstanding Sites to Be Resolved**

Relates to Overhead Clearance Sites where activities to deal with non-conformance issues with Electricity Supply Quality & Continuity Regulations (2002) (as amended) regulations 17 and 18 have not been undertaken and the Overhead Clearance Site therefore remains unresolved at the end of the regulatory reporting year.

## **OH Horizontal or Vertical Clearance - Sites Identified In Year**

This refers to the additional Overhead Clearance Sites that have been identified during the regulatory year, which are not already included in the previous year's OH Horizontal or Vertical Clearance - Outstanding Sites to Be Resolved.

Such additional sites may arise, for example, where buildings are erected close to overhead lines, where ground levels are changed as a result of roadworks or due to improved measurement techniques.

Where these additional Overhead Clearance Sites are resolved during the regulatory year, they should still be included in the overall volume of sites identified in the year to illustrate the scale of additional issues that are being identified.

There may be occasions where sites that were previously classified as being non-compliant are reassessed and deemed to be compliant. Since no work has been carried out, they should be entered as a negative count against the overall volume of sites identified in the year.

## **OH Horizontal or Vertical Clearance - Sites Resolved**

Relates to Overhead Clearance Sites where all non-compliance issues with Electricity Supply Quality & Continuity Regulations (2002) (as amended) regulations 17 and 18 have been resolved during the reporting year.

For sites with more than one non-compliance issue, all issues need to be resolved to classify the Overhead Clearance Site as being resolved.

Sites that were previously classified as being non-compliant but are reassessed and deemed to be compliant should not be classified as being resolved. Since no work has been carried out, they should be entered as a negative count against OH Horizontal or Vertical Clearance - Sites Identified in Year.

## **OH Horizontal or Vertical Clearance – Sites Resolved As Part of Other Work**

Relates to Overhead Clearance Sites where all non-compliance with Electricity Supply Quality & Continuity Regulations (2002) (as amended) regulations 17 and 18 have been resolved as a by-product of work undertaken for other reasons. For example changes to non-compliant overhead line as part of a general reinforcement project.

## **OHL (Overhead Lines)**

Any electric line which is placed above ground and in the open air. This excludes that part of an underground cable running above ground for the purpose of termination with overhead lines.

## **OHL inside Designated Areas at end of reporting year (km)**

The total circuit length of overhead lines in commission at the end of each reporting year (31 March) within Designated Areas.

## **OHL inside Designated Areas at start of reporting year (km)**

The total circuit length of overhead lines in commission at the beginning of each reporting year (1 April) within Designated Areas.



## **OHL (km) Removed During Year**

The length of overhead line (km) that has been removed under the eligibility criteria for the Visual Amenity Allowance scheme provided for under CRC 3J (Allowed expenditure on Visual Amenity Projects). This length should include eligible lines removed under the DPCR5 allowance or other funding mechanisms.

## **Oil in service in cables**

Total volume of oil present fluid-filled cables in commission at the end of the reporting year, measured in fluid litres.

## **Oil Pollution Mitigation Scheme - Cables**

Scheme undertaken where the primary objective is to reduce or remove the risk of discharging insulating oil from pressurised fluid filled underground cables into the environment.

## **Oil Pollution Mitigation Scheme - Non Operational Sites**

Schemes undertaken where the primary objective is to reduce or remove the risk of discharging insulating oil into the environment at non-operational sites such as oil storage facilities at depots.

## **Oil Pollution Mitigation Scheme - Operational Sites**

Scheme undertaken where the primary objective is to reduce or remove the risk of discharging insulating oil into the environment at operational sites.

## **ONI – see Occurrences not Incentivised**

## **ONI - Abortive Visits - No Immediate Work Required**

An ONI that does not affect DNO's power system voltage equipment.

An ONI, where, following a site visit, it is identified that no immediate action is required. For example, this includes where a site visit identifies that:

- no incident or permanent fault exists (eg a report of low overhead line that was found to be a telecommunication line or where customers are found to be on supply)
- the issue relates to third party apparatus (eg the cause of a loss of supply was found to be on customer's equipment or the customer's trip switch has operated)
- the issue relates to metering equipment
- no immediate work required, but further investigation/action is required (eg, issues associated with voltage fluctuations, flickering lights or low voltage).

This category also relates to all occurrences relating to abandoned, decommissioned or unenergised equipment where no repair or remedial work is undertaken. Site visits that identify that the issue relates specifically to metering equipment are included in this category.

It excludes occurrences which are identified during the installation of, or attempted installation of, a smart meter.

## **ONI - Asset Repairs Instigated by Troublecall**

An ONI that affects Power System Voltage Equipment.

An ONI that affects power system voltage equipment that is not categorised as an Incident, but is resolved by repair or remedial works to DNO assets (eg the reclipping of overhead service wiring or the removal of foreign objects from overhead lines)

It includes repair or remedial works to abandoned, decommissioned or unenergised equipment.

## **ONI - Cut Out Fuses Only (Metered Services)**

An ONI, that affects fuses at a cut out which is associated with a metered LV service connection (eg where a fuse has operated and requires to be changed).

It excludes occurrences which are identified during the installation of, or attempted installation of, a smart meter.

## **ONI - Cut Outs (Metered Services)**

An ONI that affects Power System Voltage Equipment.

An ONI that affects a cut out which is associated with a metered LV service connection.

It excludes occurrences relating to fuses at metered cut outs.

It excludes occurrences which are identified during the installation of, or attempted installation of, a smart meter.

## **ONI - Emergency Disconnections**

An ONI that affects Power System Voltage Equipment.

An ONI, where the DNO urgently disconnects the electricity supply to a property with a metered supply in order to prevent danger. For example, this may be at the request of emergency services.

## **ONI – Other Occurrences (Not Affecting Power System Voltage Equipment)**

This is a reporting sub-category of Occurrences Not Incentivised

It is used for the reporting of those Troublecall which are not associated with power system voltage equipment. These may require DNOs to investigate a situation or deal with a safety concern.

The reporting is disaggregated into:

- Abortive Visit - No Immediate Work Required (includes meters which in DPCR5 was a separate reporting category) (see definition).
- Responding to Critical Safety Calls (see definition).
- Pilot Wire Failures (see definition).

## **ONI - Pilot Wire Failures**

An ONI that does not affect DNO's power system voltage equipment.

An ONI, relating to the failure of a pilot wire circuit, which does not result in the disconnection of a circuit or item of equipment energised at power system voltage.

## **ONI - Power System Voltage Equipment / No Unplanned Incident**

This is a reporting sub-category of Occurrences Not Incentivised

It is used for the reporting of unplanned occurrences which affect assets and which are not classified as incidents under the Interruption Incentive Scheme and which are not as a result being identified during the installation of, or attempted installation of, a smart meter.

For each occurrence, it includes the site investigation and repair that results in a permanent restoration (or what could be considered to be a permanent restoration) of the asset back to its former availability and, if applicable, the restoration of supply.

The reporting is disaggregated into:

- Emergency Disconnections (see definition)
- Streetlights/Street Furniture/Unmetered Services/Unmetered Cut Outs (including unmetered cut out fuses) (see definition)
- Cut Outs (Metered Services) (see definition)
- Cut Out Fuses Only (Metered Services) (see definition)
- Asset Repairs Instigated By Troublecall (see definition).

## **ONI - Responding to Critical Safety Calls**

An ONI that does not affect DNO's power system voltage equipment.

An ONI that does not affect DNO's power system voltage equipment, where site attendance is required to secure a DNO site or equipment, or remove danger.

It includes attention to traffic lights, barriers and boards associated with streetworks.

## **ONI - Streetlights/Street Furniture/Unmetered Services/Unmetered Cut Outs**

An ONI that affects Power System Voltage Equipment.

An ONI that only affects an unmetered supply (eg street lighting, traffic lights, telecommunication kiosk, advertising hoarding). It includes occurrences associated with unmetered cut outs, fuses at unmetered cut outs and the service cables to unmetered cut outs.

The cost and volumes reported under this activity includes the following categories:

- **Unmetered restoration** – Local authorities have responsibility to check the state of supply to any reported faulted street furniture. Due to network configuration and the grading of supply fuses there will be occasions where the local authority pass a multiple street light fault to the DNO which is restored by the replacement of a fuse with no damage incident involved. Therefore all unmetered supplies restored by fuse replacement shall be allocated to this category;
- **Unmetered emergency disconnection** – any activity associated with making safe a street light or unmetered service, all metered emergency disconnections to be allocated to the 'Emergency Disconnection' category
- **Unmetered cut-out changes** – any activity involved with the replacement of a vandalised or faulty street lighting or unmetered cut-out;

- **Unmetered services** – all works associated with repairs to underground and overhead services for street lighting and unmetered activities;
- **Unmetered mains** – all works associated with repairs to underground and overhead mains for street lighting and unmetered activities.

## Onshore wind

A category of DG. Electricity generation using a wind turbine situated onshore.

## Opening base revenue allowance

Has the meaning given in CRC 1B (Interpretation of Part 4).

## Operation and maintenance costs for DG

The actual costs incurred for operations and maintenance of assets associated with DG subject to use of system charges in the Reporting Year. Including directly attributable costs associated with the operation and maintenance of the assets that have been included in the total capex for DG in the Regulatory Year, and a relevant portion of the indirect overhead costs incurred in the Regulatory Year on, or in support of, constructing, maintaining and operating the whole distribution infrastructure required to facilitate network access to all distribution customers.

## Operational IT & Telecoms

IT and telecommunications systems and equipment which are used exclusively in the real time management of network assets, but which do not form part of those network assets. It includes:

- Substation RTU's, Marshalling kiosks and Marshalling kiosks (see definition)
- Communications for switching & monitoring (see definition)
- Control centre hardware and software (see definition).

The following assets and components form part of the distribution network assets and are therefore excluded from Operational IT & Telecoms.

- as part of the plant:
  - Transducers on the plant
  - Control/indication panels and relays
  - Wiring from plant to control panel
- as part of the mains:
  - Auxiliary cables that form part of a pilot cable or are integral with/supported from a main
- as part of the substation:
  - Transducers associated with the substation eg, fire alarms, security alarms and weather stations
  - Dataloggers and statistical metering (for both of the above, the distinction is that these are not directly related to the normal operation of the substation)
  - Wiring (if any) from (plant) control panels to RTU and marshalling kiosk.

Where Operational IT & Telecoms equipment is installed for network plant or substation sites, where such equipment did not previously exist, then the cost of such works should be reported under the appropriate activity driver.

For example:

- the installation of Operational IT & Telecoms equipment to enable remote control functionality to be provided for plant, where such functionality did not previously exist, should be reported as Quality of Service expenditure
- the installation of Operational IT & Telecoms equipment associated with a new substation site established as part of reinforcement works, should be reported as reinforcement expenditure

Where existing Operational IT & Telecoms equipment is replaced or renewed for network plant, or substation sites, where such equipment previously exists, then the cost of such works should be reported as Operational IT & Telecoms expenditure.

## **Operational Measures – see Protection Operational Measures**

## **Operational Performance Management - see Engineering Management and Clerical Support**

## **Operational premises**

Premises which contain network assets and are not maintained for accommodating people except for the purpose of maintenance, asset replacement etc.

INCLUDES:

- substations.

EXCLUDES:

- stores
- depots
- offices.

## **Operational refreshers**

Routine and ad hoc operational refreshers and safety briefings where attendance is required in order to maintain employee's authorisation/skill set at current level.

## **Operational Staff**

Employed by the DNO or related party to work directly on the network, undertaking the roles of Craftsperson or Engineer (defined separately in the glossary).

## **Operational Transport**

A category of BCF reporting which captures emissions resulting from the transportation (often a fleet of vehicles) used in the day to day operation of the business ie, in the inspection and maintenance of the network.

## **Operational Training**

Operational Training is a closely associated indirect activity. It is the training of operational staff employed by DNO or related party regardless of whether the training is engineering or non-engineering related. Operational staff are defined separately in the glossary.

Training can be classroom based, including academic courses, or be on the job training. It includes:

- Learner costs
- Trainer and course material costs (classroom training)
- Training centre building & grounds and training admin
- Recruitment - operational staff.

For the following purposes:

- Training of new recruits
- Up-skilling
- Operational refresher training.

EXCLUDES:

- Costs of training third party employees undertaking training within DNO training facilities (include in Non Price Control De-Minimis)
- Costs of assessing capability of contractors (include in Non Price Control De-Minimis)
- Training of Non-Operational staff even if training is engineering related (report under HR & Non-Operational Training).

### **Other consented activity**

A business or activity conducted or carried on by the licensee or a relevant associate(s) to which the Authority has given its consent, as referred to in Standard Condition 29 of the electricity distribution licence.

### **Other Generation**

A category of DG. Electricity generation that cannot be categorised as any of the following DG categories:

- Onshore wind
- Offshore wind
- Tidal stream & wave power
- Biomass & energy crops (not CHP)
- Hydro
- Landfill gas, sewage gas, biogas (not CHP)
- Waste incineration (not CHP)
- Photovoltaic
- Micro CHP (domestic)
- Mini CHP (<1MW)
- Small CHP ( $\geq 1\text{MW}$ , <5MW)
- Medium CHP ( $\geq 5\text{MW}$ , <50MW)
- Large CHP ( $\geq 50\text{MW}$ ).

### **Other Income**

Any income received by the activities of Core Business Support Costs, which does not relate to insurance claims.

### **Other (legal and safety)**

[]

## **Other Metered Standards**

The following standards – ECGS 4A, 4B, 4C, 4D, 5, 6A, 6B, 6C, 6D, 7A, 7B and 7C. These, measured quarterly, in aggregate have a 90% performance standard set in Standard Condition 15A of the electricity distribution licence.

## **Other Network Investment – see Network Design and Engineering**

## **Other unmetered connections (non-L.A. or PFI)**

Refers to Unmetered connections work [provision of new unmetered points of connection, transfers and Disconnections] which is carried out for neither a Local Authority nor a PFI scheme.

Examples: Lighting on Bus shelters, phone boxes, other street furniture.

## **Out of Area Networks**

Networks owned or operated by the licensee, which are outside the licensee's distribution services area.

## **Out of Area Networks - Network Investment**

The costs a DNO incurs on Out of Area Networks that would be classified as Network Investment if the costs had been incurred within the DNO's distribution services area.

## **Out of Area Networks - Network Operating Costs**

The costs a DNO incurs on Out of Area Networks that would be classified as Network Operating Costs if the costs had been incurred within the DNO's distribution services area.

## **Out of Area Networks - Use of System**

The costs a DNO incurs on Out of Area Networks for the use of the distribution network system (see: Use of System (UoS) charging).

## **Outsourcing**

Contracting out of an internal business process to a third party organisation. Outsourcing can (but does not have to) involve transferring employees and assets involved in the business process from one firm to another. The definition of outsourcing includes both foreign and domestic contracting, which may include offshoring, described as "a company taking a function out of their business and relocating it to another country. For the avoidance of doubt, as explained under Insourcing, this should not include roles within the organisational structure (or within a project or programme team) that have been filled by individual sub-contractors.

## **Outage Planning and Management – see Control Centre**

## **Overhead Line - Inspections**

The patrol and inspection of overhead lines (all voltages) and includes foot, climbing and helicopter patrols and inspections. This also includes non-routine asset condition surveys (all voltages) and ad hoc repair carried out at the same time as the inspection.

## **Overhead Line (Temporary Shrouding)**

The provision and removal of temporary shrouding at the request of a third party, in order to provide safe working arrangements for the third party (eg, third party is erecting scaffolding close to an LV overhead line).

## **Overhead mains**

A LV overhead line that forms the LV network excluding overhead services.

## **Overstay Fines**

Fines issued by a Highway Authority under Section 74 of NRSWA which allows highway authorities to charge undertakers if street works are unreasonably prolonged (ie, take longer than previously agreed).

## **P**

## **Pass-through**

Costs for which companies can vary their annual revenue in line with the actual cost, either because they are outside the DNO's control or because they have been subject to separate price control measures. This covers costs recoverable under in CRC 2B (Calculation of Allowed Pass-Through Items).

## **Pass-through Transmission Connection Point Charges incurred**

Has the meaning given to it in CRC 2B (Calculation of Allowed Pass-Through Items).

## **Peak Demand**

The demand level (MVA) experienced at a Transmission Connection Point substation and is the weather corrected maximum demand level during the reported year. The peak demand shall be consistent with the demand data submitted to a transmission company under the terms of the GB Grid Code, and shall be representative of intact conditions.

## **Pensionable pay**

Basic pay plus pensionable allowances with no deductions.

## **Pension deficit repair payments**

The cash costs paid, directly or indirectly, by the licensee to reduce a shortfall in a pension scheme's assets compared with its liabilities as set out in the deficit recovery plan agreed between the licensee and the pension Scheme trustees, reported to the



Pensions Regulator and certified by the pension Scheme actuary, in accordance with the pension Scheme Rules.

From 1 April 2015 these are split into:

- payments in respect of pension incremental deficit repair payments, which are part of Pension Costs (see below), which are payments relating to funding the incremental deficit
- payments in respect of pension scheme established deficit repair payments, which are payments related to funding the established deficit.

### **Pension incremental deficit**

The difference between assets and liabilities, determined at any point in time, attributable to pensionable service up post 31 March 2010 and relating to Regulated Business Activities under our second Pension Principle. The term applies equally if there is a subsequent surplus.

### **Pension Protection Fund (PPF)**

The Pension Protection Fund was established to pay compensation to members of eligible defined benefit pension schemes, when there is a qualifying insolvency event in relation to the employer and where there are insufficient assets in the pension scheme to cover Pension Protection Fund levels of compensation.

### **Pension Protection Fund Levy (PPF Levies)**

The cash costs paid, directly or indirectly, by the licensee/distribution business or pension scheme (in respect of the distribution business) to the Pension Protection Fund.

### **Pension Scheme Administration Costs**

The administrative costs for the operation of a pension scheme by the scheme trustees (excluding interest and taxation) including salaries and on costs of pension scheme administrators and all other associated costs of administering the pension scheme, whether borne by the scheme directly or the employer(s) and not recovered from the scheme.

INCLUDES:

- Actuarial consultancy fees
- Administration and investment management fees where not remunerated by deduction from investment returns
- Third party administration fees
- Electricity Pensions Services Limited costs
- Pensions administration system licence and support costs
- Legal advisers fees
- Recruitment costs
- Pension secretariat
- Policy and strategy
- Administration consultancy
- Auditors fees
- Custodian fees
- Communication consultancy fees
- General office costs (eg, printing, IT support, publications etc)
- Investment consultancy fees
- Tracing agency fees

- Member communication costs
- Trustee remuneration
- Trustee training costs.

