Guidance

RIIO-ED2 Regulatory Instructions and Guidance – Glossary

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RIIO-ED2 is the price control for electricity distribution network operators (DNOs) from 1 April 2023 to 31 March 2028.

This document is part of the regulatory instructions and guidance (RIGs) for RIIO-ED2.

Contents

A

Abortive Call (SM)

Incidences where a DNO is called out to conduct work as part of the Smart Meter roll-out and the customer is not present when the engineer arrives.

Acceptance Date

Refers to:

- a Customer's acceptance of a Quotation 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.

Accruals and Prepayments (non ordinary level of business)

For items that are not incurred in the ordinary course of business and are atypical costs these should be recorded on a cash basis. Items in the ordinary course of business would be recorded as normal trade accruals and prepayments. These would include claim cost provisions and settlements; and holiday pay provisions.

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, for example, include the number of assets inspected or the number of surveys

undertaken. The total recorded should include multiple inspections of the same asset or site if these have been undertaken, as a single count irrespective of the number of times that the same asset has been inspected. For example if an asset has been inspected four times during the reporting year, a count of one inspection should be recorded.

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.

Allowed Related Party Margin

If the external turnover represents more than 75% of total revenue, then the margin will be allowed.

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.

Applicant

"Applicant" takes its definition from the Electricity Act 1989. The terms "applicant" and "Customer" are used interchangeably in relation to Connections RIGs.

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.

Apprenticeship Levy

From April 2017 the way the government funds apprenticeships has changed. The Apprenticeship Levy is a levy on UK employers to fund new apprenticeships and support quality training. Employers with an annual pay bill in excess of £3 million are required to contribute to the Apprenticeship Levy. Employers can claim back funds from the scheme to cover the costs of training and assessment.

Area of existing sites monitored

Area of existing network sites that are measured for their biodiversity value

Areas of Outstanding Natural Beauty (AONB)

Has the meaning given to it in Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

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 – Containment or Removal

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

Asbestos Management – Meter Position Containment

Work to contain or remove DNO cut outs and meter boards by encapsulation or treatment 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 - Meter Position Replacement

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 Meter Board Replacement (SM)

Replacement of asbestos meter boards undertaken in order to enable Smart Meter roll-out.

Includes costs of any cut out replacement undertaken at same time as asbestos meter board replacement. Excludes routine replacement of asbestos meter boards recorded in Legal and Safety.

Asset Register

The group of worksheets, within the Costs, Volumes and Revenue Reporting Pack, 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:

- consequential asset replacement
- smart meter outside price control
- 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(s). 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. However, where the prime driver of the replacement of an asset is an environmental factor, then the work carried out should be classified as environmental and be reported under CV22 Environmental and E2 in Annex J (eg the early replacement of fluid filled cables to prevent contamination of water courses or the replacement of transformers to remove contamination from Persistent Organic Pollutants). Where the prime driver of the replacement is metal theft, and there has been an unplanned incident, the work should be classified as metal theft remedial work and reported under CV26 Faults. Where the prime driver of the replacement is metal theft and there has not been an unplanned incident, the work should be classified as metal theft remedial work and reported under CV28 ONIs as Asset Repairs Instigated by Trouble Calls.

The undertaking of civil works (e.g. foundations, plinths, building modifications, trench work) required to facilitate the asset replacement activity are treated as a standalone activity and reported as Civils Driven by Asset Replacement. 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 such as:
    - proactive replacement of poor condition assets where the condition has been determined from condition data, test data or defect data suggesting that the assets have a higher probability of failure;
    - proactive 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).
    - replacement of poor condition assets coincident with other work carried out under a different investment driver, where the asset is a Separately Identifiable Asset Register Asset that does not need to be part of the work under the different investment driver (for example a project may include the asset replacement of switchgear as a result of the reinforcement of a transformer – the asset replacement is carried out on a Separately Identifiable Asset Register Asset)
- Replacement of assets associated with a poor condition or poorly performing asset. In some network arrangements assets are banked together (e.g. Switchboards at

Primary Substations). It may be identified that one or more (but not all) of the banked assets are in poor condition. Practical considerations may dictate that it is more cost effective to replace all the banked assets rather than just those that are assessed as being in poor condition. 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

Note, on worksheets C1- Cost Matrix (year) in the Costs, Volumes and Revenue Reporting Pack, the Asset Replacement column also includes costs related to Civil Works 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 - 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.

Atypicals - Atypicals Non Severe Weather in Totex in Price Control

Those specific costs or events that are specified as Atypical under this definition, or where Ofgem provides an agreement for the costs to be reported as Atypicals in the RIGs, and they fall within Totex activities.

INCLUDES:

- Severance, relating to Totex activities
- Non-Severance related restructuring/mergers, relating to Totex activities
- Cash utilisation of non normal provisions or non normal accruals/prepayments utilisation relating to these activities
- Costs related to EATL pension liabilities.

EXCLUDES:

- Early Retirement Deficit Contributions (ERDCs) (costs to be reported in Atypicals Non Severe Weather excluded from Totex in Price control or Atypicals outside price control as appropriate)
- Rebranding
- The costs of any event defined as an exceptional event under IIS incentive scheme.

Atypicals - Atypicals Non Severe Weather excluded from Totex in Price Control

Those specific costs or events that are specified as Atypical under this definition, or where Ofgem provides an agreement for the costs to be reported as Atypicals in the RIGs, and fall within the price control but outside Totex activities, for example under stand-alone funding, Network Innovation funding or Low Carbon Technologies.

INCLUDES:

- Early Retirement Deficit Contributions (ERDCs), relating to in price control Totex activities
- Non-Severance related restructuring/mergers, relating to in price control non Totex activities
- Rebranding
- Cash utilisation of non normal provisions or non normal accruals/prepayments utilisation relating to these activities.

Atypicals - Atypicals Non Severe Weather outside Price Control

Those specific costs or events that are specified as Atypical under this definition, or where Ofgem provides an agreement for the costs to be reported as Atypicals in the RIGs, and which are associated with non-distribution activities.

INCLUDES:

- Severance relating to Non Distribution activities
- Early Retirement Deficit Contributions (ERDCs) relating to Non Distribution activities
- Non-Severance related restructuring/mergers relating to Non Distribution activities.

EXCLUDES:

- Rebranding (costs to be reported in Atypicals Non Severe Weather excluded from Totex).

Atypicals - Non Severance Related Restructuring/Merger Costs

The Atypical costs associated with the identification and implementation of restructuring, mergers and major improvement initiatives. Excludes the costs of severance payments and ERDCs.

Atypicals - Rebranding

Costs relating to rebranding a company's assets or vehicles following a name or logo change.

Atypicals - Severance (exc ERDCs)

Payments made to secure the exit from the business of an individual, excluding any Early Retirement Deficit Contributions (ERDCs).

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).

Average embodied CO2 per unit of built asset

Licensee to specify and calculate the average embodied carbon per a unit of newly built/installed asset that are relevant to its network. For example, this could be a km of overhead line.

Average embodied CO2 per £m

Total embodied CO2 from new projects divided by the value of new projects

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 (Requirement to offer terms for the provision of Legacy Metering Equipment) 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 33kV 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 66kV 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 132kV 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.

Bespoke Activity

A Bespoke Activity is any activity being proposed by a DNO in its Business Plan that is specific to the DNO proposing it. Bespoke activities can include, but are not limited to, bespoke outputs ie bespoke Output Delivery Incentives (ODIs) and Price Control Deliverables (PCDs).

Biodiversity value

Measured biodiversity value of each monitored site using the Defra Biodiversity Metric 2.0 or equivalent.

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.

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.

BT21CN - Infrastructure Enabling

The common telecommunications infrastructure, which although not directly removing reliance upon BT circuits, is required to facilitate replacement of BT circuits with alternative communications methods. This includes the costs of radio links, radio-mast structures, multiplex equipment and power supply systems.

BT21CN - 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'.

BT21CN - 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.

Budget Estimate

For the purpose 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.

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).

Bundled Installation

Bundled installations refers to monitoring equipment installations bundled as part of another activity – for example, installing a new transformer.

Bus Stop Suspension

A bus stop suspension is used when works need to be carried out or when the bus stop is needed for access. Normal parking controls are suspended. Fees will depend on the council and the duration of the suspension.

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.

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 Plan Financial Model (BPFM)

The financial model which Ofgem and network companies use to calculate expected allowed revenues prior to the start of the RIIO price control period.

Business Rates Payments

Has the meaning given to it in SpC 6.1 (Pass-through expenditure) of the electricity distribution licence. Also known as Cumulo or network rates.

Business Support Costs

Collectively includes the activities, which are all separately defined in this Glossary, of:

- Core Business Support which comprises:
    - HR
    - Non-Operational Training

  - Finance & Regulation
  - CEO etc
- IT & Telecoms (Business Support)
- Property Management (Business Support).

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 undereaves 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 and 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, and 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

A Closely Associated Indirect activity included in the Core CAI worksheet.

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 committed through Connection Agreements not utilised in year

When new customers connect to the network, licensees enter into connection agreements which have an agreed supply capacity. The amount of committed capacity will be related to the demand that a customer is expected to use and this demand will have been used for any reinforcement. As a result this agreed supply capacity is committed to the customer. While the customer has been provided the agreed supply capacity they may not be using the full amount. This means that the measured demand on the network understates the amount of demand that would be present if the customer used all the committed capacity. This entry requires the population of the net difference between the demand being used by customers and the capacity committed in connection agreements at the time of maximum demand. It is anticipated that the types of customers that this affects are predominantly industrial and commercial customers.

Capacity constraint

Solely in relation to CV2, this term means the calculated capacity due to a limitation caused by the rating of any network component(s) utilised, solely for the purposes of providing capacity to meet the import or export requirements of a substation or circuit as relevant.

Capacity Constraint affecting single substation (N-1) or (N-2)

The calculated capacity due to a limitation caused by the rating of any network component(s) utilised, under credible first circuit outage (N-1) or second circuit outage (N-2) network arrangements, solely for the purposes of providing capacity to meet the import or export requirements of a single substation.

Limitations that arise when the network is operating under credible first circuit outage conditions shall be considered as a Capacity Constraint affecting single substation (N-1).

Limitations that arise only under credible second circuit outage conditions shall be considered as a Capacity Constraint affecting single substation (N-2).

Typical network configurations that affect a single substation are where circuits exclusively feed single substations. In these situations any of the components such as transformers, busbars and switchgear at a substation, and upstream network components such as cables and overhead lines, can lead to the limitation.

Capacity Constraint affecting substation groups (N-1) or (N-2)

The calculated capacity due to a limitation caused by the rating of any network component(s) utilised, under credible first circuit outage (N-1) or second circuit outage (N-2), for the purposes of providing capacity to meet the import or export requirements of more than one substation.

Limitations that arise when the network is operating under credible first circuit outage conditions shall be considered as a Capacity Constraint affecting substation groups (N-1).

Limitations that arise only under credible second circuit outage conditions shall be considered as a Capacity Constraint affecting substation groups (N-2).

Typical network configurations that affect a substation group are teed circuits, and ring networks, and normally interconnected substations.

- Teed circuits are where a feeding cable or overhead line to a substation has another cable or overhead line feeding another substation connected to it. The part of the first cable or overhead line that is used to supply both substations is a common component. If this common component limits the load that can be delivered it is a constraint affecting a substation group.
- Ring circuits are where a number of substations are linked together. The components (cables, overhead lines and switchgear) that make up the ring are common to all the substations on the ring and, therefore, if one of these common components limits the load that can be delivered it is a constraint affecting a substation group.
- Normally interconnected substations are where a number of substations are linked together via network components with the purpose of maintaining supplies for credible first circuit outage (N-1) or second circuit outage (N-2) that affect the source substations. An example of this is two single transformer 33/11kV substations that support each other via closed 11kV interconnected circuits.