#### EXCLUDES:

- administration and investment management fees where remunerated by deduction from investment returns
- costs incurred by the licensee/distribution business in managing its ongoing and contributions and deficit repair payments to pension schemes
- costs of actuaries appointed by the scheme sponsors to advice on the scheme valuations and recovery plans
- costs incurred by the licensee/distribution business, directly or indirectly, in managing its relationship with the Pension Scheme and scheme trustees or actuaries.

### **Pension scheme established deficit**

Has the meaning given to it in the ED1 Price Control Financial Handbook.

### **Permit Admin Costs**

The costs from processing permit applications and the costs of setting up permit schemes.

### **Permit Penalties**

Fixed Penalty Notices issued by a Highway Authority if the data in a permit application is incorrect or if the application is sent late or as a result of non-compliance with permit conditions.

### **Permits**

An electronic notice sent to a Highway Authority in place of a notification in streets which are covered by a permit scheme.

### **Permit Scheme – Existing**

A permit scheme, or equivalent in Scotland, which was implemented as at 1 July 2013 and where the DNO had 12 months of cost data relating to this scheme.

### **Permit Scheme – New**

A permit scheme, or equivalent in Scotland, which was not operational by 1 July 2013 or where the scheme has been implemented by this date but the DNO did not have 12 months of cost data relating to the scheme.

### **Permitting Condition Costs**

Additional costs of undertaking works resulting from permit conditions eg, a requirement to work at non-peak times. This includes the costs of codes of practice such as the London Code of Practice. Only incremental costs resulting from the conditions should be reported in this category – any costs that would have been incurred in their absence as part of usual operating practices should not be included.

## **Permitting - set-up costs**

One-off costs of developing the necessary IT system to process permit applications.

## **Photovoltaic**

A category of DG. Electricity generation using photovoltaics (solar panels or cells).

## **Pilot Wire Overhead**

A multicore cable, not part of a distributing main, that forms part of a protection scheme, which:

- is suspended on poles or towers
- carries signals, currents or voltages between different substation sites.

## **Pilot Wire Underground**

A multicore cable, not part of a distributing main, that forms part of a protection scheme, which:

- is buried with mains cables or separately
- carries signals, currents or voltages between different substation sites.

## **Pluvial Flooding**

Flooding which occurs when the ground and drainage systems become saturated following extremely heavy downpours of rain. It is also known as surface water flooding. Flood mitigation schemes and flooding surveys will be targeted at mitigating the risk from pluvial flooding to their electrical assets.

## **POC (point of connection)**

The point on the licensee's Distribution System at which the Premises will be directly or indirectly connected to that system.

## **Post-vesting asset**

An asset included in the RAV acquired by a licensee after vesting date ie, 1 April 1990.

## **Post-2005 DG**

DG that has a DG connection start date on or after 1 April 2005.

## **Post 2010 Unincentivised Transmission Connection Point Charges**

Transmission Connection Point Charges attributable to connection assets energised after 1 April 2010, but fall outside the scope of the DR5 incentive as result from GSP refurbishment or any other work not incurred as a result of DNO requirements.

## **PPF levy – see Pension Protection Fund Levy**

## **Pre-arranged incident**

Any incident arising from the pre-arranged isolation of any circuit or item of equipment energised at power system voltage that results in loss of supply and where statutory notification has been given to all customers affected at least 48 hours before the commencement of the earliest interruption (or such notice period of less than 48 hours where this has been agreed with the customer(s) involved), and where the loss of supply start time is not before that notified to customers.

## **Pre-investment flooding risk**

The flooding risk of a site before any investment in flood defence was/has been undertaken.

## **Premises**

Premises include any land, building, or structure and any distribution system including the Electricity Distributor's.

## **Present flooding risk**

The flooding risk of a site as of the 31 March of the year that is being reported on.

## **Present unmitigated flooding risk**

The specific flooding risk of a site as of the 31 March of the year that is being reported on that has not been mitigated against flooding.

## **Previously closed job**

Jobs that have been financially reopened after having been reported as financially closed in a previous reporting year.

## **Proceeds of sale of Non-Operational Assets**

The net sale proceeds any non-operational asset sold.

## **Proceeds of sale of Operational Assets**

The net sale proceeds any Operational (Network) asset sold.

## **Primary network**

Network assets where the primary voltage is EHV or above.

## **Primary substation**

A substation at which the primary voltage is greater than HV and the secondary voltage is HV (covers 132/11kV substations).

## **Profit and Loss Statement of comprehensive income**

One of a company's primary financial statements, this indicates how revenue (money received from the sale of goods and services before expenses are taken out) is transformed into net income.

### **Profit/Loss on Disposal of Fixed Assets**

The net sale proceeds less the net book value of any asset sold.

### **Profit/Loss on sale of Fixed Assets and Scrap**

The net sale proceeds less the net book value of any asset sold plus any proceeds received from the sale of scrap.

## **Project Management**

Project Management is a closely associated indirect activity included in the Core CAI table.

This activity relates to the activity of managing projects from authorisation through preparation, construction and energisation to completion.

### **INCLUDES:**

- overall responsibility for delivery of single major projects or multiple minor projects
- for each specific project:
  - determination of resource requirements
  - planning and requisitioning of materials and equipment
  - liaising with procurement for non-standard materials as required
  - work and resource programming
  - risk assessments of the overall project content
  - preparation of work instructions
  - issue work to own staff and contractors
  - on-site supervision and technical guidance
  - quality checks on work undertaken
  - organising network access and co-ordinating outages
  - organising and supervising (where appropriate) the undertaking of commissioning tests
  - issuing completion certificates
  - arranging energisation of assets
  - site planning activities, including checking equipment access, confirming physical layout of equipment and investigative testing such as load testing
  - identifying required changes to protection settings and calculating those settings
  - liaising with contractors and third parties
  - cost control.

### **EXCLUDES:**

- Any IT or property costs associated with Project Management (include in IT&T and Property Management indirect activities);
- Any employees managing other indirect activities (eg Logistics Manager) (include under the relevant indirect activity heading);
- Any design work relating to new connections, new or replacement assets (include in Network Design and Engineering)

- Any work undertaken directly on the assets (include under relevant direct activity)
- Project management associated with NOCs (include in Engineering Management and Clerical Support)

## Property Management

The costs of providing, managing and maintaining all non-operational premises (with the exception of operational training centres).

INCLUDES:

- rent and rates or any other property taxes for non-operational properties
- utilities (electricity, gas, water supply and sewerage charges)
- inspection and maintenance costs
- facilities management costs, including security and reception
- the ongoing operating cost provision of all office equipment, with the exception of IT or Telecoms equipment.

EXCLUDES:

- any costs relating to operational property (substation electricity include in separate table, substation rents include in wayleaves)
- business rates (excluded from all activity headings; include in Non-Activity Based Costs)
- operational training centres (include under Operational Training)
- any of the IT systems associated with property management (include under IT)
- relocation costs to or from non-operational premises (include costs of employee relocation with the costs of that employee)
- Capital purchase of office equipment.

## Protection Communication Circuits - Replacement

Communication circuits used within power system protection schemes where signalling and information exchange is required between protection equipment at separate remote sites to allow high speed clearance of faults. The activity 'Protection Communication Circuits - Replacement' refers to the replacement of BT protection communication circuits with alternative communication circuits and all necessary work associated with the installation of these alternatives. These alternatives include self-owned communication circuits and third party leased communication circuits.

The rental or lease costs associated with third party leased circuits are **not** to be reported under 'Protection Communication Circuits – Replacement', as they are reported under 'Protection Operational Measures'.

## Protection Operational Measures

Refers to:

- The operational activities associated with protection communication circuits installed as replacements to BT protection communication circuits. For example, rental costs associated with third party leased circuits.
- Measures carried out to remove an existing BT protection communication circuit by works to remove the requirement for a protection communication circuit from within a protection scheme.

## Protection schemes (all voltages)

Expenditure on substation located protection, control and SCADA equipment (HV, EHV, 132kV). This includes testing, repair and preventative maintenance. This also includes protection of conventional circuit breakers.

## Provider of Connection work

The majority provider of the contestable works within each individual connections project. The majority provider must be determined as the party or parties that will undertake/have undertaken the greater value of contestable connection work, as prescribed by the details of the relevant DNO's charging methodology. Where a third-party connection has subsequently been adopted by the host DNO it must be referred to/recorded as an ICP connection. Where the third party retains ownership of the asset for an independent network it must be referred to/recorded as an IDNO connection. Where an ICP operates as the connecting agent for an IDNO, this connection project must be referenced recorded as an IDNO connection. Where an IDNO company operates as an ICP, this connection project must be recorded as an ICP connection.

## Physical Loss Reduction actions

These are actions undertaken in order to reduce electricity losses where physical assets are affected, for example the installation or replacement of transformation equipment.

## Q

## Quality of service (QoS)

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

INCLUDES:

- costs associated with the installation of new assets or the replacement of existing assets where the primary purpose is to either:
  - reduce the average number of customers affected by an unplanned incident
  - reduce the average time that customers are affected by an unplanned incident
  - reduce the overall fault rate per km of the distribution network
- incremental or extra costs associated with the replacement of existing assets that are planned for replacement on condition assessment or are performing poorly, with assets that have a specification that exceeds the nearest MEA
- the incremental costs over and above those of the MEA would be treated as quality of service capex.

EXCLUDES:

- The planned non-load related replacement of assets undertaken, using their nearest modern equivalent asset (MEA), with the objective of ensuring that the underlying condition, performance, integrity and resilience of the distribution network are maintained. The replacement of

assets with their nearest MEA would usually be treated as asset replacement.

## **Quotation**

The notice required to be given by an Electricity Distributor in accordance with section 16A(5) of the Electricity Act 1989.

## **Quotation Issued Date**

The Working Day on which the information was issued to the applicant, either electronically or in hard copy.

## **Quotation Offer date**

The date on which the DNO dispatched the first quotation that is subsequently accepted by the connecting party. This must be assigned to the nearest working day with quotations offered after 5pm rolling into the next working day.

## **R**

## **Rail Electrification**

Electrification of an existing railway line. Defined here in connection with Diversions activity, where the installation of rail electrification equipment requires the relocation or re-routing of DNO apparatus.

## **Rail Electrification Project**

A Network Rail project for the electrification of a discrete rail route.

## **RAV additions**

Expenditure added to the RAV in the year and calculated in accordance with the terms of the price control settlement.

## **Real-Time Thermal Rating**

As featured in the transform model developed through the smart grids forum, the use of measurement and ambient forecasting data to predict the rating (and hence current carrying capacity) of assets in a real-time mode.

## **Rebranding**

Costs relating to rebranding a company's assets or vehicles following a name or logo change.

## **Rebuild**

The reconstruction of an existing network asset.



## **Receivers - see Substation RTU, Marshalling Kiosk and Receivers**

### **Recoveries of previously written off debt**

Income received in respect of a debt which was previously reported as a bad debt written off.

### **Recovery of costs**

For the purposes of R1 – theft recovery means any additional monies recovered in respect of other costs as detailed in paragraph 49.8 of Standard Condition 49 of the electricity distribution licence.

### **Recovery of value of electricity taken**

Any monies received in respect of the value of electricity as referred to in paragraph 49.7 of Standard Condition 49 of the electricity distribution licence.

### **Ref number/Project id**

The unique reference number or name given to each individual connection project on a project-by-project basis within table CR4 of the detailed connection pack. Where possible this reference must follow a logical pattern and when projects are re-opened across reporting years, the project reference must remain constant. However, it is understood that this reference is likely to differ from the original quote reference if this has been included in table CR4 in a previous year.

### **Reference case scenario**

The DECC scenario 1 equivalent – high abatement in low carbon heat – will act as a reference case to allow comparison between DNOs. We require a second full data template pack to be populated for this scenario.

### **Refurbishment**

A one-off activity undertaken on an asset that is deemed to be close to end of life or is otherwise not fit for purpose that extends the life of that asset or restores its functionality. This activity does not result in the recording of a new or disposed asset in the Asset Register, but may improve the Health Index of the asset. Refurbishment can include the replacement or reconditioning of components of an asset.

Activities considered as Refurbishment are identified in the Condition Based Task Allocation Tables in Chapter 4.

### **Refurbishment Protection Schemes**

The full or partial replacement of protection schemes where the work is undertaken as a standalone programme of work.

The replacement of substation located protection, control and SCADA equipment undertaken as part of plant asset replacement activity is excluded from 'Refurbishment - Protection' except where such Protection Scheme equipment is located at a different substation site to the plant that is being replaced.

## **Regulated margin**

The 4 per cent Margin (as allowed and defined in CRC 2K (Margins on licensee's Connection Activities) that can be charged by the DNO over and above the total cost (direct and indirect costs) (as estimated for the relevant quotation) of completing the contestable sole use element of a connection placed on the customer quotation in order to recover a margin on this work.

## **Regulatory Asset Value (RAV)**

A financial balance representing expenditure by the licensee that has been capitalised under regulatory rules. The licensee receives a return and depreciation on its RAV in its price control allowed revenues.

## **Regulatory depreciation**

The annual expense for the depreciation of assets in the RAV, determined in accordance with the price control settlement.

## **Regulatory fraction**

The proportion of a company's pension scheme that relates to licensed regulated business activities before the relevant cut-off date and which is funded through price controlled charges ie, the Established Deficit; post cut-off date it excludes the Incremental Deficit. The opening or initial (ie, cut-off date) regulatory fraction is as set out or applied in the respective price control documents or as incorporated in the licence or charge restriction conditions applicable to each licensee. The fraction will be subject to true up and reset in accordance with this deficit allocation methodology. This fraction is after any adjustment that was made in price allowances for EDRCs.

## **Regulatory Tax Losses**

Tax losses carried forward in the regulatory accounts for the year of reporting

## **Reinforcement**

Network development to relieve an existing network constraint or facilitate new load growth.

## **Reinforcement Works**

Those works required on the Electricity Distributor's distribution system to accommodate the new or increased connection.

## **Re-interruption**

The loss of supply of electricity to one or more customers, for a period of 3 minutes or longer, where those same customers have experienced an interruption during previous restoration stages of the same incident.

## **Related party**

A person or entity that is related to the entity that is preparing its financial statements (referred to as the 'reporting entity') as per IAS 24. Includes both affiliates and related undertakings of the licensee as defined in standard condition 1 of the electricity distribution licence. An affiliate or related undertaking shall remain as a related party for the whole of the price control period even if it is no longer part of the group due to restructuring.

### **Related party allowed margin**

If the external turnover represents less than 75% of total revenue then the margin will be allowed.

### **Related party disallowed margin**

If the external turnover represents 75% or more of total revenue then the margin will be allowed.

### **Related Party Margin**

The profit or loss recorded on a transaction with an affiliate being the excess or deficit on actual direct costs and indirect costs (excluding financing costs) fairly attributable to the transaction or the charge and the cost of providing that transaction.

For the avoidance of doubt this does not include exceptional items, tax, fines, penalties or the gain or loss on the disposal of assets or investments (of any sort) ie, it should be net operating costs level.

For Captive Insurance businesses the margin is to be computed based on the captive's premium income less reinsurance premiums, claims paid out and movements on technical and IBNR reserves attributable to the distribution business only ie, usually reported as the profits/loss on the Technical account. Where a captive insures more than the distribution licensee(s), then its profit/loss should be computed pro rata to the premiums paid by the licensee to total premium income in the captive for the year and the movements on technical and IBNR reserves not attributable to the distribution business must first be removed.

### **Related Party Margin charged to Related Party by additional DNO Affiliates or Related Undertakings that do not directly trade/transact with the DNO directly**

The margin embedded within charges incurred by a Related Party that trades with the DNO from a transaction with another Related Party that does not trade directly with the DNO.

### **Related Party Margin included in indirects funded through connections contributions or NTR**

Related Party margin included in indirects funded through connections contributions or NTR.

## **Related Party Margin Total Disallowed**

All Disallowed Related Party Margins that are incurred by the DNO on activities for which they are funded through RIIO-ED1.

## **Related Party Margin total: where it is reported in this DNO**

Individual Related Party's margins broken down by the following (NI & NOCs, Non-Op capex, CAI Bus support).

## **Related Party Margins Total within Price Control**

All Related Party Margins that are incurred by the DNO on activities for which they are funded through RIIO-ED1.

## **Related Party Margin within Price Control**

Related Party Margins that are incurred by the DNO on activities for which they are funded through RIIO-ED1.

## **Related Party Margin within Price Control Total Allowed**

All Allowed Related Party Margins that are incurred by the DNO on activities for which they are funded through RIIO-ED1.

## **Related party transaction**

A transaction that occurs where one party provides goods, works, supplies or services to a related party.

## **Related party Turnover**

The turnover for the related party and for reporting purposes is segmented to that as charged to each or any other DNO in the group, each other related parties and to external customers.

## **Relating to Connection projects which would be classified as Network Investment (RAV) within table C1 of the Cost and Volumes Reporting Pack**

Indirect cost that is allocated by the DNO to connection work which fall into the connection cost types classified as Network Investment Costs (RAV) in table C1 of the Cost and Volumes Reporting Pack. These categories are:

- Connection projects; DPCR4
- Element of connection that is subject to the apportionment rules - Customer funded
- Element of connection that is subject to the apportionment rules - DUoS funded.

## **Relating to Connection projects which would be classified as Non Price control within table C1 of the Cost and Volumes Reporting Pack**

Indirect cost that is allocated by the DNO to connection work which fall into the connection cost types classified as Non Price Control in table C1 of the Cost and Volumes Reporting Pack. These categories are:

- Element of connection that is Sole Use funded
- Connection projects UMC; DPCR5
- Connection projects; DG.

### **Relevant Authority**

The authority which has responsibility for street lighting and/or street furniture. This means a body responsible for maintaining the unmetered inventory of street lighting or street furniture.

### **Relevant Consumer**

- a person who is a consumer in relation to electricity supplied by a regulated provider, or
- a person who is a consumer in relation to services provided by a regulated provider.

### **Relevant Theft of Electricity**

Has the meaning given to it in Standard Condition 1 of the electricity distribution licence.

### **Remote Location Generation (Opex)**

Fixed diesel generation stations that provide permanent emergency backup in remote locations including islands. Remote locations will generally only have a single electrical feed.

Mobile generation is not classified a Remote Location Generation.

INCLUDES:

- Remote Location Generation Operating Costs: Fuel
- Remote Location Generation Operating Costs: Operation and Maintenance

EXCLUDES:

- Remote Location Generation Capital Costs

### **Remote Location Generation Capital Costs**

The cost of refurbishment, asset replacement and other capital investments associated with Remote Location Generation. This includes investment in generating plant, fuel storage and systems, buildings and other civil works.

### **Remote Location Generation Operating Costs: Fuel**

The cost of fuel to run Remote Location Generation.

## **Remote Location Generation Operating Costs: Operation and Maintenance**

The cost of operation and maintenance associated with Remote Location Generation.

### **Rent**

Payment, usually of an amount fixed by contract, made at specified intervals in return for the right to occupy or use the property of another.

### **Repair & Maintenance**

- Is the activity relating to the invasive ("hands on") examination of, and the undertaking of any subsequent works to repair defects on, system assets. This includes: minor repairs carried out at the same time as the maintenance visit
- subsequent repair works undertaken to remedy defects identified by either inspection or maintenance.

In addition to the examination of system assets, other activities considered as Repair & Maintenance are identified in the Condition Based Task Allocation Tables in Chapter 4.

Repair & Maintenance EXCLUDES:

- Remote Location Generation (ie, diesel generation costs providing permanent emergency backup on islands)
- The physical dismantlement of existing assets (at all voltage levels) where the cost of dismantlement is not chargeable to a third party and no new assets are to be installed
- Cost of electricity consumed at substations
- Supervisory input to plan workloads and manage staff (include under Engineering Mgt & Clerical Support)
- Data review except the initial recording on site (include under Engineering Mgt & Clerical Support)
- Maintenance of non-system assets (include under Property Mgt)
- Tree cutting and tree clearance (include under Tree Cutting)
- Any of the costs associated with the indirect activities as defined in this appendix
- Any costs resulting from physically repairing an asset that was instigated by the receipt of a trouble call (this should be included under Troublecall)
- Any of the costs associated with inspection.

### **Repair & Maintenance - Protection schemes (all voltages)**

Repair and maintenance work on substation located protection, control and SCADA equipment (HV, EHV, 132kV). This includes testing, repair and preventative maintenance. This also includes protection of conventional circuit breakers.

EXCLUDES:

- the replacement of individual relays, selector switches, protection and/or control panels.

## **Repairs**

For the purposes of Troublecall reporting in the Cost and Volumes Reporting Pack, the term "Repairs" is used in conjunction with unplanned incidents on power system voltage equipment and relates to the repair costs, which are classified as Network Operating Costs, associated with unplanned Damage incidents.

## **Repeat Complaint**

Has the meaning given to it in CRC 2C (Broad Measure of Customer Service Adjustment).

## **Resolved Complaint**

A consumer complaint in respect of which there remains no outstanding action to be taken by the regulated provider. In this case, the complaint has either (i) been resolved to the satisfaction of the relevant consumer who made that consumer complaint or on whose behalf that consumer complaint was made, or (ii) although the consumer is not openly satisfied with the outcome, the consumer has agreed that the regulated provider has taken all action reasonably expected, or (iii) has not made further contact with the regulated provider within 28 calendar days of despatch by the regulated provider of its substantive response to the complaint. [For the avoidance of doubt, in case (iii) the date at which the complaint should be treated as resolved is the date at which the letter was despatched.]

## **Restoration stage**

A restoration stage is defined as a stage of an incident, at the end of which supply to some or all customer(s) is restored and/or a circuit or part of a circuit is re-energised, excluding any restoration/re-energisation which is followed within 3 minutes by a circuit trip.

## **Restructuring**

The act of re-organising a business for making the organisation more efficient.

INCLUDES:

- redundancy costs (inc. ERDCs).

EXCLUDES:

- early retirement costs (inc. ERDCs).

## **Retained LCN Fund Royalties**

Has the meaning given to it in the LCN Fund Governance Document.

## **Retained NIC Royalties**

Has the meaning given to it in the LCN Fund Governance Document.

## **Returned LCN Fund Royalties**

Has the meaning given to it in CRC 1B (Interpretation of Part 4).

## Returned Royalty Income

Has the meaning given to it in CRC 1B (Interpretation of Part 4).

## Revenue Protection Services - see DRS5. Revenue protection Services

## RIIO-ED1

The electricity distribution price control period that runs from 1 April 2015 to 31 March 2023.

## RIIO-ED1 CBA tool

[tbc]

## Ring fence costs

Has the meaning given to it in CRC 2B (Calculation of Allowed Pass-Through Items).

## RI- Number of customers re-interrupted per year

The number of customers re-interrupted per year (RI) – the number of customers whose supplies have been re-interrupted per 100 customers per year, calculated as:

$$\frac{\text{The sum of the number of customers re – interrupted} \times 100}{\text{The total number of customers}}$$

## Rising and Lateral Mains (RLM)

Individual DNO owned 3 phase cable or busbar, not laid in the ground, which runs within or attached to the outside of a multiple occupancy building for:

- more than 3m vertically, or
- more than 3m horizontally, and
- to which a number of individual services are connected, usually via a distribution board.

This excludes undereaves or mural wiring.

## RLM – LV mains inspected

This refers to the identification and inspection of Rising and Lateral mains within multi-occupancy buildings for which the company accepts asset management responsibility.

## RLM- LV mains repaired or maintained

This refers to repair and maintenance work on rising mains for which the company accepts asset management responsibility. Complete replacement of mains should be reported under Asset Replacement.



## **RLM - LV service associated with RLM**

An LV service which connects an individual property to a Rising or Lateral Main.

## **RLM - LV Services associated with RLM inspected**

This refers to the identification and inspection of services (or looped services) to properties connected to a rising main or lateral, within multi-occupancy buildings for which the company accepts asset management responsibility.

## **RLM - LV Services associated with RLM repaired or maintained**

This refers to repairs and maintenance expenditure on LV services associated with rising mains for which the company accepts asset management responsibility. Complete replacement of services should be reported under Asset Replacement.

## **RMU (Ring Main Unit)**

A Ring Main Unit (RMU) is packaged switchgear that is either pre-welded together or shares the same tank. The unit is therefore non-extensible and is replaced as a single unit.

## **Road charges**

Payments made under the New Roads and Streetworks Act and Traffic Management Act, or the Transport (Scotland) Act 2005 for:

- Permit costs
  - Permit penalties
  - Notifications penalties
  - Inspections Costs
  - Inspections penalties
  - Lane Rental Costs
  - Overstay Fines
  - Congestion charge scheme payments
- net of any income from contractors in payment for road charge activities

Excludes:

- Streetworks administration costs
- Any streetworks costs paid directly by contractors to relevant authorities (report as contractor cost).

## **S**

## **Safety climbing fixtures**

Support or plant-mounted fixtures or devices provided to improve the safety for operators.

## **Salary sacrifice scheme**

An agreement between an employer and an employee to change the terms of the employment contract to reduce the employee's entitlement to cash pay. This

sacrifice of cash entitlement is usually made in return for some form of non-cash benefit eg, pension contribution.

## **Sample and Investigatory Inspections**

The total cost and volumes of investigatory inspections (charged to the DNO) and sample inspections undertaken by the Highway Authority. Where these inspections reveal defects or inadequacies, the Defect Process and associated charges are triggered.

## **Schedule 23 FA2003**

Schedule 23 of the Finance Act 2003 provides for corporation tax relief for a company where a person:

- acquires shares by reason of his, or another person's, employment with that company (an "award of shares"), or
- obtains by reason of his, or another person's, employment with that company an option to acquire shares and acquires shares in exercise of that option (the "grant of an option").

## **Scheduling and call centre (costs only)**

Ongoing scheduling and call centre costs associated with the smart meter roll-out which will continue to be incurred beyond the roll out period itself.

## **Scottish Environment Protection Agency (SEPA)**

Scotland's environmental regulator, a non-departmental public body, accountable through Scottish Ministers to the Scottish Parliament.

## **Secondary Deliverables submission**

The submission made to Ofgem by DNOs in accordance with the timetables and scope set out in chapter 2 of the Secondary Deliverables RIGs, comprising:

- Agreed Secondary Deliverables submission
- Annual Submission
- Mid-Period Review Submission, or
- Performance Assessment Submission.

## **Secondary network**

Network assets where the primary voltage is HV or below.

## **Second Tier Funding**

Funding provided to a licensee through the Second Tier Funding Mechanism for Second Tier LCN Fund projects.

## **Second Tier Funding Mechanism**

Has the meaning given to it in CRC 2J (Low Carbon Networks Fund)..

## **Self-insured risks**

Risks that are not insured with a regulated insurer for an insurance premium and which are either provided for in the licensee's regulatory accounts or which are charged or recharged to it by a related party.

## **Servitudes**

An interest in land owned by another that entitles its holder to a specific limited use of that land over a determined period of time or in perpetuity. Easements (England & Wales), Servitude (Scotland).

## **Severance (exc ERDCs)**

Payments made to secure the exit from the business of an individual, excluding any early retirement deficit contributions (ERDCs)

## **Severe weather 1-in-20 events – see Exceptional Events**

## **SF6**

The chemical symbol for Sulphur hexafluoride, a gas that is used as both an insulating and arc extinction medium in electrical plant. The reporting requirement is in respect of fugitive BCF emissions attributed to SF6 lost from electrical plant.

## **SF6 Bank**

The total mass (in kg) of sulphur hexafluoride held by the DNO for both assets installed on the network and those held in inventory. Each DNO's SF6 bank should be calculated according to the methods set out in ENA Engineering Recommendation S38.

## **SF6 Emitted**

The total mass (in kg) of sulphur hexafluoride emitted during asset installation (only if gassed by the DNO), service life and decommissioning. Service life emissions include those due to leakage (measured through top-ups); those measured during service activity requiring gassing and degassing; and those due to equipment failure resulting in the loss of all gas contained by the asset. The SF6 emitted value should account for gas recovered.

Each DNO's SF6 emitted should be calculated according to the methods set out in ENA Engineering Recommendation S38. DNOs should not assume a percentage leakage rate to determine any element of SF6 emitted and if a DNO does not have measured records of SF6 emitted, this should be highlighted in the accompanying commentary.

## **SF6 Emitted Mitigation Schemes**

Schemes undertaken where the primary objective is to reduce or remove the risk of discharging SF6 gas into the environment.

## Shared connection capex for DG

The part of total capex for DG that is to be recovered from distributed generation connection charges, which are payable to the licensee, but exclusive of all costs relating to sole-use assets and the incremental costs in excess of the high-cost project threshold (as set out in the distribution charging methodology).

### Shetland: Competitive Process Costs (CPC)

Costs associated with the competitive process SSEH must run to procure a cost efficient enduring energy solution for Shetland, as directed by Ofgem. The following costs make up the Competitive Process Costs:

- **CPC project management:** Project management involved in the competitive process.
- **CPC regulatory and consent:** Includes costs for stakeholder engagement and legal services.
- **CPC engineering:** Engineering consultancy fees and feasibility modelling costs.
- **CPC procurement:** Costs for the Independent Auditor required to oversee the competitive process, as directed by Ofgem.

### Shetland: Contingency costs (CC)

Capital and operating costs for remote generation capacity (excluding fuel), if applicable. CC is made up of the following components:

- **CC project management:** Resources required to develop and manage any contingency arrangements including any engineering work required.
- **CC regulatory and consent:** Costs for leasing land, environmental surveys and work towards any planning and consent if required.
- **CC procurement:** Procurement of temporary generation required to back up LPS if required.
- **CC construction:** Covers any work required to prepare sites for temporary generators and associated costs.
- **CC commissioning:** Includes the costs for commissioning and decommissioning of generator sets.

### Shetland: Fixed Energy Costs Allowance

Is made up of Third party contracts (TPC), LPS capital & operating costs (LPSC), NINES ongoing costs (NINES), and potential Contingency costs (CC).

### Shetland: LPS capital & operating costs (LPSC)

Capital and operating cost allowance for Lerwick Power Station (LPS) (excluding fuel) made up of the following components:

- LPSC insurance: Insurance costs for the period.
- LPSC EU Emission Trading Allowances: Costs to comply with phase 111 of the EU Emission Trading Scheme (EU ETS), regulated by Scotland Environmental Protection Agency (SEPA).
- LPSC consents and permits: Costs associated with three permits that LPS must operate under:
  - Pollution Prevention and Control (Scotland) Regulations 2000
  - Greenhouse Gas Emissions Permit

- Control Of Major Accidents Hazards (COMAH)
- LPSC engineering: Costs for design, review and engineering of solutions for LPS.
- LPSC construction: Includes any necessary power station works including system inspections, repair works, asset refurbishment, repair or replacement, ongoing maintenance, statutory inspections and any commissioning costs.
- LPSC operations staff: Salaries for management and industrial staff, transport, training, welfare, stores and administration.
- LPSC spares and consumables: Costs for station engine spares.
- LPSC depreciation: Depreciation for the operational life of LPS.

## Shetland: NINES ongoing costs (NINES)

Cost of integrating and operating solutions from the NINES project which includes:

- **NINES operational costs:** Ongoing operations staff costs, licence fee costs for the Active Network Management (ANM) system, the Distribution Demand Side Management (DDSM) communication system and ongoing licence costs associated with the integration of NINES with the SHEPD network management and control systems. DDSM variable costs are also included, which cover annual payments to participating customers.
- **NINES other:** Costs related to project management, regulatory and consent, engineering and modelling, and construction.

## Shetland: Third party contracts (TPC)

Costs related to third party contracts for Power Purchase Agreements (PPA) as stated in CRC 2B. TPC is made up of:

- **TPC project management costs:** costs involved in the negotiation and maintenance of the PPA.
- **TPC operational costs:** costs of the PPA between SSE Energy Supply Limited (SSE ESL) and the operator of the generator at Sullom Voe Terminal.

## Shetland Variable Energy Costs

Is equal to the sum of:

- the cost of fuel purchased for use by LPS, including any fuel costs for contingency arrangements
- the cost of environmental permits in respect of generation on Shetland, and
- income from units purchased by suppliers in respect of generation on Shetland.

## Short interruption

Short interruptions are defined as the loss of supply of electricity to one or more customers due to automatic, manual or remote control operation of switchgear or fusegear on the distribution system or other systems, upstream of the customers interrupted, where supply is restored in less than three minutes. (Note an initial loss of supply of electricity for less than 3 minutes should be treated as a short interruption rather than an interruption.)

## Single circuit

One circuit (overhead or underground) which is installed in a single trench or set of ducts or tunnel or set of supports.

## Single Service LV connection

Connection projects providing exit point(s) at LV a one off domestic or commercial premise commercial premise by means of a single phase service connection only.

## SI- Number of customers interrupted by short interruptions per year

The number of customers interrupted by short interruptions per year (SI) –the number of customers whose supplies have been interrupted by a short interruption per 100 customers per year over all short interruptions, where the initial interruption to supply is restored in less than three minutes, calculated as:

$$\frac{\text{The sum of the number of customers interrupted by short interruptions} \times 100}{\text{The total number of customers}}$$

## Site Security

Activity undertaken where the primary driver is to improve the physical security of sites to prevent third party access or interference. Data is presented in the table broken down by voltage of substation.

EXCLUDES:

- activity driven by security of critical national infrastructure. Costs for this activity should be captured under CV18 - Critical National Infrastructure (CNI).

## Slow money

Slow money are costs which are added to the RAV (as opposed to fast money).

## Small CHP ( $\geq 1\text{MW}$ , $< 5\text{MW}$ )

A category of DG. Electricity generation using combined heat and power plant that is greater or equal to 1MW but less than 5MW.

## Small project demand connection (LV)

Connection projects providing a single three phase exit point or up to 4 single phase domestic exit points at LV where the highest voltage of works is at LV.

## Small tools, equipment, plant and machinery (STEPM) (Non Operational)

[tbc]

## **Smart Meters**

Has the meaning given to it in Condition 1 of the Smart Meter Communication Licence.

## **Smart Meter Communication Licensee Costs**

Has the meaning given to it in CRC 2B (Calculation of Allowed Pass-Through Items).

## **Smart Meter Information Technology Costs**

Has the meaning given to it in CRC 2B (Calculation of Allowed Pass-Through Items).

## **Smart meter registration**

Changes to registration systems as part of the smart meter roll-out, as identified by the Consequential Changes Working Group. This includes the extension of registration data sets to include new data items required for the roll out. Costs equate to the price per meter fixed charge payable annually to DCC upon registration of a domestic GB smart meter enrolled in the DCC service. This fixed charge reflects the relevant proportion of costs for core services to each smart meter across each class of DCC user.

## **Sole use connection capex for DG**

The element of Total Capex for DG that is fully funded by the connecting party.

## **Span**

Related to overhead lines and is the term used to describe the portion of overhead line between two overhead line supports (ie, poles and towers). The number of spans associated with a double circuit line between two supports (either poles or towers) should be counted as two.

## **Span Length Average**

Used in Tree Cutting Table CV29 and relates to the average distance between distribution poles or towers for circuits at the relevant voltages.

## **Spans affected by trees**

Used in Tree Cutting Table CV29 and relates to spans where vegetation growth necessitates the undertaking of tree cutting on a periodic basis in order to maintain the clearances specified in ENATS 43-8.

## **Spans Cut**

Used in Tree Cutting Table CV29 and relates to a count of the number of overhead line spans where tree cutting is undertaken during the reporting year, in order to ensure that clearances in accordance with ENATS 43-8 are maintained until the span is next cut.

The reporting year in which the overhead line span was inspected in order to determine whether there was a need to undertake tree cutting is irrelevant.

## Spans Inspected (Tree Cutting)

Used in Tree Cutting Table CV29 and relates to the activity of inspecting overhead line spans to determine or confirm the need to undertake tree cutting along the span or around the support in order to meet the requirements of ENATS 43-8. For each overhead line span inspected there are three possible outcomes from the inspection activity, ie it is determined that it will:

- be necessary to undertake tree cutting in the same reporting year as the inspection activity in order to ensure that clearances, in accordance with ENATS 43-8, are maintained until the span is next cut
- be necessary to undertake tree cutting in a future reporting year in order to ensure that clearances, in accordance with ENATS 43-8, are maintained, or
- not be necessary to undertake tree cutting in order to ensure that clearances in accordance with ENATS 43-8, are maintained until the span is next inspected.

The activity volume to be reported is the total number of overhead line spans inspected to determine or confirm the need to undertake tree cutting in order to meet the requirements of ENATS 43-8, irrespective of the outcome. The reported activity total should include the volume of overhead line spans inspected where the:

- primary objective is to determine or confirm the need to undertake tree cutting, or
- tree cutting inspections are carried out as an integral part of routine overhead line condition inspections. In such circumstances, it is deemed that one of the primary objectives of the routine overhead line inspection is to determine or confirm the need to undertake tree cutting in order to meet the requirements of ENATS 43-8.

The reported activity volume should not include any spans inspected, where the primary objective is NOT to determine or confirm the need to undertake tree cutting in order to meet the requirements of ENATS 43-8. Examples of overhead line inspection activity that should NOT be included are:

- routine safety and security patrols
- inspections undertaken ahead of network investment.

## Spans not affected by trees

Used in Tree Cutting table CV29, and relates to spans where there is insufficient vegetation growth to necessitate the undertaking of tree cutting on a periodic basis in order to maintain the clearances specified in ENATS 43-8.

## Specified Lines

Refers to the following telephone lines:

- to the published power outage telephone number operated by the DNO or by its appointed agents (or contractors),
- to the safety and security of supplies enquiry service telephone number (if different from the above) operated by the DNO or by its appointed agents (or contractors), and
- to contractors and/or agents of the DNO who act as an overflow or crisis management facility during peak periods.