Limitations of network components that exclusively supply a single substation downstream of common network components should be treated as a constraint affecting a single substation, even though they may be associated with a teed or ringed network configuration.

Capacity Released

The net impact of a reinforcement intervention (including alternatives to traditional reinforcement) on either the peak demand or the network firm capacity 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
- Non-load related capex (excluding non-op capex)
- 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.

Catastrophic Failure

In relation to reporting on Link Boxes, means a fault/defect where energy is expelled. The incident may/could have resulted in an injury or fatality.

Category 1 Exceptional Event

A Severe Weather Exceptional Event affecting eight times or more the normal daily rate (see Table 1 below), defined as mean, of EHV/HV Faults, up to 13 times this threshold, but affecting less than the Category 3 number of customers affected.

Table 1	**Category 1 - Medium Severe Weather Exceptional Events**
DNO	**8 x mean HV faults and above**
ENWL	55
NPgN	37
NPgY	40
WMID	63
EMID	64
SWALES	41
SWEST	60
LPN	14
SPN	54
EPN	91
SPD	76
SPM	68
SSEH	60
SSES	67

Category 2 Exceptional Event

A Severe Weather Exceptional Event affecting thirteen times or more the normal daily rate of EHV/HV Faults (see Table 2 below), which affect less than the Category 3 number of customers affected threshold.

Table 2	**Category 2 - Large Severe Weather Exceptional Events**
DNO	**13 x mean HV faults and above**
ENWL	90
NPgN	60
NPgY	65
WMID	103
EMID	104
SWALES	67
SWEST	98
LPN	23
SPN	88
EPN	148
SPD	124
SPM	111
SSEH	97
SSES	109

Category 3 Exceptional Event

A Severe Weather Exceptional Event in which weather related faults affect more than the threshold number of customers (see Table 3 below).

Table 3	**Category 3 – Very large Severe Weather Exceptional Events**
DNO	**No. of Customers affected**
ENWL	258,000
NPgN	219,000
NPgY	431,000
WMID	353,000
EMID	452,000
SWALES	213,000
SWEST	283,000
LPN	321,000
SPN	297,000
EPN	559,000
SPD	230,000
SPM	175,000
SSEH	133,000
SSES	402,000

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 provisions, 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 relating to atypical events
- 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 under Insurance Total)
- Legal advice relating to wayleaves/servitudes/easements (include under Wayleaves and Easements/Servitudes Admin Costs).

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 length deferred (counterfactual)

In respect of flexibility, the length (km) of circuit that would have been built had flexible solutions not been procured.

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 HV Indoor Substations

Civils Works Driven By Condition Of Civil Items at an indoor substation where the voltage of operation is 6.6/11kV or 20kV.

Civil Works At HV Outdoor Substations

Civils Works Driven By Condition Of Civil Items at an outdoor substation where the voltage of operation is 6.6/11kV or 20kV.

Civil Works At 33kV Substation

Civils Works Driven By Condition Of Civil Items at a substation where the highest voltage of operation is 33kV.

Civil Works At 66kV Substation

Civils Works Driven By Condition of Civil Items at a substation where the highest voltage of operation is 66kV.

Civil Works At 132kV Substation

Civils Works Driven By Condition of Civil Items at a substation where the highest voltage of operation is 132kV.

Civil Works Driven By Asset Replacement

Civil works undertaken to replace or modify existing civils items primarily required to facilitate, or enable, Asset 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 Asset Replacement uses categorisations based upon the operating voltage of the replacement plant assets with which it is associated.

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.

Activities considered as Civil Works Driven By Condition Of Civil Items, at Substations, are further identified in the Refurbishment and Repairs & Maintenance Task Allocation Tables in Chapter 3 of this document. These are identified under the entry for Substation (Civils).

Civils Works Associated With LV Asset Replacement (not at Substation)

Civil Works Driven By Asset Replacement associated with LV plant asset types that are normally not located at a Substation, ie LV UGB and LV Pillar (OD not at a Substation) assets.

Civils Works Associated With HV or LV Asset Replacement (at secondary substation)

Civil Works Driven By Asset Replacement associated with the installation of:

- LV plant asset types that are normally located at substations, ie all LV plant assets with the exception of LV UGB and LV Pillar (OD not at a Substation) assets, or
- HV plant assets other than 6.6/11kV CB (GM) Primary and 20kV CB (GM) Primary assets.

Civils Works Associated With HV Asset Replacement (at primary substation)

Civil Works Driven By Asset Replacement associated with the installation of 6.6/11kV CB (GM) Primary and 20kV CB (GM) Primary assets.

Civils Works Associated With 33kV Asset Replacement

Civil Works Driven By Asset Replacement associated with the installation of 33kV plant asset types.

Civils Works Associated With 66kV Asset Replacement

Civil Works Driven By Asset Replacement associated with the installation of 66kV plant asset types.

Civils Works Associated With 132kV Asset Replacement

Civil Works Driven By Asset Replacement associated with the installation of 132kV plant asset types.

Clerical Support – see Engineering Management and Clerical Support

Clock Stopping

The ability, in circumstances as described in the Interruptions RIGs (Annex F), 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, Stores, Call Centre and Control Centre
- Wayleaves
- Operational Training (CAI)

- Vehicles and Transport (CAI).

Common Connection Charging 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.

Common Connection Charging Methodology

has the meaning given to that term in the Distribution Connection and Use of System Agreement.

Common Network Asset Indices Methodology

The agreed methodology, common to all DNOs, for the determination and reporting of Network Asset Indices.

Communications for Switching and 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.

Company Specific Factors

Company specific factors are adjustments made to a DNO's cost allowances to reflect specific factors that might mean the efficient level of costs are higher for some DNO than others.

Complaint

Has the meaning given to it in Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Completion Date

For the purposes of the Connections RIGs, 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.

Condition Based Functional Failure

The inability of an asset to perform it's required function, as a consequence of the condition of asset.

This includes:

- failures disruptive to the supply of electricity
- catastrophic failures of equipment or subcomponents
- failure of an asset to operate (or be operated) when required
- failure of an asset to perform its rated duty.

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.

Connected MPANs/points of connection provided as part of a Connection Project which has an element of Connections Reinforcement

MPANs/points of connection connected as part of a Connection Project which involves some element of Connections Reinforcement.

Connected MPANs/points of connection provided as part of a Connection Project which has no element of Connections Reinforcement

MPANs/points of connection connected as part of a Connection Project which has no element of Connections Reinforcement.

Connecting Party

The customer or representative/agent of the customer for which a Connection Project is being provided.

Connection

For the purposes of the Connections RIGs, 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 Connection Project, which refers to each project covered by a connection quotation offered to a customer. It is the scope of work within a particular Connection Project that determines which Market Segment it is classified as belonging to.

Connection Project

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-ED2 project.

Connection Project: 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).

Connection Project: 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.

Connection Project: DG Connection at Any Voltage that Where HV is the Highest Voltage Worked On

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

Connection Project: DG Connection at Any Voltage that Where EHV is the Highest Voltage Worked On

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

Connection Project: DG Connection at Any Voltage that Where 132kV is the Highest Voltage Worked On

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

Connection Project: 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.

Connection Project: 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.

Connection Project: 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.

Connection Project: 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.

Connection Project: HV Metered DPCR4 Connection 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.

Connection Project: 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.

Connection Project: 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.

Connection Project: LV Metered DPCR4 Connection Projects

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

Connection Project: Single Service LV Connection

Connection Projects providing exit point(s) at LV a one off domestic or commercial premise by means of a single phase service connection only.

Connection Project: 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.

Connection Project: 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 132kV.

Connection Project: 132kV Metered DPCR4 Connection Projects

Connection Projects; DPCR4 providing exit point(s) at 132kV level.

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 Unmetered Connection (UMC)

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

Connection/Customer Type

For the purposes of the Connections RIGs, all connection jobs should be categorised into one of the Connections Categories that maps to a 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.

Connections Reinforcement

Those Reinforcement works required on the Electricity Distributor's system to accommodate new or increased connections.

Where the highest voltage of the assets involved in providing such connections, and any associated works is on the Secondary Network, this would include any Reinforcement associated with a Minimum Scheme or an Enhanced Scheme.

Where the highest voltage of the assets involved in providing such connections, and any associated works is on the Primary Network or 132kV Systems, this would include any Reinforcement associated with a Minimum Scheme or an Enhanced Scheme which involves the installation of assets at the same voltage as that of the Minimum Scheme.

Connections Reinforcement - Customer Funded

The portion of Connections Reinforcement funded by the connecting customer.

Connections Reinforcement - DUoS Funded

The portion (which could be 100%) of Connections Reinforcement not funded by the connecting customer.

Consac

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

Consequence of Failure

The impact of Condition Based Functional Failure of an asset.

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.

Consumer Value Proposition (CVP)

Consumer Value Proposition is stage 2 of the Business Plan Incentive, where a DNO can bid for reward by demonstrating the additional value its Business Plan will generate for existing and future consumers and consumers in vulnerable situations.

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, land sampling and remedial actions. This includes dealing with land that has been contaminated either as a result of distribution network activities or by third parties causing contamination to land used or to be used for distribution network activities. This excludes cleaning of areas within protective bunds installed to prevent land contamination; this activity should be reported within Repairs and Maintenance

Contestable

Connections work that can be carried out by a non-affiliated third party with relevant accreditation.

Contingent Pension Asset Costs – see NABC – Contingent Pension Asset Costs

Contractors

For the purposes of the Costs, Volumes and Revenue Reporting Pack, this is a Cost Type. It represents costs incurred by contracting with organisations 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 (include in Related Party).

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.

Controllable Opex

This is PCFM Cost Type, which reports the costs of the following activities, with the exception of Pensions costs (which are reported in the 100% 'revenue pool' expenditure):

- Inspections
- Repair & Maintenance
- Dismantlement
- Remote Generation Opex
- Substation Electricity
- Smart Metering Roll-Out
- Core CAI
- Wayleaves
- Operational Training (CAI)
- Vehicles and Transport (CAI)
- Core BS
- IT & Telecoms (Business Support)
- Property Management (Business Support)
- Less: Income from Theft Recovery
- Less: DRS8. Value Added Services (net).

Conventional Solution

Any work, activity, asset or other solution other than those listed in the worksheet E6 - Innovative Solutions of the Environment and Innovation Reporting Pack.

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.

Coordinated Adjustment Mechanism (CAM)

A whole system focused re-opener to protect consumer interests by supporting the reallocation of project revenues and responsibilities to the network best placed to deliver the relevant projects.

Core Business Support

Includes the following activities, which are all separately defined in this glossary:

- HR
- Non-Operational Training (see definition)
- Finance & Regulation (see definition)
- CEO etc (see definition).

Core CAI

This combines the following activities, which are all separately defined in this glossary:

- Network Design and Engineering
- Network Policy
- Project Management
- Engineering Management and Clerical Support (EMCS)
- System Mapping
- Stores
- Call Centre
- Control Centre.

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 Connection Project completed within the previous 10years. The value entered must equate to a relevant proportion of the Connections Reinforcement DUoS Funded cost of the installation of the original asset.

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 Connection Project completed within the previous 10 years. The value entered must equate to a relevant proportion of the customer funded cost of the installation of the original asset.

Cost of Disallowed Volumes

The cost of volumes, recorded against the secondary reinforcement volume driver (SRVD) and the low voltage services volume driver (LVSVD), which are disallowed by the Authority following the Annual Metric Review Process described in Section 4 of the Load Related Expenditure Volume Drivers Governance Document, calculated as the disallowed volumes multiplied by the relevant unit costs in Appendix 1 of SpC 3.9.

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 £/MWh

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) (this includes funding received through the Apprenticeship Levy scheme, which should be recognised in Operational Training)
- Cable damage recovery payment

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).
- Recovery of design costs for quotations where the payee does not proceed with the connection (these should be reported in Customer Contributions relating to connections).

Cost Type

The categorisation of the type of costs incurred by the DNOs consisting of the following which are defined in this glossary:

- Labour
- Pensions
- Contractors
- Materials
- Wayleaves (including easements/servitudes)
- Street Works – Cost Type
- Other (includes Rent and Subscriptions)
- Related Party Margins
- Cost recoveries
- Customer Contributions.

Curtail/Curtailment

means any action taken by the licensee to restrict the flow of electricity at the connection point (ie an Exit Point or an Entry Point (both as defined in Standard Condition 1 of the Electricity Distribution Licence (Definitions for the standard conditions))), except where that restriction is caused by: (a) an Interruption to the customer's supply; and/or (b) curtailment as a result of constraints on the transmission network.

Curtailable Connection

means a connection whereby the Required Capacity can be reduced by the licensee.

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.

Critical National Infrastructure (CNI)

Sites designated as Category 3 or above on DECC's criticality scale. The data reported in the worksheet C3 – Physical Security in the Costs, Volumes and Revenue Reporting Pack should only relate to those sites classified as CNI where work as part of a physical security upgrade programme is required. Sites may be re-classified by DECC (now Department for Energy Security and Net Zero) into different categories on their criticality scale during RIIO-ED2.

Criticality Index

A framework for collating information on the Consequences of Failure of Assets Register assets.

The Criticality Index is a comparative measure of Consequence of Failure. For a particular asset, the Criticality Index is provided by:

- the location of the asset within the Criticality Index Bands, and
- the, reference costs of failure for the relevant Asset Register category, as defined in the agreed Common Network Asset Indices Methodology directed by Ofgem for use in completion of the RIIO-ED2 NARM tables.

Criticality Index Bands

Bandings used for the reporting of the Overall Consequence of Failure for individual assets, relative to the reference costs of failure for the relevant Asset Register category, as defined in the agreed Common Network Asset Indices Methodology directed by Ofgem for use in completion of the RIIO-ED2 NARM tables.

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

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

Means (subject to the following paragraph), 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) , such that an individual customer is identified at each connection point.

For the purposes of customer service reporting, 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

Customer Contributions received by the DNO (or related parties) from a third party in relation to an investment driver, including but not limited to a Connection or a Diversion.

Customers Interrupted (CIs)

The proportion of total customers whose supplies have been interrupted in a year. This is calculated by summing the number of customers with an interruption of supply that lasted for three minutes or longer (excluding re-interruptions to the supply of customers previously interrupted during the same incident), multiplying by 100 and dividing by the total number of customers. It is calculated as:

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

Customers Interrupted by Short Interruptions (SIs)

The proportion of total customers whose supplies have been interrupted by a Short Interruption in a year. This is calculated by summing the number of customers with an interruption of supply, where the initial interruption to supply is restored in less than three minutes, multiplying by 100 and dividing by the total number of customers. It is calculated as:

$$\frac{(The\ sum\ of\ the\ number\ of\ customers\ interrupted\ by\ short\ interruptions\ \times 100)}{The\ total\ number\ of\ customers}$$

Customer Minutes Lost (CMLs)

A measure of the duration of interruptions to supply per year. It is the average customer minutes lost per customer per year, where an interruption of supply to customer(s) lasts for three minutes or longer. It is calculated as:

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

Customers Re-interrupted (RIs)

The number of customers per year whose supplies have been re-interrupted per 100 customers per year. It is calculated as:

$$\frac{(The\ sum\ of\ the\ number\ of\ customers\ re-interrupted\ x\ 100)}{The\ total\ number\ of\ customers}$$

Customer Support Costs

means the cost to the licensee, incurred either directly or by virtue of reimbursing Customers or suppliers, of:

(a) providing the Customer with food, drink and temporary accommodation, in a hotel or otherwise, during a 1-in-20 Severe Weather Event;

(b) providing a Customer with welfare items during a 1-in-20 Severe Weather Event. This includes the procurement of items such as portable toilets, blankets, gas heaters, torches, fuel for customer generators; and

(c) contact centre and support staff, over and above the costs the licensee incurs in the normal course of running the Distribution Business.

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), 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 associated with a metered LV service connection.

Cut Out Changes (SM)

Cut out changes undertaken as part of Smart Meter roll-out following category A or category B referral by supplier or representative. Includes 'Tier 2' costs.

Excludes cut out changes associated with asbestos meter board replacements and routine cut out changes as reported in asset replacement.

Cyber Resilience

Activities focused primarily in response to the Network and Information Systems Regulations 2018 (SI 2018/506) (NIS Regulations) or subsequent amendments to those regulations. This also includes where DNOs carry out activities that exceed the minimum requirement of the regulations or subsequent amendments to those regulations. This also includes where DNOs carry out activities that exceed the minimum requirement of the regulations.

D

Damage Fault Rates

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

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

The activity of detecting and correcting missing or inaccurate records where correction results in a change to the Asset Register volumes.

Data Communications

Any costs of transferring video and other data between sites and the Alarm Receiving Centre.

Data Services (MPAS and data transfer)

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

DCC User

A User is an organisation that has completed all entry requirements and is able to communicate with DCC smart metering devices.

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

This refers to the deferred revenue expenditure tax pool which is a tax pool provided for under case law for assets which constitute a replacement (rather than an enhancement) of existing assets and which, prior to 1 April 2005, were treated as 100% tax deductible.

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 Costs, Volumes and Revenue 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

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.

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 Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

DG – see Distributed Generation

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 Voltage Level

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

Data & Digitalisation

A catch-all term representing the investment in digital and data technologies in order to adopt or adapt business processes or provide new digital products to stakeholders

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 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.

Directed adjustments to licensee submitted UoS Bad Debt costs

Has the meaning given to in SpC 2.1 (Revenue Restriction) of the electricity distribution licence.

Directly Attributable Costs

Has the meaning given to it in SpC 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Directly Remunerated Services

Has the meaning given to it in SpC 9.7 (Directly Remunerated Services) of the electricity distribution licence.

Directly Remunerated Services (exc connections)

Costs incurred in the directly remunerated services categories DRS2 to DRS16.

Disallowed Expenditure (LCN Fund)

Has the meaning given to it in SpC 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence. It is referred to as LCNF Disallowed Expenditure in SpC 1.2.

Disallowed Expenditure (NIC)

Has the meaning given to it in SpC 1.2(Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Disallowed Related Party Margins

The portion of the Related Party margins which will not be included in Totex for the year in accordance with the relevant price control settlement. For RIIO-ED2, if the external turnover represents less than 75% of total revenue then the margin will be disallowed.

Discretionary Funding

Has the meaning given to it in SpC 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence. It is referred to as LCNF Discretionary Funding in SpC 1.2.

Dismantlement

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.

Distribution Asset

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

Distribution Flexibility Services

Has the meaning given in Standard Condition 31E of the electricity distribution licence.

Distribution Losses

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

Distribution Losses - Justified Costs

The incremental component of the total activity cost that is justified by Distribution Losses benefits.

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 that term in Standard Condition 1 of the Electricity Distribution Licence (Definitions for the standard conditions).

Distribution System Operation (DSO)

The engagements undertaken by the licensee pursuant to the operation of the Distribution System, for planning and network development, network operation and market development of the Distribution System as set out in the DSO Incentive Governance Document Appendix 1.

Diversionary 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. Diversionary 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 - 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 due to wayleave terminations etc 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 - Highways

The raising or rerouting of a circuit or repositioning of plant associated with Street Works. The costs reported in worksheets CV5 - Diversions and CV6- Diversions for Rail Electrification in the Costs, Volumes and Revenue Reporting Pack represent the DNO-funded proportion of the costs as defined under Street Works. The proportion that is

charged to the highway authority (roads authority in Scotland) is reported in worksheet CV39 – Directly Remunerated Services in the Costs, Volumes and Revenue Reporting Pack. 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.

Domestic Premises

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

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.

DPCR4 Connection Project - see Connection Projects; DPCR4

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 Special Condition 9.7 (Directly Remunerated Services) of the electricity distribution licence.

DRS2. Diversionary Works Under an Obligation

Has the meaning given to it in Appendix 1 of Special Condition 9.7 (Directly Remunerated Services) of the electricity distribution licence.

DRS3. Works Required by an Alteration of Premises

Has the meaning given to it in Appendix 1 of Special Condition 9.7 (Directly Remunerated Services) of the electricity distribution licence.

DRS10. Value Added Services

Has the meaning given to it in Appendix 1 of Special Condition 9.7 (Directly Remunerated Services) of the electricity distribution licence.

DRS11. Top-up, Standby, and Enhanced System Security

Has the meaning given to it in Appendix 1 of Special Condition 9.7 (Directly Remunerated Services) of the electricity distribution licence.

DRS12. Revenue Protection Services

Has the meaning given to it in Appendix 1 of Special Condition 9.7 (Directly Remunerated Services) of the electricity distribution licence.

DRS13. Metering Services

Has the meaning given to it in Appendix 1 of Special Condition 9.7 (Directly Remunerated Services) of the electricity distribution licence.

DRS14. Smart Meter Roll-out Rechargeable Services

Has the meaning given to it in Appendix 1 of Special Condition 9.7 (Directly Remunerated Services) of the electricity distribution licence.

DRS15. Miscellaneous

Has the meaning given to it in Appendix 1 of Special Condition 9.7 (Directly Remunerated Services) of the electricity distribution licence.

DRS16. Distribution Network Voltage Control Services

Has the meaning given to it in Appendix 1 of Special Condition 9.7 (Directly Remunerated Services) of the electricity distribution licence.

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.

DSO Incentive

A financial output delivery incentive that drives licensees to more efficiently develop and use their network, taking into account flexible alternatives to network reinforcement.

DSO Incentive Governance Document

means the document of that name issued by the Authority in accordance with Part F of Special Condition 4.8 of the Electricity Distribution Licence (Distribution System Operation output delivery incentive).

DSO Stakeholder

Individuals or organisations that affect or can be affected by the DSO activities of the licensee. They may have a direct or indirect interest in DSO activities, and their contact may be anything from daily interaction to occasional contact.

Dual Quote

A Connection Project quote to one customer that contain both a Contestable and Non-Contestable connections work.

DUoS - see Distribution Use of System

E

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 of 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).

ED2 Final Determination

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

EHV (Extra High Voltage)

Voltages equal to or greater than 22kV but less than 132kV.

EHV Systems

Systems including all voltage levels equal to or greater than 22kV but less than 132kV.

The lower boundary of EHV Systems should be taken as the supply terminals of customers supplied at EHV, and in other situations as the load-side terminals of protection equipment connected to the secondary side (lower voltage) of EHV transformers. The upper boundary should in general be taken as the busbar side of lower voltage switchgear of transformers whose primary voltage is 132kV or above and whose secondary voltage is EHV. If no secondary switchgear exists, the upper boundary should be taken as the secondary-side terminals of the 132kV or above transformer: incidents on the system connected to the secondary voltage terminals of the transformer should be reported as EHV incidents and not as 132kV incidents.

EHV Sub Cable

EHV cable which is placed below the surface of water and laid on or under the sea bed or the bed of a lake, 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.

Electricity System Restoration

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

Electricity System Restoration 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 Electricity System Restoration Resilience.

Electricity System Restoration Resilience (ESRR)

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 Electricity System Restoration 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), as documented in ENA ER G91.

Electricity System Restoration Resilience (ESRR) - DC disconnection schemes

Expenditure on the establishment of Electricity System Restoration Resilience for protection/tripping battery supplies at substations using DC Load Disconnection Scheme solutions as described in ENA ER G91.

Electricity System Restoration Resilience (ESRR) - Generator

For complex sites with multiple battery installations or significant standing demand, standby generation may be a cost effective option, supporting multiple substation and SCADA chargers. Standby generation would ideally have sufficient fuel for 72 hours

operation (or a minimum of 48 hours with robust emergency refuelling arrangements), with remote monitoring functionality to indicate generator running, low fuel alarms etc.