Where DNOs provide a different emergency telephone number as required by the Electricity Safety, Quality and Continuity Regulations (ESQCR)<sup>4</sup>, this is not included in the definition of specified contact lines.

## **Stakeholder pension & Personal Accounts**

Forms of defined benefit contribution pension scheme.

## **Standards ('the standards' – for connections)**

Refers to both the ECDGS (DG standards), ECGS (generation standards) and the SLC 15 standards (those standards of performance specified in accordance with Standard Condition 15 of the electricity distribution licence). Unless otherwise specified the guidance refers to all of the standards.

## **Stand alone ETR 132**

Work where ETR 132 is the sole driver. For example, there are not further benefits derived in terms of asset replacement or general reinforcement.

## **Standard Deviation of Lives**

This is the amount of variation around the average asset life as reported in the age profile.

## **Stores**

The activity of managing and operating stores, which is reported as an activity within Closely Associated Indirects.

INCLUDES:

- the management of stores and inventory control
- stock-checkers
- designated storekeepers
- delivery costs (labour and transport) of materials or stock from any store to another store (including central to satellite stores)
- quality testing of materials held in stores
- the value of losses on materials held in stores, including the movements in obsolete stock provisions
- the costs of membership of the "NGT spares club".

EXCLUDES:

- Costs of oil or other insulation medium (report under the activity for which it is used, eg maintenance, faults)
- IT and property costs associated with Stores (include in IT & Telecoms and Property Management activities)
- Delivery costs of materials or stock to stores or sit

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<sup>4</sup> The Electricity Safety, Quality and Continuity Regulations 2002, No 2665

- IT and property costs associated with Stores (include in IT & Telecoms and Property Management activities)
- e from the manufacturer/supplier (include in Materials as part of the direct cost)
- Collection of materials by directly costed field staff from both manned and unmanned stores (include in Labour as part of the direct cost)

## **Strategic Business Plan Development and Implementation - see Engineering Management & Clerical Support**

### **Strategic spares**

Items of plant and equipment held specifically to cover emergencies, where the equipment is subject to long delivery lead times or it will not be available in the future and where it is of strategic importance to maintain supplies. Purchase of strategic spares in the year held as stock at the year end.

Temporary towers which can be used on either capex related work or faults and maintenance are analogous to strategic spares.

EXCLUDES:

- Pole Mounted Transformers.

### **Street works**

Activities undertaken by a statutory undertaker which involve the occupation of the highway. Includes:

- Permit costs
- Permit penalties
- Lane rental costs
- Lane rental overstay fines
- Streetworks administration costs
- Permit set-up costs
- Any streetworks costs paid directly by contractors to relevant authorities (report as contractor cost),

net of any income from contractors in payment for street works activities.

EXCLUDES (all are embedded in Road Charges):

- Notifications penalties
- Sample and Investigatory Inspections
- Inspections penalties Any road charges costs paid directly by contractors to relevant authorities (report as contractor cost)
- Congestion charge scheme payments net of any income from contractors in payment for streetworks activities.

## **Street works Admin – see Engineering Management and Clerical Support**

### **Subscriptions**

Subscriptions to IT or Telecoms software and for trade and other associations.

INCLUDES:

- Subscriptions to trade bodies including the Electricity Networks Association (ENA)
- Ordnance Survey Licences
- Other Software Licences.

## **Substation**

An electrical substation is a subsidiary station of a distribution system where voltage is transformed from high to low or the reverse using transformers and/or where circuit switching takes place.

## **Substation costs**

The costs associated with:

- Substation civil works
- Safety barriers/signs
- Building painting
- Vegetation management
- Including other costs related to substations other than transformers and switchgear.

## **Substation Electricity**

Electricity consumed (both metered and unmetered) in DNOs' substations.

## **Substation electricity costs**

The costs incurred by the DNO for substation electricity usage.

## **Substation Fire protection**

The provision of fire protection system improvements including emulsifier and inert gas systems but excluding improvements to fire prevention or fire detection systems only.

## **Substation Indoor**

Substation situated inside a building.

## **Substation - Inspections**

Includes the inspection of substation/switching station fencing, buildings, site and assets (HV, EHV, 132kV).

## **Substation Outdoor**

Substation situated outside.

## **Substation reinforcement**

Reinforcement to address a constraint at a substation.

## Substation RTU, Marshalling Kiosk and Receivers

### Substation RTUs (Remote Terminal Units)

Communication devices that transmit data used typically for real time network management from substations to a master control system/data logger, but which do not form part network assets.

For these purposes, Substation RTUs excludes the following:

As part of the plant:

- Transducers on the plant
- Control/indication panels and relays
- Wiring from plant to control panel.

As part of the mains:

- Auxiliary cables that form part of a pilot cable or are integral with/supported from a main.

As part of the substation:

- Transducers associated with the substation, eg fire/security alarms and weather stations;
- Dataloggers and statistical metering (for both of the above, the distinction is that these are not directly related to the normal operation of the substation)
- Wiring (if any) from (plant) control panels to RTU and marshalling kiosk.

### Marshalling Kiosk

A marshalling kiosk is a protected compartment or container associated with an electrical plant installation and housing terminations for alarms, trips, controls and similar devices fitted to the installation concerned.

### Receivers

Communications devices used for the conversion of transmitted signals into a format appropriate for use by Substation RTUs and/or other control hardware.

## Supply Restoration By Onsite Switching Only

Cost category relating to unplanned incidents on the power system voltage network that are resolved by network switching only.

The costs to be recorded include the cost of onsite staff only.

The cost of network switching undertaken by Control Centre staff using SCADA/remote control functionality is excluded.

## Support

A pole or tower designed to support an Overhead Line (OHL) and maintain required clearances. This A Support is different from a Structure when counting assets ( A Structure may comprise multiple supports (poles only).)

INCLUDES:

- wood poles, concrete poles, and steel towers.

## Supranational

A class of assets issued by an international organization, or union, whereby member states transcend national boundaries eg, European Central Bank.

## Surround

A construction, of brick, concrete, steel, wood or any combination of these, which surrounds a substation site or electrical assets within a substation site. Scope of work includes replacement of all or part of the surround.

INCLUDES:

- boundary walls and fences; security fences and gates.

EXCLUDES:

- repair and painting/timber treatment.

## Switchboards/substation busbars

A collective term for all switchgear operating at the same voltage and connected to a common busbar at a substation, including both non extensible switchgear and switchboards comprised of extensible switchgear.

Where a substation contains a switchboard, or common busbar, including in item of switchgear which can be operated as an open point, this shall result in a count of 1 switchboard regardless of the normal running arrangement of the switchgear.

'Switchboards/substation busbars' at HV shall only consider those associated with 132kV/HV or EHV/HV transforming substations.

## Switched Capacitors

As featured in the transform model developed through the smart grids forum, the LV connected mechanically switched devices as a low cost form of reactive power compensation. They are used for voltage control and network stabilisation under heavy load conditions.

## Switchgear

A Switch is a device capable of making, carrying and breaking currents under normal circuit operation but not normally capable of breaking fault current.

Includes switch fuses and pole mounted auto sectionalisers, disconnectors associated with ground mounted switches that permits isolation to be achieved and permanently installed earthing switches on EHV and 33 kV outdoor plant. Excludes any Switch that forms part of an RMU (other than for the purposes of the "HV Switchgear (GM) - Distribution" and "EHV Switchgear" Health Index Asset Categories, which do include RMUs).

Switchgear also includes Circuit Breakers.

## Switching points with remote control/automation facility

HV circuit breakers and switches which can be operated by means of remote control or automated equipment. This may be affected by the fitting of powered actuators and SCADA to existing a switching point, in which case the CB or switch asset

volume would be unchanged, but the count of switching points with remote control/automation facility would increase.

This excludes autoreclose facilities.

The types of switching points are:

- 6.6/11 kV and 20kV CB (GM) Primary
- 6.6/11 kV and 20kV CB (GM) Secondary
- 6.6/11 kV and 20kV RMU (including X-type)
- 6.6/11 kV and 20kV CB (PM)
- 6.6/11 kV and 20kV Switch (PM)
- 6.6/11 kV and 20kV Switch (GM).

## **System Mapping**

System Mapping is a closely associated indirect activity included in the Core CAI table.

The activity relates to the mapping of the network and operational premises of the network to geographical locations.

INCLUDES:

- Updating the geographical system maps with asset and locational information following the installation, removal or repositioning of system assets
- Updating of GIS records following Ordnance Survey mapping rebasing upgrades
- Responding to NRSWA notices sent to the DNO by other parties
- Ordnance Survey licence fees
- Provision of maps to third parties as requested.

EXCLUDES:

- Clerical support and administration associated with New Roads and Street Works Act (NRSWA) (include under Engineering Management and Clerical Support)
- Any employees employed in the Control Centre (include under Control Centre)
- Updating the network control diagram (include under Control Centre);
- On-site collection of asset and locational information where this task is undertaken with the installation of the asset (eg, sketches indicating the "as laid" size and route of an HV underground cable) (include as part of the associated direct activity)
- IT and Property costs associated with the System Mapping Activity (include in IT&T and Property Management indirect activities).

## **T**

### **Tariff Group**

In the context of portfolio billing a "Tariff Group" is a set of common distribution charging methodology tariffs calculated from a single IDNO discount factor within the model and applicable to one or more types of connection point.

## **Tax Clawback Calculation**

The calculation for the adjustment made to remove the tax benefit to licensees whose gearing level and interest payments are both above that assumed in the price control modelling.

### **tCO2e**

Carbon dioxide (CO<sub>2</sub>) equivalent, measured in tonnes. This is a measure for describing how much global warming a given type and amount of greenhouse gas may cause, using the functionally equivalent amount or concentration of carbon dioxide (CO<sub>2</sub>) as the reference.

### **Technical losses**

Electricity units lost owing to the physical properties of the network. This also includes the way the network is configured and operated.

### **Temporary connection**

A connection (made without using normal switching devices) which is not to become a permanent feature of the distribution system, but which is used solely to provide a temporary restoration of supplies during an incident.

### **Temporary disconnection**

A deliberate break in the continuity of a circuit, which is not to become a permanent feature of the distribution system, but is used solely to facilitate the temporary restoration of supplies during an incident.

### **Temporary supply arrangement**

The use of temporary connections, temporary disconnections or mobile generation in order to provide temporary restoration of supplies during an incident.

### **Third party cable damage**

Damage caused by third parties to cables or equipment for which a recovery of costs is made and which are not Non Trading Rechargeables (DRS5 & DRS6).

### **The Regulations**

Refers to the Electricity (Connection Standards of Performance) Regulations 2015.

### **Tidal stream & wave power**

A category of DG. Electricity generation using tidal flows or wave power.

### **Tier 1 network output measure**

High level system wide network risk metrics, derived from an amalgamation of well-defined, established and consistently reported site or asset-specific metrics.

## **Tier 2 network output measure**

Site or asset-specific metrics which capture factors that impact on performance and/or the relative level of risk for the asset or site in question (eg, metrics collating asset condition and health information).

## **Tier 3 network output measure**

Low-level metrics capturing volumes of activity (eg, number of assets installed).

## **TMA – Traffic Management Act 2004**

**Top-up, standby and enhanced system security - see DRS4.**  
**Top-up, standby, and enhanced system security**

## **Total Connection Indirects (excluding related party margin)**

In year allocated indirect costs split between Network Investment (RAV) and Non-Price control costs.

## **Total costs incurred in respect of relevant theft of electricity**

The estimated total costs incurred related to instances investigated to costs to recover monies in respect to 'relevant theft of electricity' as defined in Standard Condition 1 of the electricity distribution licence.

## **Total DNO call outs for SM installations**

Number of SM installations where it is expected that DNO will be required to attend. This is to be counted by the number of unique installation sites where a DNO will attend, regardless of the number of tasks required at each site (eg, if the DNO visits one installation site only where it is required to replace the meter box door and cut out, a value of 1 is still recorded.) All calls outs are counted for, regardless if DNO's intervention was required ie, includes non-valid referrals/abortive calls.

## **Total DNO related call outs for SM installations**

Includes only valid DNO call outs.

## **Total number of customers**

The total number of customers whose supplies are connected to the DNO's distribution network as at 30 September in the relevant reporting year.

## **Total number of disconnected customers**

Disconnected customers – Total number of customers whose supplies have been disconnected between 1 October in the previous year and 30 September in the relevant year.

New and disconnected customers should be identified from MPANs such that the number of new and disconnected customers corresponds with the number of new and disconnected connection points on the distribution system.



## **Total number of new customers**

New customers – Total number of new customers whose supplies have been connected between 1 October in the previous year and 30 September in the relevant year.

## **Total SM installed DNO's region**

Number of smart meters to be installed at meter points in DNO's operating area, whether or not it is expected that DNO will be required to attend site.

## **Totex**

The aggregate net network investment, net network operating costs and indirect costs, less the cash proceeds of sale of assets and scrap.

## **Traffic Lights**

Traffic lights means equipment providing standard 'red, amber, green' signals to vehicular traffic using the public highway.

## **Trainer and course material costs**

Employment costs for trainers developing and delivering classroom training.

### **INCLUDES:**

- trainer's own training costs
- costs of materials used in training delivery
- cost of any outsourced operational activity training activities.

### **EXCLUDES:**

- the cost of construction of permanent network simulations (include in training centre and training admin costs)
- the cost of supervisors/trainers for on-the-job training activities (report as per the job being undertaken).

## **Training Centre and training admin costs**

Cost of establishing, developing and maintaining training centre, including:

- rent paid on training centre and associated training infrastructure
- rates and taxes payable on training centre and associated training infrastructure
- utilities including electricity, gas and water (supply and sewerage) for training centre and associated training infrastructure
- inspection and maintenance costs of training centre and associated training infrastructure
- facilities management costs including security and reception for training centre and associated training infrastructure
- expenditure on new and replacement assets associated with training centre, whether on building assets or permanent network simulations to be used for training purposes
- costs of administering operational training including management of training records, course scheduling and invitations, attendance monitoring etc.

**EXCLUDES:**

- any training centre costs associated with the delivery of non-operational training (include under property/non-operational capex).

## **Training Days**

Number of days spent by operational staff and trainees in both classroom and on-the-job training activities.

This should be calculated as per the following examples:

- 1 employee for 1 working day = 1 training day
- 1 employee for ½ working day = ½ training day.

**EXCLUDES:**

- Training days of contractors, even if these have been undertaken in DNO training facilities

## **Transformer**

A device that is used to "transform" voltage from one level to another, usually from a higher voltage to a lower voltage.

## **Transmission Connection Point**

A point of supply from the GB Transmission System to the DNO's distribution system.

## **Transmission Connection Point Charges**

Charges payable by the licensee that are levied by a Transmission Licensee as connection charges by direct reference to the number or nature of connections between the licensee's Distribution System and the GB Transmission System, and includes any associated Transmission Use of System Charges and any remote Transmission Asset Rentals payable by the licensee.

Transmission Connection Point Charges include:

- all charges payable by the licensee to a transmission licensee relating to the number or nature of connections between the licensee's distribution system and the transmission licensee's system
- all charges payable by the licensee to a transmission licensee for use of the transmission system or for remote transmission asset rental
- all charges payable by the licensee to another distribution licensee for the transportation of units to an entry point on the licensee's system, for onward distribution to premises connected to the licensee's system ('wheeled unit' charges).

## **Transmission Connection Point Works**

Works undertaken by a transmission licensee at a Transmission Connection Point, which result in a change to Transmission Connection Point Charges.

## **Tree Cutting**

Used in Tree Cutting Table CV29 and relates to the activity of physically felling or trimming vegetation from around network assets.

- INCLUDES: The felling or trimming of vegetation to meet ENATS 43-8 & ETR132 requirements;
- The inspection of vegetation cut for the sole purpose of ensuring the work has been undertaken in an appropriate manner; and
- Inspection of tree-affected spans where included as part of a tree cutting contract.

**EXCLUDES:**

- The costs of felling or trimming of vegetation as part of a Capital Scheme, (costs remain with the driver for works which necessitated the installation of the asset/tree cutting) General inspection costs relating to wires that are subject to vegetation and not performed solely as part of a tree cutting contract or to ensure vegetation has been cut appropriately (include under Inspections & Maintenance);
- Costs of assessing and reviewing the tree cutting policy (include under Network Policy);
- Data collection and manipulation relating to vegetation (include under Network Design & Engineering);
- The cost of managing the tree cutting contract, except as stated above; and
- The cost of procuring the tree cutting contract except as stated above (include under Finance & Regulation).

## **Tree Cutting Cycle**

Used in Tree Cutting Table CV29 and relates to the number of years for a DNO to complete tree cutting across their total overhead network, at each voltage, in accordance with their proactive tree cutting policy to meet the clearance specified in ENATS 43-8.

## **Tree Cutting Policy**

Used as a concept used in Tree Cutting Table CV29. The policy should represent the DNOs overall approach to tree cutting at each voltage. There are two overall approaches:

- proactive - a cyclic (periodic) programme for ensuring that the clearances specified in ENATS 43-8 are maintained
- reactive - an approach where tree cutting to maintain the clearances specified in ENATS 43-8 is undertaken on as found basis.

## **Tree cutting: ENATS 43-8**

Used in Tree Cutting Table CV29 and relates to tree cutting activity undertaken to meet the clearance requirements of ENATS 43-8.

## **Tree cutting: ETR 132**

Used in Tree Cutting Table CV29 and relates to tree cutting activity undertaken to improve network resilience under Engineering Technical Recommendation 132 (ETR 132).

## Triennial valuation (pensions)

Under the Pensions Act 2004, specifically refers to a written report prepared and signed by the scheme actuary, valuing the schemes assets and calculating its technical provisions.

## Troublecall

The activity relating to the resolution of Troublecall occurrences.

INCLUDES:

- Site visits
- Network operations
- Issue of safety documentation
- Identification of the precise location of a failed asset
- Physical repairs to assets (including third party damage)
- Establishing temporary supply arrangements (as defined for Quality of Service reporting)
- For incidents which affect assets, the activity includes the repair and any subsequent work required to restore the faulted equipment back to pre-fault availability and, if applicable, the restoration of supply.

For incidents which affect assets, and which are not covered by Quality of Service reporting, Troublecall includes the initial repair that results in a permanent restoration (or what could be considered to be a permanent restoration) of the equipment back to its former availability and, if applicable, the restoration of supply, these are "No Unplanned Incident", and "Other".

Troublecall is recorded in three categories - Unplanned Incidents Damage and Non-damage, No Unplanned Incident, and Other:

Unplanned Incidents (Damage and Non-damage), disaggregated into

- LV Services (excluding cut out incidents) Overhead
- LV Services (excluding cut out incidents) Underground
- LV Network Supply Restoration by Switching Only (Non Damage Fault)
- LV Network UG Cables (Non CONSAC) - Asset Repair/Replacement Required
- LV Network UG Cables (CONSAC) - Asset Repair/Replacement Required
- LV Network OH Lines - Asset Repair/Replacement Required
- LV Network All Other Switchgear, Plant & Equipment - Asset Repair/Replacement Required
- LV Network Plant & Equipment LV link boxes
- HV Network (11 kV & 20 kV) Supply Restoration by Switching Only (Non Damage Fault)
- HV Network (11 kV & 20 kV) UG Cables - Asset Repair/Replacement Required
- HV Network (11 kV & 20 kV) OH Lines - Asset Repair/Replacement Required
- HV Network (11 kV & 20 kV) Pole Mounted Switchgear Circuit Breakers - Asset Repair/Replacement Required
- HV Network (11 kV & 20 kV) Pole Mounted Switchgear (All Types ex CB) Asset Repair/Replacement Required
- HV Network (11 kV & 20 kV) Pole Mounted Transformers - Asset Repair/Replacement Required
- HV Network (11 kV & 20 kV) All Other Plant and Equipment (inc GM transformers) - Asset Repair/Replacement Required

- EHV Network (22 kV, 33 kV & 66 kV) Supply Restoration by Switching Only (Non Damage Fault)
- EHV Network (22 kV, 33 kV & 66 kV) UG Cables (Pressure Assisted) - Asset Repair/Replacement Required
- EHV Network (22 kV, 33 kV & 66 kV) UG Cables (Non Pressure Assisted) - Asset Repair/Replacement Required
- EHV Network (22 kV, 33 kV & 66 kV) OH Lines - Asset Repair/Replacement Required
- EHV Network (22 kV, 33 kV & 66 kV) All Other Plant and Equipment - Asset Repair/Replacement Required
- 132 kV Network Supply Restoration by onsite switching only
- 132 kV Network UG Cables (Pressure Assisted) - Asset Repair/Replacement Required
- 132 kV Network UG Cables (Non Pressure Assisted) - Asset Repair/Replacement Required
- 132 kV Network OH Lines - Asset Repair/Replacement Required
- 132 kV Network All Other Plant and Equipment - Asset Repair/Replacement Required
- HV Network (11 kV & 20 kV) Submarine Cables - Asset Repair/Replacement Required
- EHV Network (22 kV, 33 kV & 66 kV) Submarine Cables - Asset Repair/Replacement Required
- 132 kV Network Submarine Cables - Asset Repair/Replacement Required.

No Unplanned Incident, disaggregated into:

- Emergency Disconnections
- Streetlights/Street Furniture/Unmetered Services
- Unmetered Cut Outs (including unmetered cut out fuses)
- Cut Outs
- Cut Out Fuses Only
- Asset repairs instigated by Troublecall.

Other, disaggregated into:

- Abortive Visit - no immediate work required
- Meters
- Responding to critical safety calls
- Pilot Wire Failures.

EXCLUDES:

- the planned replacement of assets because of their condition and/or performance history (include in Asset Replacement)
- any subsequent maintenance work identified and planned at the time of resolving the Troublecall occurrence (include in Inspection and Maintenance)
- resolving failures on the DNO's SCADA and Telecontrol networks.

### **Troublecall LV link boxes**

Repair or replacement of a low voltage cable marshalling point with facilities for the insertion and removal of linking cables.

### **Troublecall LV mains, HV, EHV and 132kV overhead lines and underground cables**

All overhead line and underground cable replacements including submarine cables, necessary as part of the minimum work required to restore the faulted piece of

equipment back to pre-fault availability and, if applicable, the restoration of supply. The minimum work is defined as the minimum work that is feasible to undertake at that location given the “as-found” condition and any access constraints. For example, if the cable is wet and needs to be cut back to find a suitable location to make a joint that is expected to have normal life expectancy then this is minimum work required for that specific location. Likewise where there is an access constraint such as a road crossing that requires extending the cable replaced, this is also the minimum work required for that specific location. The minimum work should not be determined by the cost of the repair or the length of conductor or cable installed.

### **Troublecall LV service failures (including service cut-outs)**

Failure of LV service (including service cut-out).

EXCLUDES:

- replacement of the complete service (main to cut-out) due to the “as found” condition and where this is a direct offset against a volume of planned service replacement.

### **Troublecall LV, HV, EHV and 132kV plant (excluding PMT)**

Repair or replacement of components within plant assets, necessary as part of the minimum work. In general any electrical asset not specifically named in the RIGs is a component. For the avoidance of doubt fuses, fuse holders, winding repairs, tap changers, bushings, individual CB poles, CTs and VTs are components.

### **Troublecall Occurrences**

Occurrences relating to loss of supply, distribution system abnormality or suspected distribution system abnormality that have been brought to a DNO’s attention by:

- reports by third parties
- reports by DNO employees or agents
- the operation of alarms.

Troublecall Occurrences are grouped into three generic categories:

- unplanned incidents on power system voltage equipment
- occurrences on power system voltage equipment that are not defined as unplanned incidents for Quality of Service reporting purposes
- other occurrences that do not affect power system voltage equipment.

## **U**

### **UG Cables (CONSAC)**

Buried cables made from concentric aluminium cable (CONSAC).

### **UG Cable (Oil & Gas) - Decommissioned**

A UG cable (Gas) or UG cable (Oil) that has been de-energised and disconnected from the network.

Such cable may be kept pressurised if there is a foreseeable re-use, but normally it is de-pressurised, drained and flushed (in the case of oil cable) and capped.

Decommissioned cable has not been physically removed from the environment, and it remains an asset management liability due to its potential to cause harm to the environment if residual oil escapes from the cable.

## **UG cables installed during year (km)**

Energisation of underground cables, measured in km, that have replaced OHL removed during the year under the eligibility criteria for the Visual Amenity Allowance scheme.

## **UG cables (km) installed**

Energisation of underground cables, measured in km, that have replaced the OHL removed.

## **Underground cables**

Buried cables. Underground power cables are often used in densely populated areas or where the use of overhead lines is not suitable.

## **Underground cables - Inspections**

INCLUDES:

- monitoring of pressurised cables and pressurising plant and equipment (HV, EHV, 132kV).

EXCLUDES:

- cable testing and inspections of cable tunnels and bridges.

## **Underground cable and services other - inspections**

Includes the inspection of LV Main (UG Consac), LV Main (UG Plastic), LV Main (UG Paper), and LV Service (UG).

## **Underground services**

The cables used to distribute electricity from the mains network to individual customers or groups of customers.

## **Undergrounding**

The process of replacing overhead power cables with buried electricity distribution cables.

## **Undergrounding in non-designated areas**

The activity of undergrounding overhead lines when the primary driver is the reduction of their visual impact on the landscape, not undertaken under the Visual Amenity Allowance funding mechanism described in CRC 3J (Allowed expenditure on Visual Amenity Projects).

## **Undrawn facilities**

Loan/credit facilities that are available to an entity but which have not been utilised.

## **Units**

In relation to unmetered connections, means any single asset with or intended to have an unmetered connection.

## **Units Consumed**

Is the total electricity consumed (both metered and unmetered) at a DNO's substations in MWh.

## **Units Entering System**

Units entering (System Entry Volumes) a DNO's network take account of all sources of energy entering the network at different types of network connection point.

## **Units Exiting System**

Units exiting (Units Distributed) a DNO's network take account of all sources and uses of energy exiting the network at different types of network connection point.

## **Unmetered connections work**

The following three activities constitute unmetered connections work:

- Work – Provision of points of connection
- Work – Transfer
- This refers to occurrences of a service cable being transferred from one street lighting column/ equivalent to another by the party in the "connected for" column. Although the service cable is usually cut and replaced by a new cable to the new column, this service should be counted as 1 transfer rather than 1 disconnection and 1 reconnection.
- Work – Disconnections
- This refers to disconnections of service cables for each party in the "connected for" column. This quantity should NOT include any service cable disconnections provided as part of a service cable transfer.

## **Unmetered Local Authority**

Refers to Unmetered connection work [provision of points of connection, transfers and disconnections] which are carried out for a Local Authority.

## **Unmetered PFI**

Unmetered connection work [provision of exit points, transfers and disconnections] which are carried as part of a Private Funding Initiative (PFI) scheme.

## **Unmetered services included in the quote**

Where the quotation for a Connection Project includes any unmetered connection work, the number of unmetered connection works (provision of points of connection, transfers and disconnections) should be recorded where applicable in table CR5.



## **Unmetered Standards**

The following standards - ECGS 8A, 8B, 8C, 8D, 8E, 9, 10A and 10B. These, measured quarterly, in aggregate have a 90% performance standard set in Standard Condition 15A of the electricity distribution licence.

## **Unmitigated flooding risk at 31 March 2015 at forecast level of expenditure**

The flooding risk, as defined in this glossary, for sites that will not be mitigated for flood damage before 1 April 2015, based on current forecasts and expenditure arrangements.

## **Unplanned incident on the distribution system**

Any incident arising on the licensee's distribution system, where statutory notification<sup>5</sup> has not been given to all customers affected at least 48 hours before the commencement of the earliest interruption (or such notice period of less than 48 hours where this has been agreed with the customer(s) involved).

## **Unregulated margin**

Has the meaning given to it in Standard Condition 1 of the electricity distribution licence.

## **Unregulated margin period**

The period or periods in which DNOs are permitted/choose to apply the regulated margin as defined in CRC 2K (Margins on licensee's Connection Activities).

## **Upgrading connection projects**

This refers to the upgrading of existing MPANs/points of connection without the provision of new MPANs/points of connection and must qualify as achieving either of the following:

- Increase the capacity available to an existing MPAN/point of connection of the DNO network
- Allowing an existing MPAN/point of connection to be able to feed a supply of electricity to a DNO network.

## **Up-skilling**

Covers operational training for existing operational employees whose skill set is being augmented or improved. This can include operational employees on either official promotion/development programmes and the enhancement of existing skillsets within current operational roles, and covers both classroom training and on-the-job training. Note this is distinct from 'initial training' (for apprentices and other

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<sup>5</sup> Regulation 14 of the Electricity (Standards of Performance) Regulations 2010.

new employees), and 'refresher training' which does not involve any new skills. This activity is part of Operational Training.

EXCLUDES:

- Training provision for New Recruits
- Routine operational refreshers and safety briefings.

### **Use of System (UoS) charges**

Has the meaning given to it in Standard Condition 1 of the electricity distribution licence.

### **Use of system bad debts**

A bad debt arising specially for use of system charges.

### **Use of system capex for DG**

The amount of Total Capex for DG that is not remunerated through connection charges payable to the licensee exclusive of the incremental costs in excess of the high-cost project threshold (as set out in the licensee's connection charging methodology in place on or after 1 April 2010).

## **V**

### **Variant Costs**

Costs which are subject to uncertainty mechanisms.

### **Vehicles and Transport (Non-Operational)**

Expenditure on new and replacement vehicles which are not system assets.

INCLUDES:

- mobile plant and generators
- purchase of the commercial vehicle fleet and mobile plant utilised by the DNO or any other related party for the purposes of providing services to the DNO.

EXCLUDES:

- company cars (except where included under the labour cost).

### **Vehicles & Transport (CAI)**

Is the Closely Associated Indirect activity associated with managing, operating and maintaining the commercial vehicle fleet and mobile plant utilised by the DNO or any other related party for the purposes of providing services to the DNO.

INCLUDES:

- Lease costs associated with the vehicle fleet and mobile plant
- Insurance premiums associated with leased commercial fleet vehicles where the costs of the premiums are embedded in the lease charges
- Maintenance costs of the vehicle fleet and mobile plant, including mobile generation

- Cost of accident repairs to DNO's own commercial fleet vehicles where the cost is borne directly by the DNO
- Cost of accident repairs to commercial fleet vehicles leased by the DNO, where the cost is borne directly by the DNO
- Fuel costs of the vehicle fleet and mobile plant, irrespective of whether the commercial fleet is owned by the DNO or leased by the DNO.

#### EXCLUDES:

- Direct field staff time spent on utilising the vehicles for a direct cost activity (include under Direct Activities)
- IT and property costs associated with vehicle management (include as IT and property respectively)
- Purchase of vehicles, mobile plant and equipment (include as Non-Operational Capital Expenditure – Vehicles and Transport)
- Cost of providing company cars to employees which are benefits in kind (include as labour cost under the relevant activity of that employee)
- Costs recovered in respect of accident repairs from insurance companies (include as Finance and Regulation)
- Insurance premiums associated with commercial fleet that are not embedded in the lease cost (include as Finance and Regulation).

### **Vertical clearance**

The vertical distance between an overhead line, the ground or a building or structure.

### **Vesting asset lives**

Being the number of years over which vesting assets are depreciated in rolling forward the RAV.

### **Vesting assets**

Assets included in the RAV at the vesting date.

### **Visual Amenity Allowance**

The mechanism for funding Visual Amenity Projects provided for in CRC 3J (Allowed expenditure on Visual Amenity Projects).

### **Visual Amenity Expenditure**

The actual expenditure on Visual Amenity Projects in any regulatory year.

### **Visual Amenity Inside Designated Areas**

The activity of undergrounding overhead lines within Designated Areas undertaken under the Visual Amenity Allowance funding mechanism described in CRC 3J (Allowed expenditure on Visual Amenity Projects). In this licence condition and CV22 - visual amenity these are referred to as Visual Amenity Projects.

### **Visual Amenity Outside Designated Areas (10% allowance)**

The activity of undergrounding overhead lines that are located outside the boundaries of Designated Areas as part of Visual Amenity Projects for which up to

10% of the Visual Amenity Allowance funding mechanism described in CRC 3J (Allowed expenditure on Visual Amenity Projects) may be used.

The activity volumes to be reported are the circuit lengths of overhead lines located outside the boundaries of Designated Areas that are removed as part of Visual Amenity Projects.

## **Visual Amenity Projects**

Has the meaning given to it in CRC 3J (Allowed expenditure on Visual Amenity Projects) may be used.

## **Voltage regulation schemes**

Reinforcement schemes that are driven by the DNO requirement to ensure that the voltage to individual LV connected customers is maintained within statutory limits which are at present:- 230v +10/-6 (between 253v and 216v).

## **W**

## **Waste incineration (not CHP)**

A category of DG. Electricity generation from burning waste, but not including combined heat and power plants.

## **Wayleaves**

An activity included within Closely Associated Indirects, incorporating the following sub-activities:

- Wayleave Payments (as defined in the glossary)
- Wayleaves and Easements/Servitudes: Admin Cost (as defined in the glossary).

## **Wayleaves (inc. Easements/Servitudes)**

Cost type for reporting payments of wayleaves and easements / servitudes.

These are payments to owners and/or occupiers to cover the financial impact of having equipment on their land and for access to that equipment:

- Wayleaves - Access to property granted for up to one year
- Easements/Servitudes - An interest in land owned by another that entitles its holder to a specific limited use of that land over an unrestricted time. Easements (England & Wales), Servitude (Scotland).

For the purposes of the Costs and Volumes RIGs, this cost type also includes the payments of substation rents.

## **Wayleaves and Easements/Servitudes Admin Costs**

A sub-activity of the 'Wayleaves' Indirect activity included with Closely Associated Indirects.

INCLUDES:

- Obtaining, managing and administering Wayleave, substation rents, easements and servitudes

- Negotiating new Wayleaves;
- Managing Wayleave terminations;
- Administration of existing Wayleaves including the preparation of payments;
- Negotiating conversions from Wayleave arrangements to permanent easement/ Servitudes, substation rents and Wayleave payments
- Provision of legal services relating to wayleaves /easements/servitudes.

## **Wayleaves Payments**

A sub-activity of the 'Wayleaves' Indirect activity included with Closely Associated Indirects.

INCLUDES:

- Annual payments made in advance to the owner and/or occupier to cover the financial impact of having equipment on their land and for access to that equipment;
- Cost of substation rent payments.

EXCLUDES:

- Purchase of easements / servitudes (include as Diversions or as relevant Connections activity within or outside price control).

## **Wheeled units imported**

The activity and costs of the importation of units of electricity conveyed on the licensee's distribution system within the licensee's distribution services area but not consumed within the licensee's distribution services area.

## **Work Planning, Budgeting, Allocation and Control - See Engineering Management and Clerical Support**

## **Works required by an alteration of premises – see DRS3.Works required by an alteration of premises**

## **Worst Served Customers (WSC)**

There are two definitions that will apply during RIIO-ED1:

- Aa DPCR5 definition that is used for the reporting of post WSC Scheme completion network performance for WSC Schemes carried out during DPCR5
- an ED1 definition that applies to reporting of WSC Schemes carried out during RIIO-ED1.

DPCR5 definition is customers experiencing 15 or more higher voltage unplanned interruptions over a three year period, with ie a minimum of three higher voltage unplanned interruptions in each year.

RIIO-ED1 definition is Customers experiencing 12 or more higher voltage unplanned interruptions over a three year period, with a minimum of three higher voltage unplanned interruptions in each year.

## **Worst Served Customer Schemes**

Schemes that are undertaken to reduce the average number of higher voltage interruptions experienced by Worst Served Customers.

The associated funding mechanism requires that the performance improvement meets a predetermined criterion. In DPCR5, the number of higher voltage faults had to reduce by 25%. In ED1, DNOs have been allowed to specify their own level of performance improvement (which had to be supported by the DNO's stakeholders). These ED1 values are recorded in Licence Condition CRC 3H.

### **WSC - Calculated number of customers interrupted in reference period**

This is calculated data. It represents the number of customers interrupted, in each year in the reference period, for each substation/individual customer. It is derived from the product of the number of incidents in the reference period and the number of Worst Served Customers on the substation/individual customer expected to benefit from the WSC Scheme.

### **WSC - Calculated number of customers interrupted post scheme completion**

This is calculated data. It represents the number of customers interrupted, in each year after the year in which the scheme is technically completed, for each substation/individual customer. It is derived from the product of the number of incidents in each year after the year in which the scheme is technically completed and the number of Worst Served Customers on the substation/individual customer expected to benefit from the WSC Scheme.

### **WSC - Circuit Reference Number**

This is a unique identification number for a circuit on a DNO's Distribution System.

### **WSC - Feeder Name/Ref**

This is the name or reference number of the feeder that the Worst Served Customers are connected to.

### **WSC - Improvement qualifies for revenue recovery**

This is calculated data. It uses the data calculated in "% improvement scheme (post scheme actual vs reference period)" to determine whether the WSC Scheme has delivered the required performance improvement as per "Performance Improvement Target from CRC 3H".

It only determines a statement once sufficient time has elapsed to make an assessment and returns either "yes" or "no".

### **WSC - Number of Customers expected to Benefit**

This is a count of the number of customers who are expected to benefit from the Worst Served Customer schemes being undertaken.