The type of generator used (eg single or three phase) will be determined by the requirements of the substation it supports.

Electricity System Restoration Resilience (ESRR) - Land lines & Internal Telephony

Expenditure on the establishment of Electricity System Restoration 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.

Electricity System Restoration Resilience (ESRR) - Mobile Voice Communications

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

Electricity System Restoration Resilience (ESRR) - Protection Batteries

Expenditure on protection batteries to ensure Electricity System Restoration Resilience at substations used for power system protection or tripping of switchgear.

Electricity System Restoration Resilience (ESRR) - SCADA Batteries

Expenditure on SCADA batteries to ensure Electricity System Restoration Resilience at substations.

Electricity System Restoration Resilience (ESRR) - Securing of Existing Telecommunications Infrastructure

The establishment of Electricity System Restoration Resilience for the DNO’s existing telecommunications systems that are necessary for the implementation of Electricity System Restoration recovery.

Electricity System Restoration Resilience (ESRR) of SCADA Infrastructure

Expenditure on the establishment of Electricity System Restoration Resilience for the telecommunications infrastructure for SCADA system operations under Electricity System Restoration conditions, excluding expenditure on the Electricity System Restoration Resilience of SCADA battery supplies at substations.

Electricity System Restoration Resilience (ESRR) of Substation Batteries

Establishment of Electricity System Restoration Resilience of all battery supplies at a substation used for power system protection or tripping of switchgear and for SCADA purposes.

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

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.

Eligible NIA Expenditure

Has the meaning given to it in Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Eligible NIC Bid Preparation Costs

Has the meaning given to it in Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Eligible NIC Project

As defined in the NIC Governance Document.

Eligible Use of System Bad Debt Costs Incurred

Has the same meaning given to the term EBDA in Special Condition 6.1 (Pass-through expenditure) of the electricity distribution licence.

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 Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Engineering Management & Clerical Support (EMCS)

A Closely Associated Indirect activity included in the Core CAI worksheet.

This 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 related costs

- Street Works Admin
- Permit and Lane Rental Administration Costs
- Permit and Lane Rental Set-Up Costs
- Liaising with contractors and direct labour force to undertake remedial works following inspections (but not the cost of the remedial works)
- 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 (CAI))
- 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 non-operational staff attending non-operational training (include as labour costs under the relevant activity of that employee)
- Time of operational staff attending non-operational training (include as labour costs 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.

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.

Enhanced Physical Security (Capex)

Any expenditure associated with upgrading physical security assets which is undertaken as part of the PSUP, at sites classified as CNI or centralised sites.

Enhanced Scheme

A network design that differs from the Minimum Scheme. This will include one or more of the following:

- additional assets not required as part of the Minimum Scheme;
- assets of a larger capacity than required by the Minimum Scheme;
- assets of a different specification than required by the Minimum Scheme.

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 refuelling 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 which 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 (Environment Reporting) of the electricity distribution licence.

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

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

The amount of physical and non-physical work that has been undertaken to achieve ETR 132 Compliance.

ETR 132 – Physical Cut

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 DNO's CIs and CMLs (incentivised interruptions performance) are affected by exceptional circumstances, as set out in Part G of Special Condition 4.4 (Adjustments for Severe Weather Events) of the electricity distribution licence, an Exceptional Event has occurred.

Exceptional events are classified as one of the following:

1) Severe Weather Exceptional Event:

As defined in Special Condition 1.2 (Definitions and references to the Electricity Distributors), an 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 commencement threshold number, and
- is deemed to end at the time determined by the Authority having regard to:
    - such time as the licensee may have declared was the end of the severe weather event in its statement of facts
    - the time of restoration of the last Customer off supply due to an LV incident linked to the underlying cause of the severe weather, (provided that all Customers off supply due to high voltage incidents linked to the underlying cause of the severe weather event have been restored), and
    - 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 event has fallen to zero.

For the purposes of the Costs, Volumes and Revenue 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. For clarity, the Severe Weather 1-in-20 Event threshold applies to a 24 hour period within the event, rather than across the entirety of the 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
SSEH	60	315
SSES	67	351

Other Exceptional 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**
ENWL	1.06	0.84
NPGN	1.58	1.26
NPGY	1.10	0.88
WMID	1.01	0.81
EMID	0.95	0.76
SWALES	2.26	1.80
SWEST	1.60	1.28
LPN	1.10	0.88
SPN	1.11	0.89
EPN	0.70	0.56
SPD	1.25	1.00
SPMW	1.68	1.34
SSEH	3.33	2.67
SSES	0.84	0.67

Excess Specified Amount

Has the same meaning given to the term ESAt in SpC 7.5 (Legacy pass-through items term (LPTt) of the electricity distribution licence.

Excluded Market Segments

The six segments in the market specified in Special Condition 9.10 (Margins on Connections licensee's Connections Activities) of the electricity distribution licence where it is not possible to charge a Regulated or Unregulated Margin. These are defined in this glossary and are:

- LV Metered DPCR4 Connection Projects
- HV Metered DPCR4 Connection Projects
- EHV Metered DPCR4 Connection Projects
- 132kV Metered DPCR4 Connection Projects
- Single Service LV Connection
- Small Project Demand Connection (LV).

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 (Standards for the provision of Non-Contestable Connection Services) of the electricity distribution licence.

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

An MPAN for the exporting of an electricity supply to the DNO's network.

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 equal to or greater than 22kV but less than 132kV.

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 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 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

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 measure) of unplanned incidents for a specific category of Distribution Asset. The units of measure are:

- per 1000 units for plant, switchgear and services
- per 100km for overhead lines and cables
- per 100km for non-damage incidents

Fault Rate Asset Category

Any category of Distribution Asset 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.

Faults

Troublecall Occurrences classified under Interruptions reporting as Unplanned Incidents which require some form of action to restore an asset to Pre-Fault Availability.

A fault starts at the same time as when an Unplanned Incident starts.

The completion of a fault is when an asset is restored to Pre-Fault Availability. This may occur at a time that is later than when an Unplanned Incident (as reported under IIS) stops.

Costs associated with faults relate to the activity required to restore the faulted asset to Pre-Fault Availability. Where relevant, this:

INCLUDES:

- On-site network switching and operations to isolate the fault or restore supplies
- Issue of safety documentation
- Identification of the precise location of a failed asset
- Ground excavation and reinstatement
- Physical repairs to assets (including those caused by third party damage or metal theft)
- Establishing and removing temporary supply arrangements (as defined for Interruptions reporting)
- For Unplanned Incidents whereassets are damaged, the repair or replacement of the damaged asset and any associated work required to restore the damaged asset back to Pre-Fault Availability such as:
    - The repair or replacement of a component part of the asset;
    - The complete replacement of an asset.

EXCLUDES:

- the proactive replacement of assets because of their condition and/or performance history (include in CV7 - Asset Replacement)any subsequent maintenance, refurbishment or replacement work identified at the time of resolving the Troublecall Occurrence but not related to the occurrence itself
- resolving failures on the DNO’s SCADA and telecontrol networks.

Faults (PCFM Cost Type)

This is a PCFM Cost Type, which reports the costs of the following activities, with the exception of Pensions costs (which are reported in the 100% 'revenue pool' expenditure):

- Faults
- Severe Weather 1-in-20 Events
- Occurrences Not Incentivised (ONIs).

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.
- 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.

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 audit
- 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 (include in Insurance totals)
- 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 2015 to 31 March 2016 to be reported as financial year '2016').

Fines and Penalties

Any fines or penalties paid by the DNO that do not fall within the categories of:

- Notice Penalties
- Inspection Penalties (part of Investigatory Inspections and Penalties)
- Overstay Fines
- Permit Penalties.

Includes all tax penalties, fines and interest.

Fire Blankets - Link Box

New fire blankets installed on link boxes to reduce the effect of Catastrophic Failure.

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 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

All other dwellings that are not a House (see definition) or a Multi-Storey (see definition).

Flexibility – Payments to service providers

Flexible service contracts to manage network capacity constraints.

Expenditure should include payments made for the availability of flexibility services and payments made for service utilisation.

The volumes relate to total MVA of flexible services contracted during the reporting year.

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.

Flexible Connections

are connection arrangements whereby a customer's export or import of electricity is managed (often through real-time control) based upon contracted and agreed principles of available capacity. Flexible Connections typically allow quicker and cheaper connection to the Distribution System but are made on the basis that there is no limit on the extent to which a user's access can be interrupted.

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

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.

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)

The probability of flooding for each substation identified in ETR 138 (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.

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 Filled Cables in Service

Commissioned and energised 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

Flooding that 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 worksheets in the Costs, Volumes and Revenue Reporting Pack. 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.

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) Employee

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:

- to enable new load growth (both demand and generation) which is not attributable to specific customers; or
- Connections Reinforcement on the Primary Network which involves the installation of assets at a voltage level above that of the Minimum Scheme.

General Reinforcement (EHV & 132kV N-1)

Work carried out on the network which is 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 which is 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 falls 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.

Green Recovery Schemes

Green Recovery Schemes refer to new network investments in RIIO-ED1 and RIIO-ED2 aimed at accelerating action on medium and long-term environmental goals.

Growth band

In respect of LV monitored peak demand growth and LV monitored annual electricity consumption, the range of growth percentages against which LV monitored sites are reported.

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)
- Distributed Generation Standards Direction issued under Standard Condition 15A
- Ex-Gratia Compensation Payments (Distributed Generation Standards Direction issued under Standard Condition 15A)
- Any Other Ex-Gratia/Goodwill Compensation Payments.

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.

GWh

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

H

Halted Project Revenues (LCN Fund)

Has the meaning given to it in Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Halted Project Revenues (NIC)

Has the meaning given to it in Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Health Index (HI)

A framework for collating information on the health (or condition) of Asset Register assets. This framework enables:

- tracking of changes in asset condition over time

- identification of the Probability of Failure associated with the asset condition.

For a particular asset, age, condition and duty data is used to allocate the asset to a Health Index Band. A common approach to assessing Health Index Bands is defined as part of the Common Network Asset Indices Methodology.

Using this approach, each asset is assigned to a Health Index Band between HI1 and HI5. For forecasts of future Health Index Band positions, the future Health Index should be calculated in accordance with the Common Network Asset Indices Methodology.

Health Index Band

Bandings used for the reporting of the Health Indices for individual assets, based on the Probability of Failure indicated by each asset's health and condition. Health Index Bandings are determined in accordance with the Common Network Asset Indices Methodology.

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-cost project threshold

The threshold of £1,720/kVA, as specified in the connection charging methodology, applied to reinforcement works triggered by DG projects. If reinforcement works triggered are beyond this threshold, the project is required to pay the full cost of reinforcement.

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 1,000 volts but less than 22kV.

Higher Voltages

Higher voltages include HV, EHV and 132kV networks.

Horizontal Clearance

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

Houses

A dwelling divided vertically from every other dwelling and with its principal access from ground level. Includes detached, semi-detached and terraced houses.

HR (Human Resources)

The division focused on activities relating to employees.

INCLUDES:

- provision of the Human Resources function
- industrial and employee relations, including developing HR strategy, policies and procedures
- all costs of recruiting all new staff (operational and non-operational 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
- costs incurred by the licensee/distribution business, directly or indirectly, in managing its relationship with the pension scheme and scheme trustees or actuaries

EXCLUDES:

- any costs associated with Training (see definitions for Operational Training and Non-Operational Training)
- 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)
- any Pension Protection Fund Levy (PPF Levies) and Pension Scheme Administration Costs paid directly by the company rather than via contributions; which should be apportioned across all pension costs following the activities, where possible.

HV Network

The DNO network that operates at all voltages above 1,000 volts but less than 22kV.

HV Systems

High voltage (HV) includes all voltage levels above 1,000 volts but less than 22kV.