## **WSC – Number of higher voltage Customers Interrupted in the WSC reference period**

This is calculated data. It represents the total number of customers interrupted, in each year of the reference period, for all the substations/individual customers that are impacted by the same WSC Scheme. It is derived by using the Scheme id as a link between the scheme data and the substation/individual customer data in "Calculated number of customers interrupted in reference period". It is used in the calculation of the percentage improvement in performance.

## **WSC - Number of higher voltage Customers Interrupted post scheme completion**

This is calculated data. It represents the total number of customers interrupted, in each year after the year in which the scheme is technically completed, for all the substations/individual customers that are impacted by the same WSC Scheme. It is derived by using the Scheme id as a link between the scheme data and the substation/individual customer data in "Calculated number of customers interrupted post scheme completion". It is used in the calculation of the percentage improvement in performance.

## **WSC - Number of HV+ incidents post scheme completion**

This is the number of HV and above incidents which have occurred at the substation/for the individual customer after the scheme has been technically completed.

Data entry is only required for the three years after the year in which the project was technical completed. For example if the Year Project Completed is 2016 (for 2015-16), the data entry of HV and above incidents is for 2016-17, 2017-18 and 2018-19.

## **WSC – Number of HV+ Incidents within the reference period**

This is the number of HV and above incidents which have occurred on each substation/for each individual customer during the three year reference period.

Data only needs to be entered for the three years that constitute the Reference Period.

## **WSC - Number of Worst Served Customers on feeder**

This is the number of Worst Served Customers on the feeder where work is being undertaken and is linked to the Scheme's id/project number.

## **WSC - Number of Worst Served Customers on Substation**

This is the number of Worst Served Customers on the Substation.

## **WSC - Performance Improvement Target from CRC 3H**

The performance improvement that is required in order for DNOs to recover the costs of carrying out the WSC Scheme.

In DPCR5 its value is 25%. In RIIO-ED1 it is the value specified by each DNO (which is supported by stakeholders) recorded in CRC 3H (Allowed expenditure on improving services to Worst Served Customers) of the DNO's licence.

## **WSC - Primary Name**

This is the name of the primary substation upstream of the Worst Served Customers.

## **WSC - Scheme id (project number)**

This is a unique DNO reference for the Worst Served Customer scheme being undertaken.

## **WSC - Secondary Substation (name)/Customer Details**

This is the name of the secondary substation upstream of the Worst Served Customers, which was used to identify customers as being worst served, or the individual Worst Served Customer's details for the incidents that were used to identify an individual customer as being worst served.

## **WSC - Secondary Substation Ref/customer ref**

This is the unique reference used by the DNO to identify the secondary substation upstream of the Worst Served Customers or the unique reference used to identify an individual Worst Served Customer, and is related to the name used in "Secondary Substation (name)/Customer Details".

## **WSC - Start of reference period**

This is the regulatory year corresponding to the first year of the reference period that defines customers as being worst served (eg 2014 for 2013/14).

As an illustration, a reference period that was specified as 2014 would use incident data from 2013/14, 2014/15 and 2015/16 to show that the customers benefitting from a Worst Served Customer scheme meet the relevant definition of a Worst Served Customer.

## **WSC - Type of scheme (brief description of work done)**

This is a brief description of the work being undertaken as part of the scheme (eg line refurbishment, undergrounding, additional network automation).

## **WSC - Year Project completed**

This is the regulatory year corresponding to the year that the project was technically completed (eg 2017 for 2016-17).

## **WSC - % improvement scheme (post scheme actual vs reference period)**

This is calculated data. It represents the percentage reduction in the number of customers interrupted as a consequence of having carried out the WSC Scheme.

Where insufficient time has elapsed since the WSC Scheme was technical completed the calculation will return the message "too early".



## **WSC - Improvement qualifies for revenue recovery**

This is calculated data. It uses the data calculated in “% improvement scheme (post scheme actual vs reference period)” to determine whether the WSC Scheme has delivered the required performance improvement as per “Performance Improvement Target from CRC 3H”.

It only determines a statement once sufficient time has elapsed to make an assessment and returns either “yes” or “no”.

**X**

**Y**

**Z**

## **Zero margin period**

The period, or periods, that a DNO is unable to retain any margin on connections work.

### 3. Numerical definitions

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#### **6.6/11 kV CB (GM) Primary**

Includes – all Ground mounted Circuits Breakers (both indoor and outdoor) which form the switchboard associated with a 132kV/HV or EHV/HV transforming substation. For example a circuit breaker switchboard comprising two transformer incomers, a bus-section and a number of feeder circuit breakers.

#### **6.6/11 kV CB (GM) Secondary**

6.6 or 11 kV Circuit Breaker (Ground Mounted)

Includes – all Ground mounted Circuit Breakers (both indoor and outdoor) which do not form part of a 132kV/HV or EHV/HV transforming substation switchboard.

#### **6.6/11 kV CB (PM)**

6.6 or 11 kV Circuit Breaker (Pole Mounted)

Includes – all Pole mounted Circuit Breakers and Auto Reclosers.

#### **6.6/11 kV OHL (BLX or similar Conductor)**

6.6 kV or 11 kV Overhead Line with covered conductor

Includes – all forms of covered construction for example lines constructed to ENA TS 43-121 ie, single circuit overhead lines of compact covered construction on wood poles for use at high voltage (eg, BLX).

Excludes - any associated poles.

#### **6.6/11 kV OHL (Conventional Conductor)**

6.6 kV or 11 kV Overhead Line with Open Wire Construction

Includes - all forms of open wire construction. Depending on how data are extracted from the DNOs' asset registers this may also include short spans of covered conductor (as required for reasons of safety) which form part of a line of otherwise conventional open construction.

Excludes - any associated poles.

#### **6.6/11 kV Poles**

6.6 kV or 11kV Overhead Line Pole

Includes - supports constructed of wood, concrete or steel (both single and double circuits).

#### **6.6/11 kV RMU**

A 6.6/11kV Ring Main Unit is a non-extensible item of switchgear generally comprising two switches and a switchfuse or circuit breaker, supplied as a single item of switchgear.

Excludes - 6.6/11 kV X-type RMU.

## **6.6/11 kV Switch (GM)**

Ground Mounted 11/6.6kV Switches & Fuse Switches (both indoor and outdoor) that do not form part of a Ring Main Unit.

## **6.6/11 kV Switch (PM)**

Includes – 6.6 and 11 kV pole mounted switches that contain an insulation medium other than air.

Excludes - air break isolators, line sectionalisers, links, fuses and other pole mounted plant insulated only by air.

## **6.6/11kV Switchgear - Other (PM)**

6.6 and 11 kV pole mounted switches that have only air as an insulation medium

Includes - air break isolators, line sectionalisers, links, fuses and other pole mounted plant insulated only by air.

## **6.6/11 kV Transformer (GM)**

Ground Mounted Power Transformer with a primary winding voltage of 6.6 or 11 kV

Includes – 6.6 and 11 kV reactors & regulators.

## **6.6/11 kV Transformer (PM)**

Pole Mounted Power Transformer with a primary winding voltage of 6.6 or 11 kV

Includes – 6.6 and 11 kV reactors & regulators.

## **6.6/11 kV UG cable**

6.6/11 kV Underground Cable

Includes – all design types of Underground Cable.

## **6.6/11 kV X-type RMU**

A 6.6/11kV Ring Main Unit generally used on interconnected networks with unit type protection, consisting of two switches, one of which controls a transformer and one of which controls a feeder circuit, and a circuit breaker to control the second feeder circuit.

## **20 kV CB (GM) Primary**

20 kV Circuit Breaker (Ground Mounted)

Includes – all Ground mounted Circuits Breakers (both indoor and outdoor) which form the switchboard associated with a 132kV/HV or EHV/HV transforming substation. For example a circuit breaker switchboard comprising two transformer incomers, a bus-section and a number of feeder circuit breakers.

## **20 kV CB (GM) Secondary**

20 kV Circuit Breaker (Ground Mounted)

Includes – all Ground mounted Circuit Breakers (both indoor and outdoor) which do not form part of a 132kV/HV or EHV/HV transforming substation switchboard.

## **20 kV CB (PM)**

20 kV Circuit Breaker (Pole Mounted)

Includes – all Pole mounted Circuit Breakers and Auto Reclosers.

## **20 kV Overhead Line Conductor – Open Wire Construction**

Includes - all forms of open wire construction. Depending on how data are extracted from the DNOs' asset registers this may also include short spans of covered conductor (as required for reasons of safety) which form part of a line of otherwise conventional open construction.

Excludes - any associated poles.

## **20 kV OHL (BLX or similar Conductor)**

20 kV Overhead Line Conductor – Covered Construction

Includes – all forms of covered construction for example lines constructed to ENA TS 43-121 ie, single circuit overhead lines of compact covered construction on wood poles for use at high voltage (eg, BLX).

Excludes - any associated poles.

## **20 kV Poles**

6.6 kV or 11kV Overhead Line Pole

Includes - supports constructed of wood, concrete or steel (both single and double circuits).

## **20 kV RMU**

A 20 kV Ring Main Unit is a non-extensible item of switchgear generally comprising two switches and a switchfuse or circuit breaker, supplied as a single item of switchgear.

## **20 kV Switch (GM)**

Ground Mounted 20kV Switches & Fuse Switches (both indoor and outdoor) that do not form part of a Ring Main Unit.

## **20 kV Switch (PM)**

Includes – 20kV pole mounted switches that contain an insulation medium other than air.

Excludes - air break isolators, line sectionalisers, links, fuses and other pole mounted plant insulated only by air.

## **20kV Switchgear - Other (PM)**

20kV pole mounted switches that have only air as an insulation medium

Includes - air break isolators, line sectionalisers, links, fuses and other pole mounted plant insulated only by air & Automatic Sectionalising Links'.

### **20 kV Transformer (GM)**

Ground Mounted Power Transformer with a primary winding voltage of 20 kV

Includes – 20 kV reactors & regulators.

### **20 kV Transformer (PM)**

Pole Mounted Power Transformer with a primary winding voltage of 20 kV

Includes – 20 kV reactors & regulators.

### **20 kV UG cable**

20 kV Underground Cable

Includes – all design types of Underground Cable.

### **33kV CB (Air Insulated Busbars) (ID) (GM)**

33 kV (includes 22 & 25 kV) Ground Mounted Circuit Breaker situated indoor

Includes - all CB designs with any arc extinction media having air (or equivalent) busbar insulation.

Excludes - CB that form part of a RMU.

### **33kV CB (Air Insulated Busbars) (OD) (GM)**

33 kV (includes 22 & 25 kV) Ground Mounted Circuit Breaker situated outdoor

Includes - all CB designs with any arc extinction media having air (or equivalent) busbar insulation.

Excludes - CB that form part of a RMU.

### **33kV CB (Gas Insulated Busbars) (ID) (GM)**

33 kV (includes 22 & 25 kV) Ground Mounted Circuit Breaker situated indoors

Includes - all CB designs with any arc extinction media having SF6 gas (or equivalent) busbar insulation situated indoor.

Excludes - CB that form part of a RMU.

### **33kV CB (Gas Insulated Busbars) (OD) (GM)**

33 kV (includes 22 & 25 kV) Ground Mounted Circuit Breaker situated outdoor

Includes - all CB designs with any arc extinction media having SF6 gas (or equivalent) busbar insulation situated indoor.

Excludes - CB that form part of a RMU.

### **33kV Fittings**

Includes - insulators and fittings on OH tower lines

Excludes - insulators and fittings associated with OH pole lines. Measured per set (ie, one per circuit per tower).

### **33kV OHL (Pole Line) conductor**

33 kV (includes 22 & 25 kV) Overhead Line Conductor – Pole Line

Includes - all conductor strung on poles, single and double circuits, open wire and covered conductor.

Excludes - Conductor strung on a Tower Line and any associated poles.

### **33kV OHL (Tower Line) conductor**

33 kV (includes 22 & 25 kV) Overhead Line Conductor – Tower Line

Includes – all conductor strung on towers, single and double circuits.

Excludes - Conductor strung on a Pole Line and any associated fittings and towers.

### **33kV Pole**

33 kV (includes 22 & 25 kV) Overhead Line Pole

Includes - poles constructed of wood or concrete and small footprint steel masts (both single and double circuits).

Excludes – Steel lattice towers.

66 kV Overhead Line Conductor – Pole Line

Includes - all conductor strung on poles, single and double circuits, open wire and covered conductor.

Excludes - Conductor strung on a Tower Line and any associated poles.

### **33kV RMU**

A 33kV (includes 22kV and 25kV) Ring Main Unit is a non-extensible item of switchgear generally comprising two switches and a switchfuse or circuit breaker, supplied as a single item of switchgear.

### **33kV Switch (GM)**

33 kV (includes 22 & 25 kV) Switch (Ground Mounted)

Includes - all indoor and outdoor Ground Mounted Switches & Fuse Switches.

Includes - all other switchgear eg, disconnectors, fault throwers, earthing switches, fuses.

Excludes – Circuit breakers, Switches and RMUs.

Any isolators and earth switches that are integral to a circuit breaker, switch, RMU should not be counted as separate items of switchgear.

### **33kV Switch (PM)**

33 kV (includes 22 & 25 kV) Switch (Pole Mounted)

Includes – All Pole mounted Circuit Breakers, Switches and auto sectionalisers.

## **33kV Tower**

33 kV (includes 22 & 25 kV) Overhead line tower

Includes - Steel lattice towers

Excludes - Small footprint steel masts

## **33kV Transformer (GM)**

33 kV (includes 22 & 25 kV) Ground Mounted Power Transformer with a primary winding voltage of voltage of 33 kV (includes 22 and 25 kV)

Includes – 33 kV reactors & regulators

Excludes – All Auxiliary Transformers

## **33kV Transformer (PM)**

33 kV (includes 22 & 25 kV) Pole Mounted Power Transformer with a primary winding voltage of 33 kV (includes 22 and 25 kV)

Includes – 33 kV reactors & regulators

Excludes – all Auxiliary Transformers

## **33kV UG cable (Gas)**

33 kV (includes 22 & 25 kV) Underground pressured assisted gas filled cable

Excludes - non pressured assisted designs and oil filled cables

## **33kV UG cable (Non Pressurised)**

33 kV (includes 22 & 25 kV) Underground non pressured assisted cables

Includes – XLPE, EPR and paper insulated cables. Excludes pressured assisted designs.

## **33kV UG cable (Oil)**

33 kV (includes 22 & 25 kV) Underground pressured assisted oil filled cable

Excludes - non pressured assisted designs and gas filled Cables

## **66kV CB (Air Insulated Busbars) (ID) (GM)**

66 kV Ground Mounted Circuit Breaker situated indoors

Includes - All CB designs with any arc extinction media having air (or equivalent) busbar insulation situated indoor

## **66kV CB (Air Insulated Busbars) (OD) (GM)**

66 kV Ground Mounted Circuit Breaker situated outdoors

Includes - all CB designs with any arc extinction media having air (or equivalent) busbar insulation situated outdoor.

## **66kV CB (Gas Insulated Busbars) (ID) (GM)**

66 kV Ground Mounted Circuit Breaker situated indoors

Includes – All CB designs with any arc extinction media having SF6 gas (or equivalent) busbar insulation situated indoor.

## **66kV CB (Gas Insulated Busbars) (OD) (GM)**

66 kV Ground Mounted Circuit Breaker situated outdoors

Includes –All CB designs with any arc extinction media having SF6 gas (or equivalent) busbar insulation situated outdoor.

## **66kV Fittings**

Includes insulators and fittings on OH tower lines, but excludes insulators and fittings associated with OH pole lines. Measured per set (ie, one per circuit per tower).

## **66 kV OHL (Tower Line) Conductor**

66 kV Overhead Line Conductor – Tower Line

Includes - all conductor strung on towers, single and double circuits

Excludes - Conductor strung on a Pole Line and any associated fittings and towers.

## **66 kV Pole**

66 kV Overhead Line Pole

Includes - poles constructed of wood or concrete and small footprint steel masts (both single and double circuits)

Excludes – Steel lattice towers

## **66kV Switchgear - Other**

Includes - All other switchgear eg, Disconnectors, Fault throwers, Earthing switches, Fuses,

Excludes – Circuit breakers

Any isolators and earth switches that are integral to a circuit breaker should not be counted as separate items of switchgear.

## **66kV Tower**

66 kV Overhead line tower

Includes - Steel lattice towers

Excludes - Small footprint steel masts

## **66kV Transformer**

Power Transformer (PM or GM) with a primary winding voltage of 66 kV

Includes – 66 kV reactors & regulators

Excludes – All Auxiliary Transformers



## **66kV UG Cable (Gas)**

66kV Underground pressured assisted gas filled cable

Excludes non pressured assisted designs and oil filled cables

## **66kV UG Cable (Non Pressurised)**

66 kV Underground non pressured assisted cables

Includes – XLPE, EPR and paper insulated cables. Excludes pressured assisted designs.

## **66kV UG Cable (Oil)**

66kV Underground pressured assisted oil filled cable.

Excludes - non pressured assisted designs and gas filled cables.

## **132kV as highest voltage worked on**

All DPCR4 connection jobs where 132kV is the highest voltage of the assets being worked on.

## **132kV CB (Air Insulated Busbars) (ID)**

132 kV Ground Mounted Circuit Breaker

Includes - all CB designs with any arc extinction media having air (or equivalent) busbar insulation situated indoor.

## **132kV CB (Air Insulated Busbars) (OD)**

132 kV Ground Mounted Circuit Breaker

Includes - all CB designs with any arc extinction media having air (or equivalent) busbar insulation situated outdoor.

## **132kV CB (Gas Insulated Busbars) (ID)**

132 kV Ground Mounted Circuit Breaker

Includes - all CB designs with any arc extinction media having air (or equivalent) busbar insulation situated indoor.

## **132kV CB (Gas Insulated Busbars) (OD)**

132 kV Ground Mounted Circuit Breaker

Includes - all CB designs with any arc extinction media having air (or equivalent) busbar insulation situated outdoor.

## **132kV end connections involving only 132kV work**

Connection projects providing exit point(s) at 132kV level where the only voltage of the assets involved in providing exit point at LV, and any associated works, is 132 kV.

## **132kV Fittings**

Includes insulators and fittings on OH tower lines, but excludes insulators and fittings associated with OH pole lines. Measured per set (ie, one per circuit per tower).

## **132kV metered DPCR4 Connection Projects**

Connection projects; DPCR4 providing exit point(s) at 132kV level

## **132kV OHL (Pole Line) Conductor**

132 kV Overhead Line Conductor – Pole Line

Includes - all conductor strung on poles, single and double circuits, open wire and covered conductor

Excludes - Conductor strung on a Tower Line and any associated poles.

For reporting of Asset Replacement, this activity includes the installation of conductor only and excludes the installation of poles and pole fittings (including stay wire)

## **132kV OHL (Tower Line) Conductor**

132 kV Overhead Line Conductor – Tower Line

Includes - all conductor strung on towers, single and double circuits

Excludes - Conductor strung on a Pole Line and any associated fittings and towers.

## **132kV Pole**

132 kV Overhead Line Pole

Includes poles constructed of Wood or concrete and small footprint steel masts (both single and double circuits)

Excludes – towers

## **132kV Sub cable**

132kV cable which is placed below the surface of the water and laid on or under the sea bed or the bed of a river or estuary whether or not designed for this purpose.

## **132kV Switchgear - Other**

Includes - Disconnectors, Earthing Switches and Fault throwers

Excludes – Circuit Breakers

Any isolators and earth switches that are integral to a circuit breaker should not be counted as separate items of switchgear.

## **132kV Tower**

132 kV Overhead Line Tower

Includes - Steel lattice towers

Excludes - Small footprint steel masts

## **132kV Transformer**

Power Transformer with a primary winding voltage of 132 kV

Includes - 132 kV reactors & regulators

Excludes – All Auxiliary Transformers earthing transformers and arc suppression coils.

## **132kV UG Cable (Gas)**

132 kV Under Ground Cable (Gas Filled)

Includes – All pressure assisted Gas Filled Cables.

## **132kV UG Cable (Non Pressurised)**

132 kV Underground Cable (Non Pressurised)

Includes - all non-pressure assisted cables (eg, XLPE, EPR or paper insulated cables).

## **132kV UG Cable (Oil)**

132 kV Underground Cable (Oil Filled)

Includes – all pressure assisted Oil Filled Cables.

## **4% regulated margin period**

For the purposes of connections reporting, the period of time within which the 4% Regulated margin is applied to the contestable element of connection that is sole use funded.

## 4. Condition Based Task Allocation Tables

LV Main (OHL) Conductor			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Removal and testing of overhead conductor core samples from existing overhead line	✓		
Repairs to overhead conductor, such as remaking compression joints, replacement of clamps, replacement of jumpers, replacement of insulation piercing connectors, and repair of broken strands	✓		
Replacement of interphase spacers	✓		
Replacement of bird flight deterrents	✓		
Shrouding (Temporary) to prevent contact with conductors in order to achieve safe working clearances when third parties are working near LV overhead lines.	✓		

LV Service (OHL)			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Repairs to overhead service conductor, such as remaking compression joints, replacement of clamps, replacement of jumpers, replacement of insulation piercing connectors, and repair of broken strands	✓		
Replacement of individual insulators	✓		
Repairs to / replacement of brackets	✓		
Recleaning of service lead-in cable	✓		
Remaking cut out termination	✓		
Replacement of a section of aerial service conductor/ service lead-in cable within an existing LV overhead service (but not complete replacement of the service) <i>{note: complete replacement of a service is reported as Asset Replacement}</i>		✓	
Replacement of multi service box	✓		
Shrouding (Temporary) to prevent contact with conductors in order to achieve safe working clearances when third parties are working near LV overhead lines.	✓		

LV Poles			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Pole testing using diagnostic equipment	✓		
Repairs to existing stay and stay insulators that do not constitute complete replacement of the stay wire and insulator.	✓		
Replacement of individual insulators or fittings	✓		
Repairs to pole top steelwork (such as crossarms, outrigger brackets, bracing) involving the replacement of individual steelwork components such as bolts or individual crossarm members	✓		
Replacement of signs and notices	✓		
Repair or replacement of pole earthing	✓		
Remedial application of wood pole preservative (e.g. insertion of boron rods)	✓		
Patch welding repairs to steel poles	✓		
Replacement of a complete set of insulators associated with an existing pole		✓	
Complete replacement of pole top steelwork (including associated insulators and fittings)		✓	
The complete replacement of stay wire and insulator (including stay block or anchor as necessary) at an existing pole		✓	
Replacement of steelwork associated with pole mounted switchgear and equipment		✓	

LV Main (UG Consac)			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)	✓		
LV Main (UG Plastic)			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)	✓		
LV Main (UG Paper)			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)	✓		
Rising & Lateral Mains			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)	✓		
LV Service (UG)			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Sheath repairs	✓		
Replacement of joints or remaking cut out termination	✓		
Replacement of a section of service cable within an existing LV underground service (but not complete replacement of the service) <i>{note: complete replacement of a service is reported as Asset Replacement}</i>	✓		
LV Underground Service Transfers - associated with the installation of new LV UG Mains cable (i.e. the activity of connecting existing LV underground services to a new LV underground (mains) cable as required when the existing LV underground (mains) cable is the subject of asset replacement).		✓	
LV Service associated with RLM			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Sheath repairs	✓		
Replacement of joints, remaking cut out termination or terminations at distribution boards	✓		

LV Circuit Breaker			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing	✓		
Diagnostic testing (e.g. infrared temperature measurement etc.)	✓		
Painting of equipment	✓		
General cleaning of equipment (internal & external)	✓		
Vegetation management (e.g. weed clearance)	✓		
Replacement of barriers	✓		
Replacement of doors or locks	✓		
Replacement of MCCB unit within existing cabinet	✓		
Replacement of protection module	✓		
Replacement of contacts (ACB)	✓		
Replacement of individual components of the operating mechanism (ACB)	✓		
Replacement of individual components of the drive rods and linkages (ACB)	✓		
Complete replacement of the operating mechanism (ACB)			✓
Complete replacement of drive rods and linkages (ACB)		✓	
Replacement of test sockets		✓	

LV Pillar (ID)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing	✓		
Diagnostic testing (e.g. infrared temperature measurement etc.)	✓		
Painting of equipment	✓		
General cleaning of equipment (internal & external)	✓		
Vegetation management (e.g. weed clearance)	✓		
Clean and grease spare fuse carriers/ links	✓		
Replacement of barriers	✓		
Replacement of doors or locks	✓		
Replacement of damaged fuse carriers/ links	✓		
Replacement of complete feederway		✓	
Replacement of test sockets		✓	

LV Pillar (OD at Substation)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing	✓		
Diagnostic testing (e.g. infrared temperature measurement etc.)	✓		
Painting of equipment	✓		
General cleaning of equipment (internal & external)	✓		
Vegetation management (e.g. weed clearance)	✓		
Clean and grease spare fuse carriers/ links	✓		
Replacement of barriers	✓		
Replacement of doors or locks	✓		
Replacement of damaged fuse carriers/ links	✓		
Replacement of complete feederway		✓	
Replacement of test sockets		✓	

LV Board (WM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing	✓		
Diagnostic testing (e.g. infrared temperature measurement etc.)	✓		
Painting of equipment	✓		
General cleaning of equipment (internal & external)	✓		
Vegetation management (e.g. weed clearance)	✓		
Replacement of barriers	✓		
Replacement of doors or locks	✓		
Replacement of test sockets		✓	

LV UGB			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
General cleaning of equipment (internal & external)	✓		
Vegetation management (e.g. weed clearance)	✓		
Clean and grease spare fuse carriers/ links	✓		
Replacement of barriers	✓		
Replacement of damaged fuse carriers/ links	✓		
Pumping water from link disconnecting box pit	✓		
Replacement of link disconnecting box lid/ bell cover	✓		
Repair of link disconnecting box frame	✓		

LV Pillars (OD not at Substation)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing	✓		
Diagnostic testing (e.g. infrared temperature measurement etc.)	✓		
Painting of equipment	✓		
General cleaning of equipment (internal & external)	✓		
Vegetation management (e.g. weed clearance)	✓		
Clean and grease spare fuse carriers/ links	✓		
Replacement of barriers	✓		
Replacement of doors or locks	✓		
Replacement of damaged fuse carriers/ links	✓		
Replacement of complete feederway		✓	
Replacement of test sockets		✓	

Cut Out (Metered)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
No specific Maintenance & Repair or Refurbishment activities identified			

LV Board (X-type Network) (WM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing	✓		
Diagnostic testing (e.g. infrared temperature measurement etc.)	✓		
Painting of equipment	✓		
General cleaning of equipment (internal & external)	✓		
Vegetation management (e.g. weed clearance)	✓		
Clean and grease spare fuse carriers/ links	✓		
Replacement of barriers	✓		
Replacement of damaged fuse carriers/ links	✓		
Replacement of complete feederway		✓	
Replacement of test sockets		✓	

LV Transformers/Regulators			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
No specific Maintenance & Repair or Refurbishment activities identified			

6.6/11kV OHL (Conventional Conductor)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing of overhead conductor (e.g. corman testing)	✓		
Removal and testing of overhead conductor core samples from existing overhead line	✓		
Repairs to overhead conductor, such as remaking compression joints, replacement of clamps, replacement of jumpers, replacement of insulation piercing connectors, and repair of broken strands	✓		
Replacement of bird flight deterrents	✓		
6.6/11kV OHL (BLX or similar Conductor)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing of overhead conductor (e.g. corman testing)	✓		
Removal and testing of overhead conductor core samples from existing overhead line	✓		
Repairs to overhead conductor, such as remaking compression joints, replacement of clamps, replacement of jumpers, replacement of insulation piercing connectors, and repair of broken strands	✓		
Replacement of spiral vibration dampers	✓		
Replacement of bird flight deterrents	✓		
20kV OHL (Conventional Conductor)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing of overhead conductor (e.g. corman testing)	✓		
Removal and testing of overhead conductor core samples from existing overhead line	✓		
Repairs to overhead conductor, such as remaking compression joints, replacement of clamps, replacement of jumpers, replacement of insulation piercing connectors, and repair of broken strands	✓		
Replacement of bird flight deterrents	✓		
20kV OHL (BLX or similar Conductor)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing of overhead conductor (e.g. corman testing)	✓		
Removal and testing of overhead conductor core samples from existing overhead line	✓		
Repairs to overhead conductor, such as remaking compression joints, replacement of clamps, replacement of jumpers, replacement of insulation piercing connectors, and repair of broken strands	✓		
Replacement of spiral vibration dampers	✓		
Replacement of bird flight deterrents	✓		



6.6/11kV Poles			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Pole testing using diagnostic equipment	✓		
Repairs to existing stay and stay insulators that do not constitute complete replacement of the stay wire and insulator.	✓		
Replacement of individual insulators or fittings	✓		
Repairs to pole top steelwork (such as crossarms, outrigger brackets, bracing) involving the replacement of individual steelwork components such as bolts or individual crossarm members	✓		
Replacement of signs and notices	✓		
Repair or replacement of pole earthing	✓		
Remedial application of wood pole preservative (e.g. insertion of boron rods)	✓		
Replacement of a complete set of insulators associated with an existing pole		✓	
Complete replacement of pole top steelwork (including associated insulators and fittings)		✓	
The complete replacement of stay wire and insulator (including stay block or anchor as necessary) at an existing pole		✓	
Replacement of steelwork associated with pole mounted switchgear and equipment		✓	

20kV Poles			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Pole testing using diagnostic equipment	✓		
Repairs to existing stay and stay insulators that do not constitute complete replacement of the stay wire and insulator.	✓		
Replacement of individual insulators or fittings	✓		
Repairs to pole top steelwork (such as crossarms, outrigger brackets, bracing) involving the replacement of individual steelwork components such as bolts or individual crossarm members	✓		
Replacement of signs and notices	✓		
Repair or replacement of pole earthing	✓		
Remedial application of wood pole preservative (e.g. insertion of boron rods)	✓		
Replacement of a complete set of insulators associated with an existing pole		✓	
Complete replacement of pole top steelwork (including associated insulators and fittings)		✓	
The complete replacement of stay wire and insulator (including stay block or anchor as necessary) at an existing pole		✓	
Replacement of steelwork associated with pole mounted switchgear and equipment		✓	

6.6/11kV UG Cable			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)	✓		

20kV UG Cable			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)	✓		

HV Sub Cable			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)	✓		
Replacement of physical protection of submarine cable (e.g. split piping, backfill cover to exposed cables at shoreline etc.)		✓	

6.6/11kV CB (PM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests etc.)	✓		
Diagnostic testing (oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of external bushings	✓		
Replacement of arcing horns	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Painting of plant	✓		
Replacement of control/communications battery	✓		
Replacement or repair of control box (and/or communications devices)	✓		

6.6/11kV CB (GM) Primary			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Replacement of the moving portion (truck) in withdrawable equipment			✓
Repairs to interlocks	✓		
Repairs to racking device	✓		
Repairs to busbar joints (extensible switchgear)	✓		

6.6/11kV CB (GM) Secondary			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Replacement of the moving portion (truck) in withdrawable equipment			✓
Painting of plant	✓		
Repairs to interlocks	✓		
Repairs to racking device	✓		
Repairs to busbar joints (extensible switchgear)	✓		

6.6/11kV Switch (PM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests etc.)	✓		
Diagnostic testing (oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of external bushings	✓		
Replacement of arcing horns	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Painting of plant	✓		
Replacement of control/communications battery	✓		
Replacement or repair of control box (and/or communications devices)	✓		

6.6/11kV Switchgear - Other (PM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (operating tests etc.)	✓		
Lubrication of moving parts	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of braids	✓		
Replacement of interruptor heads	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of bushings	✓		
Repair/ replacement of earth bonding and earth mats	✓		
Repair/ replacement of interlocks	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of control/communications battery	✓		
Replacement or repair of control box (and/or communications devices)	✓		
Replacement of fuse links/ ASLs	✓		

6.6/11kV Switch (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Painting of plant	✓		
Repairs to interlocks	✓		
Repairs to racking device	✓		
Repairs to busbar joints (extensible switchgear)	✓		

6.6/11kV RMU			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Painting of plant	✓		
Repairs to interlocks	✓		

6.6/11kV X-type RMU			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Painting of plant	✓		
Repairs to interlocks	✓		

20kV CB (PM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests etc.)	✓		
Diagnostic testing (oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of external bushings	✓		
Replacement of arcing horns	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Painting of plant	✓		
Replacement of control/communications battery	✓		
Replacement or repair of control box (and/or communications devices)	✓		

20kV CB (GM) Primary			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Replacement of the moving portion (truck) in withdrawable equipment			✓
Repairs to interlocks	✓		
Repairs to racking device	✓		
Repairs to busbar joints (extensible switchgear)	✓		

20kV CB (GM) Secondary			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Replacement of the moving portion (truck) in withdrawable equipment			✓
Painting of plant	✓		
Repairs to interlocks	✓		
Repairs to racking device	✓		
Repairs to busbar joints (extensible switchgear)	✓		

20kV Switch (PM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests etc.)	✓		
Diagnostic testing (oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of external bushings	✓		
Replacement of arcing horns	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Painting of plant	✓		
Replacement of control/communications battery	✓		
Replacement or repair of control box (and/or communications devices)	✓		

20kV Switchgear - Other (PM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (operating tests etc.)	✓		
Lubrication of moving parts	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of braids	✓		
Replacement of interruptor heads	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of bushings	✓		
Repair/ replacement of earth bonding and earth mats	✓		
Repair/ replacement of interlocks	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of control/communications battery	✓		
Replacement or repair of control box (and/or communications devices)	✓		
Replacement of fuse links/ ASLs	✓		

20kV Switch (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Painting of plant	✓		
Repairs to interlocks	✓		
Repairs to racking device	✓		
Repairs to busbar joints (extensible switchgear)	✓		



20kV RMU			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Painting of plant	✓		
Repairs to interlocks	✓		

6.6/11kV Transformer (PM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Bushing replacement	✓		
Replacement of gaskets and seals	✓		
Sight glass replacement	✓		
Align arcing horns	✓		
Complete workshop/factory refurbishment			✓

6.6/11kV Transformer (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (oil testing, partial discharge testing etc.)	✓		
Oil filtration and replacement	✓		
Painting	✓		
Sight glass replacement	✓		
Bolt tightening	✓		
General housekeeping (remove debris from radiator etc.)	✓		
Repair/ replacement of connections to earthing system	✓		
Minor repair to existing cooling radiators ( rust/ leaks)	✓		
On site processing to recondition oil to remove moisture and acidity from windings			✓
Replacement of cooling radiators			✓
Replacement of conservator tanks		✓	
Replacement of bushings		✓	
Replacement of cable box		✓	
Installation of replacement windings			✓
Complete factory refurbishment			✓

20kV Transformer (PM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Bushing replacement	✓		
Replacement of gaskets and seals	✓		
Sight glass replacement	✓		
Align arcing horns	✓		
Complete workshop/factory refurbishment			✓

20kV Transformer (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (oil testing, partial discharge testing etc.)	✓		
Oil filtration and replacement	✓		
Painting	✓		
Sight glass replacement	✓		
Bolt tightening	✓		
General housekeeping (remove debris from radiator etc.)	✓		
Repair/ replacement of connections to earthing system	✓		
Minor repair to existing cooling radiators ( rust/ leaks)	✓		
On site processing to recondition oil to remove moisture and acidity from windings			✓
Replacement of cooling radiators			✓
Replacement of conservator tanks		✓	
Replacement of bushings		✓	
Replacement of cable box		✓	
Installation of replacement windings			✓
Complete factory refurbishment			✓

Batteries at GM HV Substations			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Examination of electrolyte level, plates, connections etc.	✓		
Diagnostic testing (e.g. internal impedance measurements, discharge tests etc.)	✓		
Topping up individual cells	✓		
Cleaning/ re-tightening of inter-cell connections	✓		
Replacement of individual cells	✓		

33kV OHL (Pole Line) Conductor			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing of overhead conductor (e.g. corman testing)	✓		
Removal and testing of overhead conductor core samples from existing overhead line	✓		
Repairs to overhead conductor, such as remaking compression joints, replacement of clamps, replacement of jumpers, replacement of insulation piercing connectors, and repair of broken strands	✓		
Replacement of spiral vibration dampers	✓		
Replacement of bird flight deterrents	✓		

33kV Pole			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Pole testing using diagnostic equipment	✓		
Repairs to existing stay and stay insulators that do not constitute complete replacement of the stay wire and insulator.	✓		
Replacement of individual insulators or fittings	✓		
Repairs to pole top steelwork (such as crossarms, outrigger brackets, bracing) involving the replacement of individual steelwork components such as bolts or individual crossarm members	✓		
Replacement of signs and notices	✓		
Repair or replacement of pole earthing	✓		
Remedial application of wood pole preservative (e.g. insertion of boron rods)	✓		
Replacement of a complete set of insulators associated with an existing pole		✓	
Complete replacement of pole top steelwork (including associated insulators and fittings)		✓	
The complete replacement of stay wire and insulator (including stay block or anchor as necessary) at an existing pole		✓	
Replacement of steelwork associated with pole mounted switchgear and equipment		✓	