The lower boundary of HV Systems should be taken as the supply terminals of customers supplied at HV, and in other situations as the load-side terminals of the protection equipment connected to the secondary side (lower voltage) of distribution transformers respectively. Where the transformer does not have any secondary-side protection equipment, the boundary must be the bolted connection between the transformer tail and the lower voltage busbar. The upper boundary should in general be taken as the busbar side of lower voltage switchgear of transformers whose primary voltage is EHV or above and whose secondary voltage is HV. If no secondary switchgear exists, the upper boundary should be taken as the secondary-side terminals of the EHV or above transformer: incidents on the system connected to the secondary voltage terminals of the transformer should be reported as HV incidents and not as EHV or 132kV incidents.

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) – DPCR5

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

HVP (High Value Projects) – RIIO-ED1

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

HVP (High Value Projects) – RIIO-ED2

Schemes specified and agreed with individual DNOs to be undertaken during RIIO-ED2 that were specified in the RIIO-ED2 Final Determination or included during the price control period in accordance with SpC 3.2 (Uncertain Costs Re-openers) of the electricity distribution licence.

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 lake, river or estuary whether or not designed for this purpose.

Hydro

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

I

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 Theft Recovery

Has the meaning given in Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

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, that could not, on their own, be classed as a direct network activity. Indirect Activities generally do not involve physical contact with system assets, whereas direct activities do.

INCLUDES:

- Closely Associated Indirects
- Business Support Costs
- Non-Operational Capex.

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 Costs

The costs incurred undertaking Indirect Activities.

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.

Injurious Affection

Claims made for the detrimental effect upon property of the location of distribution network assets.

Volumes of injurious affection claims settled should be reported only when the claim has been settled and a new agreement is in place. Injurious affection claims that have not been settled and/or do not yet have a new agreement in place should have volumes reported under 'Injurious affection claims received'.

Innovative Solutions

Innovative Solutions must meet at least one of the following criteria:

- has been trialled by any DNO as part of an LCNF, NIC, NIA, or IFI innovation project during DPCR5, RIIO-ED1 or RIIO-ED2
- was considered a smart solution as part of the RIIO-ED1 smart solutions assessment
- involves the application of technology, systems or processes not in widespread use at the beginning of RIIO-ED2 to provide long term direct benefits to distribution network customers through:
    - improving the utilisation or provision of network capacity for demand or generation (including demand side solutions)
    - improving the management of asset condition to reduce lifetime costs
    - increasing the DNO's ability to manage network performance, safety or security, or
    - improving the level of service provided to network customers.

Direct benefits can include improvements in economic performance, environmental benefits, safety, quality of service, reliability, and/or resilience.

Flexibility services, for the purposes of managing network contraints, are not Innovative Solutions in the RIGs.

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.

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 invasive diagnostic testing equipment (e.g. devices that require removal of equipment covers or require physical connections to the equipment being tested). Note 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
- Indirect Costs
- Any of the costs associated with Repair & 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.

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.

EXCLUDES:

- Ex-gratia Compensation Payments and Guaranteed Standards of Performance Compensation Payments (included in Non Activity Based Costs).

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

Contracts where the DNO has an agreement with the customer, such that supply to this customer could, if required by the DNO, be interrupted/reduced, eg through 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. This excludes voltage quality and frequency abnormalities, such as dips, spikes or harmonics.

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 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.

Intervention

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

- 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 Security

Business as usual activities focused primarily on the IT security of business systems and not relating to Cyber Resilience. Costs are to be reported as part of the relevant activity within:

- IT & Telecoms (Business Support)
- IT & Telecoms (Non-Operational)Operational IT & Telecoms

IT & Telecoms (Business Support)

Expenditure on operating and maintaining the operational and 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
    - 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
    - Ongoing or renewal software licence and licensing fees
    - 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)
  - 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
    - Authorised home telephone account usage.
- Fees for the maintenance of software licences.
- All ongoing support costs for IT Security activities
- All ongoing support costs for Cyber Resilience activities.

EXCLUDES:

- Ordnance survey data/licences
- Any of the property costs associated with IT & Telecoms (include under Property Management), 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
- IT & Telecoms (Non-Operational) expenditure.

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, inclusive of initial costs relating to IT Security and Cyber Resilience.

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
- Hardware that is purchased as part of an IT software project.

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 Management), except where the cost of specific IT environmental control systems can be distinguished from other property costs.
- Application Software Development Costs

INCLUDES:

- 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:

- Hardware that is purchased as part of an IT software project (include in Hardware and Infrastructure Costs).
- Annual maintenance charges whether or not they include standard upgrades to the software (include in IT & Telecoms (BS)).
- Ongoing or renewal software licence and licensing fees.
- 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 Management), except where the cost of specific IT environmental control systems can be distinguished from other property costs.
- BT21CN costs.

J

K

L

Labour

For the purposes of the Cost, Volumes and Revenue Reporting Pack, this is a Cost Type.

Labour costs include 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
- Subsistence
- Travel
- Entertainment expenses
- Share options (including employee share purchase plans, employee share option plans)
- Medical insurance costs
- Childcare assistance
- Protective clothing
- Welfare costs
- Costs recognised relating to Apprenticeship Levy payments.

EXCLUDES:

- Professional services
- Contractors
- Company vehicles take home over night, other than company cars (include under Labour costs)
- 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.

Large CHP (>=50MW)

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 Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

LCN Fund Royalties

Royalties earned through LCN Fund projects.

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 (Licensee's payments to the Authority) of the electricity distribution licence.

Licensee submitted UoS Bad Debt costs

Has the meaning given to in SpC 2.1 (Revenue Restriction) of the electricity distribution licence.

LineSIGHT

Means the overhead line safety management system project developed by Electricity North West Limited to install 400 sensors to 800km of high risk high voltage circuits and 1,800 sensors to 7,200km of normal risk high voltage circuits and integrate them with its network management system as set out in its Engineering Justification Paper (Reference No. BA EJP 1 - Safety) dated 1 December 2021.

LineSIGHT – No. of sensors on high risk circuits

Means the no. of sensors installed and integrated with ENWL's network management system on high risk high voltage overhead line circuits for the regulatory year.

LineSIGHT – No. of sensors on normal risk circuits

Means the no. of sensors installed and integrated with ENWL's network management system on normal risk high voltage overhead line circuits for the regulatory year.

LineSIGHT – Total no. of sensors installed

Means the cummulative sum of sensors installed and integrated with ENWL's network management system on both high risk and normal risk high voltage overhead line circuits for the regulatory year.

LineSIGHT – Length of high voltage overhead line circuits covered

Means the cummulative sum of length of high voltage overhead line circuits covered by LineSIGHT for the regulatory year.

Link Box

A low voltage cable marshalling point with facilities for the insertion and removal of linking cables. An alternative name for an LV UGB asset. Depending on the number of ways that can be connected to the link box, these can be categorised into 'Two-way link box', 'Four-way link box' and 'Other type link box'. The difference in the categorisation relates to the number of ways that can be connected to the link box.

LiDAR Inspections

The activity of inspecting overhead line spans using LiDAR (Light Detection and Ranging) technology.

LiDAR Inspections (Tree Cutting)

The activity of inspecting overhead line spans using LiDAR (Light Detection and Ranging) technology, where the primary objective is 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

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.

This shall only include capacity that is immediately available, under such circumstances, without requiring manual intervention.

Load Index Firm 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.

        - asset rating data obtained through the use of equipment calculating the real-time thermal rating of the components.
    - 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 Load Index Firm 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 Capex

This is PCFM Cost Type, which reports the costs of the following activities, with the exception of Pensions costs (which are reported in the 100% 'revenue pool' expenditure):

- Connections within the price control
- Primary Reinforcement
- Secondary Reinforcement
- Fault Level Reinforcement
- New Transmission Capacity Charges.

Load Related Expenditure

Costs incurred by the licensee, after the deduction of Connections Reinforcement – Customer Funded, in developing its distribution system because of:

- system reinforcement associated with shared-asset connections
- general reinforcement of the licensee's Distribution System
- fault level reinforcement of the licensee's Distribution System
- New Transmission Capacity Charges, or
- the accommodation of Distributed Generation and low-carbon devices onto the Distribution System.

For the purposes of this definition, Load Related Expenditure does not include costs associated with High Value Projects.

Long Life Assets Pool

A special rate pool for long life assets which are assets 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 8% per annum is applicable.

Long Term Development Statement

Means a document prepared and maintained by the licensee in accordance with Standard Condition 25 of the Electricity Distribution Licence (Long-Term Development Statement).

Long Term Risk

A monetised value of risk, used in the Risk Index, that represents the total discounted value of risk based on the predicted Probability of Failure and Consequence of Failure over a future period of time, as defined in the Common Network Asset Indices Methodology.

Losses

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

Low Carbon Technologies (LCTs)

LCTs is the collective term for the following technologies:

- Heat pumps at existing connections that do not lead to a new or modified connection
- Electric vehicle (EV) chargers, both slow and fast charging, at existing connections that do not lead to a new or modified connection
- Photovoltaics (PV) connected under Engineering Recommendation G98
- Other renewable Distributed Generation (DG), excluding PV, connected under Engineering Recommendation G98
- Renewable DG not connected under Engineering Recommendation G98.

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

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 Network

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

LV Monitored Annual Electricity Consumption Growth

LV Monitored Annual Electricity Consumption Growth is calculated as the percentage difference in measured annual electricity consumption (MWh) across Regulatory Years, at each location where LV Monitoring is being used, in accordance with the methodology further defined in the LRE Volume Drivers Governance Document.

LV Monitored Peak Demand Growth

LV Monitored Peak Demand Growth is calculated as the percentage difference in measured peak demand (MVA) across Regulatory Years. The in-year annual peak demand shall be based on the average (mean) of the peak demand across multiple events for each LV Monitoring point, using the highest 10 Half Hour periods for that LV substation in accordance with the methodology further defined in the LRE Volume Drivers Governance Document.

LV Monitoring

LV Monitoring means the use of direct measurement, or advanced analytics, to allow for real time measurement and assessment of network conditions on the licensee's LV network, as defined in the RIIO-ED2 licence

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)

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 Services

The service line from the LV distributing main to the DNO's protection device situated upon the customer's premises. For the purposes of fault reporting, the fault of the service joint to the LV main should be classified as a LV mains fault and not a service fault. It should be noted that incidents on cut-outs and all wiring and equipment after cut-outs, including cut-out fuse operations, are excluded from reporting under the Quality of Service Incentive Scheme (even where this results in the operation of a fuse at the DNO's substation) and the definition of LV Services therefore excludes this equipment.

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.

Low Voltage Service Volume Driver (LVSVD)

The LVSVD is a price control uncertainty mechanism designed to fund Proactive Works and Reactive Works relating to LV Service reinforcement, including works associated with 'unlooping' of LV Service cables. The mechanism is contained within Electricity Distribution Licence Special Licence Condition 3.9.

Low Voltage Service Volume Driver (LVSVD) Asset Additions – LV Service (OHL)

For the purposes of the Low Voltage Service Volume Driver (LVSVD), the volume of LV Service (OHL) reinforcement asset additions is defined as the number of whole or partial service installations.

Low Voltage Service Volume Driver (LVSVD) Asset Additions – LV Service (UG)

For the purposes of the Low Voltage Service Volume Driver (LVSVD), the volume of LV Service (UG) reinforcement asset additions is defined as the number of whole or partial service installations.

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

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 and LV Pillars (OD not at Substation) asset categories. This includes replacement of UGB pavement covers, repairs to UGB structures and civil repairs to LV pillars not involving full replacement of the pillar.

LV Systems

A system that operates at a nominal voltage of 1000V or less.

The upper boundary should be taken as the load-side terminals of the protection equipment connected to the secondary side (low voltage) of distribution transformers. Where the transformer does not have any secondary-side protection equipment, the boundary must be the bolted connection between the transformer tail and the LV busbar. The lower boundary should be taken as the points of connection associated with LV services.

LV Transformer/Regulator

Power Transformer with a primary winding voltage of 1kV and below.