66kV OHL (Pole Line) Conductor			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing of overhead conductor (e.g. corman testing)	✓		
Removal and testing of overhead conductor core samples from existing overhead line	✓		
Repairs to overhead conductor, such as remaking compression joints, replacement of clamps, replacement of jumpers, replacement of insulation piercing connectors, and repair of broken strands	✓		
Replacement of spiral vibration dampers	✓		
Replacement of bird flight deterrents	✓		

66kV Pole			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Pole testing using diagnostic equipment	✓		
Repairs to existing stay and stay insulators that do not constitute complete replacement of the stay wire and insulator.	✓		
Replacement of individual insulators or fittings	✓		
Repairs to pole top steelwork (such as crossarms, outrigger brackets, bracing) involving the replacement of individual steelwork components such as bolts or individual crossarm members	✓		
Replacement of signs and notices	✓		
Repair or replacement of pole earthing	✓		
Remedial application of wood pole preservative (e.g. insertion of boron rods)	✓		
Replacement of a complete set of insulators associated with an existing pole		✓	
Complete replacement of pole top steelwork (including associated insulators and fittings)		✓	
The complete replacement of stay wire and insulator (including stay block or anchor as necessary) at an existing pole		✓	
Replacement of steelwork associated with pole mounted switchgear and equipment		✓	

33kV OHL (Tower line) Conductor			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing of overhead conductor (e.g. corman testing)	✓		
Removal and testing of overhead conductor core samples from existing overhead line	✓		
Repairs to overhead conductor, such as remaking compression joints, replacement of jumpers or repair of broken strands	✓		
Replacement of individual suspension clamps	✓		
Replacement of individual dampers and spacer dampers	✓		

33kV Tower			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. line polarisation resistance tests or transient dynamic response tests on foundations)	✓		
Vegetation management around the tower base	✓		
Replacement of individual bolts	✓		
Replacement of signs and notices	✓		
Repairs to existing steelwork members (e.g. welding)	✓		
Patch painting following steelwork repair	✓		
Replacement of anti-climbing devices (e.g. complete outrigger or barbed wire only)	✓		
Replacement of step bolts		✓	
Replacement of individual steelwork members			✓
Painting of tower		✓	
Repairs to tower foundations (e.g. remuffing)	✓		
Replacement of tower foundations		✓	

33kV Fittings			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Repairs to insulation and fitting sub components, including replacement of individual insulators, dishes, shackles, arcing horns etc.	✓		
Replacement of individual insulator strings { <i>note: replacement of a complete set of insulators/ fittings is an 'Asset Replacement' activity</i> }		✓	

66kV OHL (Tower line) Conductor			
Activity	Cost And Volume Table For Reporting Of Activity Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing of overhead conductor (e.g. corman testing)	✓		
Removal and testing of overhead conductor core samples from existing overhead line	✓		
Repairs to overhead conductor, such as remaking compression joints, replacement of jumpers or repair of broken strands	✓		
Replacement of individual suspension clamps	✓		
Replacement of individual dampers and spacer dampers	✓		

66kV Tower			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. line polarisation resistance tests or transient dynamic response tests on foundations)	✓		
Vegetation management around the tower base	✓		
Replacement of individual bolts	✓		
Replacement of signs and notices	✓		
Repairs to existing steelwork members (e.g. welding)	✓		
Patch painting following steelwork repair	✓		
Replacement of anti-climbing devices (e.g. complete outrigger or barbed wire only)	✓		
Replacement of step bolts		✓	
Replacement of individual steelwork members			✓
Painting of tower		✓	
Repairs to tower foundations (e.g. remuffing)	✓		
Replacement of tower foundations		✓	

66kV Fittings			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Repairs to insulation and fitting sub components, including replacement of individual insulators, dishes, shackles, arcing horns etc.	✓		
Replacement of individual insulator strings { <i>note: replacement of a complete set of insulators/ fittings is an 'Asset Replacement' activity</i> }		✓	

33kV UG Cable (Non Pressurised)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)		✓	

33kV UG Cable (Oil)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)		✓	
Remaking existing joints and terminations in situ		✓	
Repressurising of cable fluid system (e.g. top up of oil or gas)	✓		
Resealing of pressurising equipment (e.g. resealing tanks)	✓		
Resoldering of pressurising equipment pipework	✓		
Replacement of pressurising equipment valves and/or gauges		✓	
Replacement of pressurising equipment pipework and/or tanks		✓	

33kV UG Cable (Gas)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)		✓	
Remaking existing joints and terminations in situ		✓	
Repressurising of cable fluid system (e.g. top up of oil or gas)	✓		
Resealing of pressurising equipment (e.g. resealing tanks)	✓		
Resoldering of pressurising equipment pipework	✓		
Replacement of pressurising equipment valves and/or gauges		✓	
Replacement of pressurising equipment pipework and/or tanks		✓	

66kV UG Cable (Non Pressurised)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)		✓	

66kV UG Cable (Oil)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)		✓	
Remaking existing joints and terminations in situ		✓	
Repressurising of cable fluid system (e.g. top up of oil or gas)	✓		
Resealing of pressurising equipment (e.g. resealing tanks)	✓		
Resoldering of pressurising equipment pipework	✓		
Replacement of pressurising equipment valves and/or gauges		✓	
Replacement of pressurising equipment pipework and/or tanks		✓	

66kV UG Cable (Gas)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)		✓	
Remaking existing joints and terminations in situ		✓	
Repressurising of cable fluid system (e.g. top up of oil or gas)	✓		
Resealing of pressurising equipment (e.g. resealing tanks)	✓		
Resoldering of pressurising equipment pipework	✓		
Replacement of pressurising equipment valves and/or gauges		✓	
Replacement of pressurising equipment pipework and/or tanks		✓	

EHV Sub Cable			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)		✓	
Replacement of physical protection of submarine cable (e.g. split piping, backfill cover to exposed cables at shoreline etc.)		✓	

<b>33kV CB (Air Insulated Busbars)(ID) (GM)</b>			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Replacement of the moving portion (truck) in withdrawable equipment			✓
Repairs to interlocks	✓		
Repairs to racking device	✓		
Repairs to busbar joints (extensible switchgear)	✓		

<b>33kV CB (Air Insulated Busbars)(OD) (GM)</b>			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Replacement of arcing horns	✓		
Replacement of outdoor bay components: busbar, connections, clamps or droppers	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Replacement of the moving portion (truck) in withdrawable equipment			✓
Painting of plant	✓		
Repairs to interlocks	✓		

<b>33kV CB (Gas Insulated Busbars)(ID) (GM)</b>			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Replacement of the moving portion (truck) in withdrawable equipment			✓
Repairs to interlocks	✓		
Repairs to racking device	✓		
Repairs to busbar joints (extensible switchgear)	✓		

<b>33kV CB (Gas Insulated Busbars)(OD) (GM)</b>			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Replacement of arcing horns	✓		
Replacement of outdoor bay components: busbar, connections, clamps or droppers	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Painting of plant	✓		
Repairs to interlocks	✓		



33kV Switch (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of the moving portion (truck) in withdrawable equipment			✓
Painting of plant	✓		
Repairs to interlocks	✓		
Repairs to busbar joints (extensible switchgear)	✓		

33kV Switchgear - Other			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (operating tests etc.)	✓		
Lubrication of moving parts	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of braids	✓		
Replacement of interruptor heads	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of bushings	✓		
Repair/ replacement of earth bonding and earth mats	✓		
Repair/ replacement of interlocks	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of control/communications battery	✓		
Replacement or repair of control box (and/or communications devices)	✓		

<b>33kV Switch (PM)</b>			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests etc.)	✓		
Diagnostic testing (oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of external bushings	✓		
Replacement of arcing horns	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Painting of plant	✓		
Replacement of control/communications battery	✓		
Replacement or repair of control box (and/or communications devices)	✓		

<b>33kV RMU</b>			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Painting of plant	✓		
Repairs to interlocks	✓		

66kV CB (Air Insulated Busbars)(ID) (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Repairs to interlocks	✓		
Repairs to busbar joints (extensible switchgear)	✓		

66kV CB (Air Insulated Busbars)(OD) (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Replacement of arcing horns	✓		
Replacement of outdoor bay components: busbar, connections, clamps or droppers	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Painting of plant	✓		
Repairs to interlocks	✓		

66kV CB (Gas Insulated Busbars)(ID) (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Repairs to interlocks	✓		
Repairs to busbar joints (extensible switchgear)	✓		

66kV CB (Gas Insulated Busbars)(OD) (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Replacement of arcing horns	✓		
Replacement of outdoor bay components: busbar, connections, clamps or droppers	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Painting of plant	✓		
Repairs to interlocks	✓		

66kV Switchgear - Other			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (operating tests etc.)	✓		
Lubrication of moving parts	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of braids	✓		
Replacement of interruptor heads	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of bushings	✓		
Repair/ replacement of earth bonding and earth mats	✓		
Repair/ replacement of interlocks	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of control/communications battery	✓		
Replacement or repair of control box (and/or communications devices)	✓		

33kV Transformer (PM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Bushing replacement	✓		
Replacement of gaskets and seals	✓		
Sight glass replacement	✓		
Align arcing horns	✓		
Complete workshop/factory refurbishment			✓

33kV Transformer (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Test operation of forced cooling (fans/ pumps)	✓		
Test Bucholz & winding temperature indicators/ relays	✓		
Diagnostic testing (oil testing, partial discharge testing etc.)	✓		
Change silica gel in breather	✓		
Oil filtration and replacement	✓		
Painting	✓		
Sight glass replacement	✓		
Bolt tightening	✓		
General housekeeping (remove debris from radiator etc.)	✓		
Repair/ replacement of connections to earthing system	✓		
Minor repair to existing cooling radiators ( rust/ leaks)	✓		
Replacement of silica gel breather unit	✓		
Tapchanger diverter contact replacement	✓		
Tapchanger selector contact replacement	✓		
Replacement of individual fan motors	✓		
Replacement of pumps	✓		
On site processing to recondition oil to remove moisture and acidity from windings			✓
Replacement of cooling radiators			✓
Replacement of conservator tanks		✓	
Replacement of tap changers or full replacement of tap changer mechanism			✓
Replacement of bushings		✓	
Replacement of cable box		✓	
Installation of replacement windings			✓
Complete factory refurbishment			✓

66kV Transformer			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Test operation of forced cooling (fans/ pumps)	✓		
Test Bucholz & winding temperature indicators/ relays	✓		
Diagnostic testing (oil testing, partial discharge testing etc.)	✓		
Change silica gel in breather	✓		
Oil filtration and replacement	✓		
Painting	✓		
Sight glass replacement	✓		
Bolt tightening	✓		
General housekeeping (remove debris from radiator etc.)	✓		
Repair/ replacement of connections to earthing system	✓		
Minor repair to existing cooling radiators ( rust/ leaks)	✓		
Replacement of silica gel breather unit	✓		
Tapchanger diverter contact replacement	✓		
Tapchanger selector contact replacement	✓		
Replacement of individual fan motors	✓		
Replacement of pumps	✓		
On site processing to recondition oil to remove moisture and acidity from windings			✓
Replacement of cooling radiators			✓
Replacement of conservator tanks		✓	
Replacement of tap changers or full replacement of tap changer mechanism			✓
Replacement of bushings		✓	
Replacement of cable box		✓	
Installation of replacement windings			✓
Complete factory refurbishment			✓

Batteries at 33kV Substations			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Examination of electrolyte level, plates, connections etc.	✓		
Diagnostic testing (e.g. internal impedance measurements, discharge tests etc.)	✓		
Topping up individual cells	✓		
Cleaning/ re-tightening of inter-cell connections	✓		
Replacement of individual cells	✓		

Batteries at 66kV Substations			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Examination of electrolyte level, plates, connections etc.	✓		
Diagnostic testing (e.g. internal impedance measurements, discharge tests etc.)	✓		
Topping up individual cells	✓		
Cleaning/ re-tightening of inter-cell connections	✓		
Replacement of individual cells	✓		

132kV OHL (Pole Line) Conductor			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing of overhead conductor (e.g. corman testing)	✓		
Removal and testing of overhead conductor core samples from existing overhead line	✓		
Repairs to overhead conductor, such as remaking compression joints, replacement of clamps, replacement of jumpers, replacement of insulation piercing connectors, and repair of broken strands	✓		
Replacement of bird flight deterrents	✓		

<b>132kV Pole</b>			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Pole testing using diagnostic equipment	✓		
Repairs to existing stay and stay insulators that do not constitute complete replacement of the stay wire and insulator.	✓		
Replacement of individual insulators or fittings	✓		
Repairs to pole top steelwork (such as crossarms, outrigger brackets, bracing) involving the replacement of individual steelwork components such as bolts or individual crossarm members	✓		
Replacement of signs and notices	✓		
Repair or replacement of pole earthing	✓		
Remedial application of wood pole preservative (e.g. insertion of boron rods)	✓		
Replacement of a complete set of insulators associated with an existing pole		✓	
Complete replacement of pole top steelwork (including associated insulators and fittings)		✓	
The complete replacement of stay wire and insulator (including stay block or anchor as necessary) at an existing pole		✓	
Replacement of steelwork associated with pole mounted switchgear and equipment		✓	

<b>132kV OHL (Tower line) Conductor</b>			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing of overhead conductor (e.g. corman testing)	✓		
Removal and testing of overhead conductor core samples from existing overhead line	✓		
Repairs to overhead conductor, such as remaking compression joints, replacement of jumpers or repair of broken strands	✓		
Replacement of individual suspension clamps	✓		
Replacement of individual dampers and spacer dampers	✓		

<b>132kV Tower</b>			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. line polarisation resistance tests or transient dynamic response tests on foundations)	✓		
Vegetation management around the tower base	✓		
Replacement of individual bolts	✓		
Replacement of signs and notices	✓		
Repairs to existing steelwork members (e.g. welding)	✓		
Patch painting following steelwork repair	✓		
Replacement of anti-climbing devices (e.g. complete outrigger or barbed wire only)	✓		
Replacement of step bolts		✓	
Replacement of individual steelwork members			✓
Painting of tower		✓	
Repairs to tower foundations (e.g. remuffing)	✓		
Replacement of tower foundations		✓	

<b>132kV Fittings</b>			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Repairs to insulation and fitting sub components, including replacement of individual insulators, dishes, shackles, arcing horns etc.	✓		
Replacement of individual insulator strings { <i>note: replacement of a complete set of insulators/ fittings is an 'Asset Replacement' activity</i> }		✓	

132kV UG Cable (Non Pressurised)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)		✓	

132kV UG Cable (Oil)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)		✓	
Remaking existing joints and terminations in situ		✓	
Repressurising of cable fluid system (e.g. top up of oil or gas)	✓		
Resealing of pressurising equipment (e.g. resealing tanks)	✓		
Resoldering of pressurising equipment pipework	✓		
Replacement of pressurising equipment valves and/or gauges		✓	
Replacement of pressurising equipment pipework and/or tanks		✓	

132kV UG Cable (Gas)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)		✓	
Remaking existing joints and terminations in situ		✓	
Repressurising of cable fluid system (e.g. top up of oil or gas)	✓		
Resealing of pressurising equipment (e.g. resealing tanks)	✓		
Resoldering of pressurising equipment pipework	✓		
Replacement of pressurising equipment valves and/or gauges		✓	
Replacement of pressurising equipment pipework and/or tanks		✓	

132kV Sub Cable			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Diagnostic testing (e.g. partial discharge testing, sheath testing etc.)	✓		
Sheath repairs	✓		
Replacement of cable joints and terminations (including sealing ends)		✓	
Replacement of physical protection of submarine cable (e.g. split piping, backfill cover to exposed cables at shoreline etc.)		✓	



132kV CB (Air Insulated Busbars)(ID) (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Repairs to interlocks	✓		
Repairs to busbar joints (extensible switchgear)	✓		

132kV CB (Air Insulated Busbars)(OD) (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Replacement of arcing horns	✓		
Replacement of outdoor bay components: busbar, connections, clamps or droppers	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Painting of plant	✓		
Repairs to interlocks	✓		

132kV CB (Gas Insulated Busbars)(ID) (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Repairs to interlocks	✓		
Repairs to busbar joints (extensible switchgear)	✓		

132kV CB (Gas Insulated Busbars)(OD) (GM)			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (trip tests, operation of interlocks etc.)	✓		
Diagnostic testing (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	✓		
Lubrication of moving parts	✓		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of crossjet pots (turbulator)	✓		
Replacement of individual gaskets and seals	✓		
Replacement of barriers	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of cable boxes		✓	
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	✓		
Replacement of arcing horns	✓		
Replacement of outdoor bay components: busbar, connections, clamps or droppers	✓		
Repair/ replacement of earth bonding	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of vacuum bottles (including replacement of associated seals)		✓	
Painting of plant	✓		
Repairs to interlocks	✓		

132kV Switchgear - Other			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Functional testing (operating tests etc.)	✓		
Lubrication of moving parts	✓		
Replacement of contacts (arcing contacts/ main contacts)	✓		
Replacement of braids	✓		
Replacement of interruptor heads	✓		
Replacement of individual components of the operating mechanism	✓		
Replacement of individual components of the drive rods and linkages	✓		
Replacement of bushings	✓		
Repair/ replacement of earth bonding and earth mats	✓		
Repair/ replacement of interlocks	✓		
Complete replacement of the operating mechanism			✓
Complete replacement of drive rods and linkages		✓	
Replacement of control/communications battery	✓		
Replacement or repair of control box (and/or communications devices)	✓		

132kV Transformer			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Test operation of forced cooling (fans/ pumps)	✓		
Test Bucholz & winding temperature indicators/ relays	✓		
Diagnostic testing (oil testing, partial discharge testing etc.)	✓		
Change silica gel in breather	✓		
Oil filtration and replacement	✓		
Painting	✓		
Sight glass replacement	✓		
Bolt tightening	✓		
General housekeeping (remove debris from radiator etc.)	✓		
Repair/ replacement of connections to earthing system	✓		
Minor repair to existing cooling radiators ( rust/ leaks)	✓		
Replacement of silica gel breather unit	✓		
Tapchanger diverter contact replacement	✓		
Tapchanger selector contact replacement	✓		
Replacement of individual fan motors	✓		
Replacement of pumps	✓		
On site processing to recondition oil to remove moisture and acidity from windings			✓
Replacement of cooling radiators			✓
Replacement of conservator tanks		✓	
Replacement of tap changers or full replacement of tap changer mechanism			✓
Replacement of bushings		✓	
Replacement of cable box		✓	
Installation of replacement windings			✓
Complete factory refurbishment			✓

Batteries at 132kV Substations			
Activity	Cost And Volume Table For Reporting Of Activity		
	Repair & Maintenance	Refurbishment (No SDI)	Refurbishment (SDI)
Examination of electrolyte level, plates, connections etc.	✓		
Diagnostic testing (e.g. internal impedance measurements, discharge tests etc.)	✓		
Topping up individual cells	✓		
Cleaning/ re-tightening of inter-cell connections	✓		
Replacement of individual cells	✓		