Includes - 1kV reactors & regulators.

LV UGB

An underground LV cable marshalling point with the facilities for the insertion and removal of links.

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 Regulated or Unregulated Margin.

Regulated Margin

The 4 per cent Margin (as allowed and defined in SpC 9.1of the electricity distribution licence 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.

Unregulated Margin

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

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.

Market Segments

The nine Market Segments specified in SpC 9.10 (Margin's on Licensee's Connection Activities) of the electricity distribution licence where it is possible to charge a Regulated or Unregulated Margin.

In respect of Metered premises owned or occupied by Demand Customers, the following are Relevant Market Segments:

- low voltage work: low voltage Connection Activities involving only low voltage work, other than in respect of Excluded Market Segments;
- high voltage work: low voltage or high voltage Connection Activities involving high voltage work, including where that work is required in respect of Connection Activities within an Excluded Market Segment;
- high voltage and extra high voltage work: low voltage or high voltage Connection Activities involving extra high voltage work; and
- extra high voltage work and above: extra high voltage work and 132kV Connection Activities.

In respect of Metered premises in which the connection involves the connection of Distributed Generation, the following are Relevant Market Segments:

- low voltage work: low voltage Connection Activities involving only low voltage work; and
- high voltage and extra high voltage work: any Connection Activities involving work at high voltage or above.

In respect of Unmetered premises, the following are Relevant Market Segments:

- local authority work: new Connection Activities in respect of local authority premises;
- private finance initiative work: new Connection Activities under private finance initiatives; and

other work: all other non-local authority and non-private finance initiative Unmetered connections work. It is not possible to charge a Margin on Excluded Market Segments (see definition).

Marshalling kiosk - see Substation RTU, Marshalling Kiosk and Receivers

Materials

For the purposes of the Costs, Volumes and Revenue Reporting Pack, this is a Cost Type.

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

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 (CAI))
- 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 store or to site
- storage of the materials, unless the purchase price includes the cost of storage by the supplier.

Maximum Export Capacity

has the meaning given to that term in the Distribution Connection and Use of System Agreement.

Maximum Import Capacity

has the meaning given to that term in the Distribution Connection and Use of System Agreement.

Medium CHP (>=5MW, <50MW)

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

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 Connection Category

The reporting categories required for each metered Connection Project as listed below. Each Connection Category will map to one of six Market Segments specified in SpC 9.10 (Margins on licensee's Connection Activities) of the electricity distribution licence.

	Metered Connection Category	**Market Segments specified in SpC 9.10**
1	LV metered DPCR4 Connection Projects	Excluded
2	HV metered DPCR4 Connection Projects	Excluded
3	EHV metered DPCR4 Connection Projects	Excluded
4	132kV metered DPCR4 Connection Projects	Excluded
5	Single service LV connection	Excluded
6	Small project demand connection (LV)	Excluded
7	All other LV (with only LV work)	(i) LV work: low voltage Connection Activities involving only low voltage work, other than in respect of Excluded Market Segments.
8	LV end connections involving HV work	(ii) HV work: low voltage or high voltage Connection Activities involving high voltage work (including where that work is required in respect of Connection Activities within an Excluded Market Segment).
9	HV end connections involving only HV work	(ii) HV work: low voltage or high voltage Connection Activities involving high voltage work (including where that work is required in respect of Connection Activities within an Excluded Market Segment).
10	LV end connections involving EHV work	(iii) HV and EHV work: low voltage or high voltage Connection Activities involving extra high voltage work.
11	HV end connections involving EHV work	(iii) HV and EHV work: low voltage or high voltage Connection Activities involving extra high voltage work.
12	EHV end connections involving only EHV work	(iv) EHV work and above: extra high voltage and 132kV Connection Activities.
13	HV or EHV connections involving 132kV work	(iv) EHV work and above: extra high voltage and 132kV Connection Activities.
14	132kV end connections involving only 132kV work	(iv) EHV work and above: extra high voltage and 132kV Connection Activities.
15	DG connection at LV involving LV assets only	(v) LV work: low voltage Connection Activities involving only low voltage work.
16	DG connection at any voltage where HV is the highest voltage worked on	(vi) HV and EHV work: any Connection Activities involving work at high voltage or above.
17	DG connection at any voltage where EHV is the highest voltage worked on	(vi) HV and EHV work: any Connection Activities involving work at high voltage or above.

18	DG connection at any voltage where 132kV is the highest voltage worked on	(vi) HV and EHV work: any Connection Activities involving work at high voltage or above.

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 (Connection Policy and Connection Performance) 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.

Minimum Scheme

The network design to provide a connection with the lowest overall capital cost solely to provide the capacity required by the connecting customer, as further defined in the Common Connection Charging Methofology (CCCM).

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 Value (MEAV)

The value of a modern asset with the same service capability as an existing asset.

Monitored sites with sufficient data but bad data / nil return

Sites where LV Monitoring, as defined in the LRE Volume Drivers Governance Document, has been installed, but where no data could be retrived or where the data is considered unreliable.

Monitored sites with insufficient data

Sites where LV Monitoring, as defined in the LRE Volume Drivers Governance Document, has been installed, but where insufficient data has been recorded to calculate year-on-year annual growth.

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.

MVA (Mega volt amperes)

Volt-ampere is a unit of electric power equal to the product of one volt and one ampere, equivalent to one watt power is a unit used for measuring apparent power.

Multi-Storey

A high rise flat of five storeys or more with a lift.

MWh

Megawatt hours (1,000,000 Watt hours).

N

NABC - 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 2015, or The Electricity (Connection Standards of performance) Regulations 2015, or Distributed Generation Standards Direction issued under Standard Condition 15A. For example, for Interruptions of 11h 59min, multiple Interruptions falling short of multiple Interruption standard, etc. This also includes cash payments made to customers where a formal standard exists and the DNO pays more than the formal standard requires (eg if the formal standard requires a £75 payment and the DNO pays £100, £75 should be reported as a NABC - GS Compensation Payments and the other £25 as NABC - Any Other Ex-Gratia/Goodwill Compensation Payments).

EXCLUDES:

- cash payments to customers who have experienced a financial loss (report as Insurance in the Core Business Support table (as they relate to third party claims paid out by the DNO)
- any payments in respect of employees.

NABC - Bad Debt Expense Other (Net of Recoveries)

The charge/credit to the profit and loss account (income statement under IAS) for bad and doubtful debts.

INCLUDES:

- debts written off or a provision against non-recovery
- debts recovered after they have been written off.

EXCLUDES:

- the cost of debt recovery (include under Finance and Regulation).

NABC - 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.

NABC - Connections Guaranteed Standards of Performance Compensation Payments

Payments to customers made under The Electricity (Standards of Performance) Regulations 2015.

NABC - 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.

NABC - Cost of Items Sold

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

NABC - Depreciation

Included as part of NABC Profit/Loss on Disposal of Fixed Assets calculation. The cumulative depreciation charged against fixed assets at point of sale/disposal of specific asset.

NABC - 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.

NABC - Distributed Generation Standards Direction issued under Standard Condition 15A

Payments to customers made under the Distributed Generation Standards Direction issued by Ofgem under Standard Condition 15A (Connection Policy and Connection Performance) of the electricity distribution licence.

NABC - Ex-Gratia Compensation Payments

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 2015 had the customer chosen to do so.

NABC - Ex-Gratia Compensation Payments (Connections)

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 had the customer chosen to do so.

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

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 Standard Condition 15A had the customer chosen to do so.

NABC - GS Compensation Payments

Payments to customers made under The Electricity (Standards of Performance) Regulations 2015.

NABC - Net Sale Proceeds

Sale proceeds received less sale expenses incurred on disposal of a specific fixed asset.

NABC - Non Activity Based Costs

Costs incurred by DNOs that do not relate to the Direct and Indirect Activities contained in RIGs and commonly referred to as NABC.

Includes the following which are defined separately in this glossary, under the prefix NABC:

- Any Other Ex-Gratia/Goodwill Compensation Payments
- Bad Debt Expense (net of recoveries)
- Carbon Reduction Commitment Scheme
- Connections Guaranteed Standards of Performance Compensation Payments
- Contingent Pension Asset Costs
- DG Network Unavailability Rebate Payments
- Distributed Generation Standards Direction issued under Standard Condition 15A
- Ex-Gratia Compensation Payments

- Ex-Gratia Compensation Payments (Connections)
- Ex-Gratia Compensation Payments (Distributed Generation Standards Direction issued under Standard Condition 15A)
- GS Compensation Payments
- Pensions Established Deficit Repair Payments
- Profit/Loss on sale of Fixed Assets and Scrap.

EXCLUDES:

- Pass-Through Costs.

NABC - Pensions Established Deficit Repair Payments – see Pension Scheme Established Deficit

NABC - Proceeds of Sale of Non-Operational Assets

The net sale proceeds of all non-operational assets sold.

NABC - Proceeds of Sale of Operational Assets

The net sale proceeds of all Operational (Network) assets sold.

NABC - Proceeds From Sale of Scrap

The net sale proceeds of scrap sold.

NABC - Profit/Loss on Disposal of Fixed Assets

The net sale proceeds less the net book value of any asset sold.

NABC - 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.

National Parks

Has the meaning given to it in Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

National Scenic Areas

Has the meaning given to it in Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

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).

Network Asset Indices

Collective term for the Indices relating to asset health, criticality and risk of condition based failure that are used for the Network Asset Risk Measure. The Network Asset Indices comprise:-

- the Health Index: this provides information about the health of the asset and can be related to its Probability of Failure;
- the Criticality Index: this provides information about the consequences of an asset failure. These are quantified in terms of the impact upon the environment, network performance, safety and financial implications (e.g. repair costs); and
- the Risk Index: this is a monetised measure of the overall long term condition-based risk for the asset, which is derived using the Health Index and Criticality Index.

Network Assets

Operational network assets (excluding metering related costs) recorded in balance sheet as fixed assets, which are subsequently sold/disposed.

Network Asset Risk Measure (NARM)

The monetised risk associated with a NARM asset or the monetised risk benefit associated with a NARM asset intervention.

Network Design & Engineering

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 132kV & 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 Connection 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 Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Network Innovation Competition (NIC)

Has the meaning given to it in Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Network Investment

Includes all costs associated with the following activities:

- Load Related Expenditure
- Non-load related capex (excluding non-op capex)
- Standalone funding (RAV).

Network Licencee's Compulsory Contribution

The minimum contribution by the Network Licensee to the Total Project Cost which is 10 per cent of the value of the Initial Net Funding Required.

Network Operating Costs

Collectively includes the activities of:

- Faults
- Severe Weather 1-in-20 Events
- Occurrences not incentivised (ONIs)
- Tree Cutting
- Inspections
- Repair & 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

A Closely Associated Indirect activity included in the Core CAI worksheet.

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.

Network-wide Peak Demand

The gross peak demand of the distribution network in the regulatory year measured in megawatts. This should be consistent with the DNOs' figure reported in their National Grid Week 24 report in accordance with the Guidance Notes for Network Operators Submission of Grid Code Data (SPD PC.A.4.2.2).

Peak – the one ½ period where each licensed network peaks (rather than the sum of the individual peaks of each substation).

Network-wide – the DNO licensed network (i.e. one for each license), rather than the NGET system.

Gross – the measured demand at the interface with NGET plus the demand hidden by generation running at the time of the peak.

New Transmission Capacity Charges (NTCC)

Transmission Connection Point Charges that are specifically related to a licensee requirement for new or reinforced TCPs that are energised after 1 April 2023.

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 Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

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 Activity Based Costs – see NABC – Non Activity Based Costs

Non-Contestable

Connections work that can only be carried out by the host DNO/licence holder.

Non-Damage Incident

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 SpC 2.1 (Revenue Restriction) of the electricity distribution licence, 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

Contracts 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. 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 Related Capex – Asset Replacement

This is PCFM Cost Type, which reports the costs of the following activities, with the exception of Pensions costs (which are reported in the 100% 'revenue pool' expenditure):

- Diversions (Excluding Rail Electrification)
- Diversions (Rail Electrification)
- Asset Replacement
- Refurbishment Non NARM
- Refurbishment NARM
- Civil Works Condition Driven
- Black Start
- Legal and Safety
- QoS and North of Scotland Resilience
- Flood Mitigation
- Physical Security
- Rising and Lateral Mains (RLMs)
- Overhead Line Clearances

- Losses
- Environmental
- West Coast of Cumbria (ENWL only).

Non-Load Related Capex – Other

This is PCFM Cost Type, which reports the costs of the following activities, with the exception of Pensions costs (which are reported in the 100% 'revenue pool' expenditure):

- Operational IT and telecoms
- BT21CN
- Worst Served Customers (WSCs)
- Visual Amenity
- IT and Telecoms (Non-Operational)
- Property (Non-Operational)
- Vehicles and Transport (Non-Operational)
- Small Tools, Equipment, Plant and Machinery (Non-Operational) (STEPM)
- Less: Cash proceeds from sale of assets and scrap.

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 (Non-Operational) (STEPM)
- Property (Non-Operational)
- 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.

INCLUDES:

- IT & telecoms (non-operational)
- Non-Operational Property
- Non-operational vehicles
- Small tools, equipment, plant and machinery.

Non-Operational Staff

Employed by the DNO or Related Party and does not meet definition of Craftsperson, Engineer or Other Operational Employee.

Non-Operational Training

The provision of training to non-operational staff (defined separately in the glossary), regardless of whether this training is to support operational or non-operational activities.

INCLUDES:

- all costs of providing non-operational and operational training courses to non-operational staff (including training non-operational staff for standby activities).

EXCLUDES:

- time of employees attending training (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).

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-Variant Costs

Costs which are not subject to uncertainty mechanisms.

North of Scotland Resilience Schemes

The costs reported against these schemes are related to specific named schemes that are being undertaken in SHEPD during RIIO-ED1 and RIIO-ED2. These schemes will focus on delivering significant improvements in the Interruptions experience of the worst served customers served on specific circuits in SHEPD. These schemes will be undertaken in the following four areas: Western Isles - Barra, Argyll and Bute - Islay, Argyll and Bute – Mull, and Orkney – Sanday.

NRSWA - New Roads and Street Works Act (1991)

Number of substations metered

Total number of substations forming part of the licensee's distribution network at which electricity and/or gas use is metered

Number of substations unmetered

Total number of substations forming part of the licensee's distribution network at which electricity and gas use is not metered

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 (SSSES)) 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.

In some limited cases, DNOs may use alternative systems for the management of non-urgent activities which are equivalent to those reported through the SSSES. For example urgent street lighting faults may be managed through the SSSES, but less urgent faults could be managed through a different work programming system.

ONIs are recorded in two categories, which are defined in this glossary (under the prefix "ONI"):

- 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. The volumes are reported under Interruptions Reporting Paclk not in the Costs, Volumes and Revenue Reporting Pack.

Offshore Wind

A category of DG. Electricity generation using a wind turbine situated offshore.

OH Clearance Sites

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

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

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

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

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 (km) Removed During Year

The length of overhead line (km) that has been removed under the Visual Amenity Allowance scheme provided for under Special Condition 3.4 (Use It or Lose It Allowances) of the electricity distribution licence.

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

Scheme 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.

Ongoing Efficiency

Ongoing Efficiency is the reduction in the volume of inputs required to produce a given volume of output - ie the productivity improvement that we consider even the most efficient company is capable of achieving.

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.

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. The following are typical examples:

- Refix a wall bracket
- Repair a stay wire

- Pot-end an abandoned cable
- Reclip cables to a wall
- Remove tree/branches from an overhead line
- Earth wire repairs
- Conductors re-sagged.

It includes repair or remedial works to abandoned, decommissioned or unenergised equipment.

ONI - Cut Out Fuses Only (Metered Services)

An ONI that affects Power System Voltage Equipment.

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. The rectification includes instances both where cut outs have been replaced and cut outs have been repaired.

It excludes occurrences relating to fuses at metered cut outs.

It excludes occurrences which are managed outside of the DNOs' Safety and Security of Supplies Enquiry Service (these are reported under ONI – Cut Outs (Metered Services) – non safety and security of supply enquiry).

It excludes occurrences which are identified during the installation of, or attempted installation of, a Smart Meter.

ONI - Cut Outs (Metered Services) – non safety and security of supply enquiry system

Suppliers and meter operators provide details of defective service position equipment. These defects are classified in three categories (category A – urgent defects, Category B – defects which prevent meter related work, Category C – other defects). It is anticipated that DNOs will manage these defects in different ways with both category A and B being reported under ONIs (Category C will inform replacement programmes). Whilst Category A urgent defects will be routed through DNOs Safety and Security of

Supplies Enquiry Service, other systems may be used to manage Category B defects. This reporting requirement records those Category B defects that are managed in other DNO systems.

It excludes occurrences which are identified during the installation of, or attempted installation of, a Smart Meter.

ONI - Cut Outs (Metered Services) – Prior year Adjustment due to Smart Meter Roll-Out

It is recognised that a proportion of cut out defects classified as ONIs will require to be reclassified as being associated with the Smart Meter roll-out. This arises because supplier and meter operator data flows do not identify that defects are associated with the Smart Meter roll-out and there is a delay between when DNOs rectify a defect and when this can be associated with a Smart Meter. The delay may be several months and therefore an adjustment is required to previously stated volumes and costs. This adjustment relates to the volume of defects carried out in Regulatory Years prior to the current reporting Regulatory Year. For example it may not be possible to assign a defect carried out in 2023/24 with the Smart Meter roll-out until 2025/26. This adjustment will lead to a reduction in the volume of ONIs, and so the adjustment should be shown as a negative value (there will be a corresponding positive adjustment in Smart Meter Interventions).

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 occurrences 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 the following which are separately defined (under the prefix “ONI”):

- Abortive Visit - No Immediate Work Required (includes meters which in DPCR5 was a separate reporting category).
- Responding to Critical Safety Calls.
- Pilot Wire Failures.

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 of 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, where site attendance is required to secure a DNO site or equipment, or remove danger.

It includes closing substation doors/gates and attention to traffic lights (not associated with Street Works), barriers and boards associated with Street Works and also site visits for guidance.

An ONI that requires further investigation/action (eg issues associated with voltage fluctuations, flickering lights or low voltage) whereby remedial work is undertaken.

ONI - Streetlights/Street Furniture/Unmetered Services/Unmetered Cut Outs

An ONI that affects Power System Voltage Equipment.

DNOs should only include all faults associated with unmetered supplies that are managed through the Safety and Security of Supplies Enquiry Service.

Unmetered supply covers for example street lighting, traffic lights not associated with Street Works , telecommunication kiosk and advertising hoarding. The faults covers occurrences associated with unmetered cut outs, fuses at unmetered cut outs and the service/mains cables to unmetered cut outs.

ONI - Streetlights/Street Furniture/Unmetered Services/Unmetered Cut Outs non safety and security of supply enquiry system

For faults associated with unmetered supplies that are not managed through the Safety and Security of Supplies Enquiry Service.

Onshore Wind

A category of DG. Electricity generation using a wind turbine situated onshore.

Operational Activities to Manage Losses

Operational activities undertaken where the primary driver is managing distribution losses. For example, actions to tackle theft in conveyance.

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 primarily 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 Receivers (see definition)
- Communications for switching & monitoring (see definition)
- Control centre hardware and software (see definition).

Cyber Resilience (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 repaired, replaced or renewed for operational communication purposes, then the cost of such works should be reported as Operational IT & Telecoms expenditure on table CV11.

The costs associated with the replacement of existing Operational IT & Telecoms equipment as a result of other investment drivers, should be reported in line with the main investment driver for the works.

Operational Measures – see BT21CN Protection Operational Measures

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 Training

A Closely Associated Indirect activity. It is the training of Operational Staff employed by DNO or Related Party, or Agency Staff to support the direct activities on the network. 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 and Training Admin Costs.
- Time of Operational Staff attending non-operational training.

For the following purposes:

- Training of New Recruits
- Operational Up-skilling
- Operational Refresher training.

All training of apprentices and graduate engineers (who are on a defined training scheme) should be treated as Operational Training.

EXCLUDES:

- Time of Non-Operational Staff attending operational training (include as labour cost under the relevant activity of that employee)
- Recruitment costs of Operational Staff (include under HR in the Core Business Support worksheet)

- Costs of training Contractors undertaking training within DNO training facilities where costs are recovered separately and not through contractor's rates for direct activities (include in C18 Non Price Control De-Minimis)
- Costs of training Contractors undertaking training within DNO training facilities where costs are not recovered separately and are embedded in contractor's rates for the direct activity (included in the contractor cost for the relevant activity)
- Costs of assessing capability of Contractors (include in C18 Non Price Control De-Minimis)
- Costs recognised relating to Apprenticeship Levy payments (include as labour cost across activities).

Operational Training - Craftsperson

Employed by DNO or Related Party to work directly on the network, undertaking 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:
    - 52: Skilled metal, electrical and electronic trades
    - 53: Skilled Construction and Building Trades.

EXCLUDES:

- any craftsperson employed by contractors.

Operational Training - Engineers

Employed by DNO or Related Party to gain of specialist skills for working on an electrical distribution network and whose intended role requires the skills and abilities of incorporated or professional engineers.

Includes persons in the following standard occupation classification codes:

- 21: Science, Research, Engineering and Technology Professionals
- 31: Science, Engineering and Technology Associate Professionals

Operational Training - 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).

Operational Training - 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.

Operational Training - Leaver - Due to Retirement

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

Operational Training - Leaver Due to Other Reasons Than Retirement

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

Operational Training - New Recruits

New employee recruited to be trained to fill an operational role (Craftsperson or Engineer) and reported within Operational Training.

Operational Training - New Recruit – Craftsperson

Trainee on a formal apprenticeship, higher apprenticeships or equivalent training scheme with the objective of becoming a Craftsperson (see definition).

Operational Training - 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).

Operational Training - Other Operational Employee

Employed by DNO or Related Party to work directly on the network, who does not meet the definition of an Engineer or Craftsperson.

Includes persons in the following standard occupation classification codes:

- 51: Skilled agricultural and related trades
- 81: Process, Plant and Machine Operatives
- 82: Transport and Mobile Machine Drivers and Operatives
- 91: Elementary Trades and Related Occupations.

Operational Training - 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 Training - Operational Staff

Employed by the DNO or Related Party, or Agency Staff to work directly on the network, undertaking the roles of Craftsperson, Engineer or Other Operational Employee (defined separately in the glossary).

Operational Training - Operational Up-Skilling

Operational training for existing Operational Staff, Related Party staff or Agency Staff 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.

EXCLUDES:

- training provision for New Recruits (ie initial training for apprentices and other new employees)
- routine operational refreshers and safety briefings, which do not involve any new skills.

Operational Training - 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).

Operational Training - 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).

Operational Training - Training Days

Number of days spent by Operational Staff, Related Party staff and Agency Staff 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

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.

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 (Restriction of activity and financial ring-fencing of the Distribution Business) of the electricity distribution licence.

Other Exceptional Event – see Exceptional Events

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 (>=1MW,<5MW)
- Medium CHP (>=5MW, <50MW)
- Large CHP (>=50MW).

Other (includes rent and subscriptions)

For the purposes of the Costs, Volumes and Revenue Reporting Pack, this is a Cost Type. It includes costs that do not fall under the definitions for other Cost Types, which are:

- Labour
- Pensions
- Contractors
- Materials
- Wayleaves (including easements/servitudes)
- Street Works – Cost Type
- Related Party Margins
- Cost Recoveries
- Customer Contributions.

Specifically includes the categorisation of:

- 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.
- Subscriptions: Subscriptions to IT or Telecoms software and for trade and other associations, including:

- Subscriptions to trade bodies including the Electricity Networks Association (ENA)
- Ordnance Survey Licences
- Other Software Licences.

Other Income

Any income received by the activities of core Business Support Costs, which does not relate to insurance claims.

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 (Connection Policy and Connection Performance) of the electricity distribution licence.

Other Network Investment – see Network Design and Engineering

Other Operating Costs

Any other operating costs which are associated with the physical security upgrade programme.

Other Unmetered Connections (non-L.A. or PFI)

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.

Output Delivery Incentives (ODIs)

Performance measurables designed to reward a licencee where service quality improvements are beyond a level that is funded through base revenues. These may also penalise a licencee where performance is below the level funded through base revenues. These incentives could be either financial or reputational in nature.

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

Overall Consequence of Failure

The total Consequence of Failure for an asset, taking account of the Consequences of Failure in all Consequence Categories.

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.

Over/Under Recovery

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

P

Parking Bay Suspensions

A parking bay suspension is used when works need to be carried out or when the bay is needed for access. Normal parking controls are suspended. Fees will depend on the council and the duration of the suspension. These are often needed where a higher level of pedestrian provision is required by permitting authorities. E.g. the authority insists on 1.5 metres left free for pedestrians rather than minimum of 1 metre, therefore the footway cannot be used and the walkway is needed into the carriageway across parking bays.

Pass-Through Costs

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 SpC 6.1 (Pass-through expenditure) of the electricity distribution licence.

Pass-Through Transmission Connection Point Charges

Has the meaning given to it in SpC 6.1 (Pass-through expenditure) of the electricity distribution licence.

PCFM Cost Type – see Price Control Financial Model (PCFM) Cost Type

Pensions

For the purposes of the Costs, Volumes and Revenue Reporting Pack, this is a Cost Type.

Pensions includes licensee payments on a cash basis for the following:

- Ongoing normal service contributions to Defined Benefit Pension Schemes
- Ongoing normal service contributions to Defined Contribution Pension Schemes
- Ongoing normal service contributions to stakeholder and/or personal pension plans
- (from 31 March 2015) Payments in respect of Pension Scheme Incremental Deficit repair payments
- Payments in respect of the PPF levy (whether paid directly by the distribution business or within ongoing contribution rates)
- Payments in respect of pension scheme administration costs (whether paid directly by the distribution business or as part of ongoing contribution rates).

EXCLUDES:

- (Until 31 March 2015) Payments in respect of Pension Scheme Incremental Deficit repair payments
- (from 31 March 2015) Payments in respect of Pension Scheme Established Deficit repair payments (report in Non Activity Based Costs)
- Payments in respect of pension related severance costs (report in Atypicals - Early Retirement Deficiency Contributions and report ERDCs cost type split as labour costs)
- Payments in respect of augmentation of benefits
- Payments in respect of EATL pension costs (report in Atypicals – Atypicals Non Severe Weather in Totex in Price Control and report cost type split as Contractors).

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 Scheme Incremental Deficit repair payments, which are part of Pensions, 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 Protection Fund (PPF)

The fund 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

The difference between pension scheme assets and liabilities, as determined under periodic scheme valuations, that is attributable to:

- the regulated business, and
- pensionable service up to the end of the cut-off date, which for DNOs is 31 March 2010.

If the Pension Scheme Established Deficit figure becomes negative, it is referred to as a surplus relating to pensionable service up to the end of the cut-off date.

Pension Scheme Incremental Deficit

The difference between pension scheme assets and liabilities, as determined under periodic scheme valuations, that is attributable to:

- the regulated business, and
- pensionable service after the cut-off date, which for DNOs is 31 March 2010.

If the Pension Scheme Incremental Deficit figure becomes negative, it is referred to as a surplus relating to pensionable service after the cut-off date.

Percentage breakdown – manufacture

Proportion of average embodied CO2 arising from manufacturing

Percentage breakdown – transport

Proportion of average embodied CO2 arising from transport

Percentage breakdown – construction

Proportion of average embodied CO2 arising from construction

Percentage breakdown – end of life

Proportion of average embodied CO2 arising from end of life

Percentage breakdown – transformers

Proportion of total oil leakage arising from transformers

Percentage breakdown – cables

Proportion of total oil leakage arising from cables

Percentage management – reuse/reduce

Proportion of potential waste that is diverted through reuse (or reduce)

Percentage management – recycling

Proportion of waste that is recycled

Percentage management – landfill

Proportion of waste that is sent to landfill

Percentage of existing sites monitored

Proportion of existing network sites that are measured for their biodiversity value

Percentage waste source – new projects

Proportion of total waste arising from new projects in year

Percentage waste source – business operations

Proportion of total waste arising from business operations

Persistent organic pollutant oil changes

The removal of oil from assets that contain unacceptable levels of persistent organic pollutants (POPs) such as polychlorinated biphenyls (PCBs).

Persistent organic pollutant oil testing

The testing of oil specifically carried out to determine levels of persistent organic pollutants (POPs) such as polychlorinated biphenyls (PCBs).

Persistent organic pollutant asset changes

The wholesale replacement of assets that contain, or (where it is not possible to test) are suspected of containing, unacceptable levels of persistent organic pollutants (POPs) such as polychlorinated biphenyls (PCBs).

Photovoltaic

A category of DG. Electricity generation using photovoltaics (solar panels or cells).

Physical Loss Reduction Actions

Actions undertaken to reduce electricity losses where physical assets are affected, for example the installation or replacement of transformation equipment.

Physical Security

Sites designated as critical national infrastructure by DECC. Includes all associated costs of complying with DECC requirements.

Physical Security Upgrade Programme (PSUP)

DECC's enhanced physical security upgrade programme.

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-Delivery Support Agreements (PDSA)

Any ongoing expenditure associated with post-delivery support agreements which will be put in place following completion of a scheme as part of the physical security upgrade programme.

Post 2005 DG

DG that has a DG connection start date on or after 1 April 2005.

Power Quality

Variations in voltage, current or frequency, outside referenced technical parameters, that result in failure or misoperation of customer equipment, but do not qualify for inclusion under Faults (CV26) or ONIs (CV28).

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-Fault Availability

Pre-fault availability means that an asset is restored to service and has the same level of functionality it had before an Unplanned Incident occurred.

Restoring an asset to pre-fault availability will require a different action dependent on the whether there is damage to the asset.

Where there is no damage to the asset pre-fault availability is restored through switching (eg reclosing a protective device or replacing a fuse).

Where there is damage to the asset, pre-fault availability is achieved either by repairing/replacing a component or replacing the faulted asset with a modern equivalent asset.

In the case of a damaged asset, simply restoring supplies by temporary measures, through backfeeds or through reconfiguring network running arrangements does not constitute restoring the asset to pre-fault availability.

There is no time limit on the length of time to carry out asset repairs or replacement in order to achieve pre-fault availability.

In most situations the replacement of assets will be on a like for like basis with a similar network configuration. Where the licensee elects to permanently remove the asset and establish a different network configuration, the cost of removing the asset and re-configuration to provide alternative network arrangements necessitated by the fault or removal of the faulted asset are deemed to represent restoring to pre-fault availability.

Pre-Investment Flooding Risk

The flooding risk of a site before any investment in flood defence was/has been undertaken.

Premises

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.

Price Control Deliverable (PCD)

PCDs capture outputs that are directly funded through the RIIIO-2 price control, where the funding provided is conditional upon clear up-front requirements being met and is not transferrable to a different output or project.

ED1 Price Control Financial Model (PCFM)

has the meaning given to that term in Charge Restriction Condition 1B (Interpretation of Part 4) of this licence as in force on 31 March 2023.ED2 Price Control Financial Model (PCFM)

means the model of that name that was first published by the Authority to come into effect on 1 April 2023.

Price Control Financial Model (PCFM) Cost Type

The PCFM Cost Types defined in this glossary are:

- Load Related Capex
- Non-Load Related Capex - Asset Replacement
- Non-Load Related Capex – Other
- Faults
- Tree Cutting
- 100% 'Revenue Pool' Expenditure
- Controllable Opex.

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).

Primary Reinforcement

Reinforcement of the Primary Network (see definition).

Priority Services Register

A list established and maintained by an Electricity Distributor which contains the details of Priority Services Register Customers.

Priority Services Register Customer

A domestic customer who:

- is of pensionable age, disabled or chronically sick
- due to special communication needs or dependency on electricity for medical reasons, requires certain information and advice about Interruptions in the supply of electricity to the customer's premises, and has either:
    - personally asked the licensee to add their name to the Priority Services Register,
    - had a person acting on their behalf ask for their name to be added to it, or
    - had a relevant supplier ask for their name to be added to it.

Probability of Failure

The likelihood of a Condition Based Functional Failure occurring (per annum).

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.

Proactive Service Reinforcement

Proactive Service Reinforcement means works that are undertaken to increase the capacity of service connections to individual loads at low voltage (<1kV) where no specific Customer request has been received.

Project Management

A Closely Associated Indirect activity included in the Core CAI worksheet.

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 (except on-site safety risk assessments carried out as part of the on–site works; on-site safety risk assessments should be included as part of associated direct activity)
    - 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 certificate
    - 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 (Business Support)

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 propertie
- 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 Substation Electricity, substation rents include in Wayleaves Payments)
- Business Rates Payments (which are a Pass-Through Cost)
- 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.

Property (Non-Operational)

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
- Installation of fuel tanks at these premises, including pumps and monitoring equipment.

Protection Enhancement

Activities where the primary purpose is the provision of additional functionality to existing protection, control and SCADA arrangements associated with Primary Network and Primary Substations where the work is undertaken as a standalone programme of work.

Where the provision of additional functionality is undertaken as part of reinforcement of other plant assets, this should be reported as part of the main reinforcement work.

Where replacement of protection, control and SCADA arrangements with a modern equivalent asset leads to incidental additional functionality, this should be reported under Refurbishment Protection Schemes.

INCLUDES:

- improvements to fault detection
- improvements to fault discrimination
- switchover schemes at Primary Substations

EXCLUDES:

- Refurbishment Protection Schemes
- Repair and Maintenance Protection Schemes
- changes where the primary purpose is to improve performance against the IIS targets (refer to Quality of Supply)

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 when undertaken independently of asset replacement schemes.

Provider of Connection Work

The majority provider of the Contestable works within each individual Connection 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.

PSUP Direct labour

Costs associated with staff working directly on operational activities for the physical security upgrade programme, for example site maintenance or site specific audits.

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 midnight 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.

Reactive Service Reinforcement

Reactive Service Reinforcement means works that are undertaken to increase the capacity of service connections to individual loads at low voltage (<1kV) in response to a specific Customer request.

Real Price Effects (RPEs)

Real Price Effects (RPEs) are the differences between the evolution of some of DNOs' input prices (e.g. wages or materials) and general price inflation.

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.

Rebuild

The reconstruction of an existing network asset.

Receivers - see Substation RTU, Marshalling Kiosk and Receivers

Recovered Bad Debt

Has the same meaning given to the term RBD in SpC 6.1 (Pass-through expenditure) of the electricity distribution licence.

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 worksheet I5 – Theft Recovery in the Costs, Volumes and Revenue Reporting Pack means any additional monies recovered in respect of other costs as detailed in paragraph 49.8 of Standard Condition 49 (Electricity Distribution Losses Management Obligation and Distribution Losses Strategy) 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 (Electricity Distribution Losses Management Obligation and Distribution Losses Strategy) of the electricity distribution licence.

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 Refurbishment and Repairs & Maintenance Task Allocation Tables in Chapter 3 of this document.

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.

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 Pension Scheme Established Deficit; post cut-off date it excludes the Pension Scheme 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 Instructions and Guidance (RIGs)

The collection of documents issued by Ofgem to the DNOs to enable them to complete the reporting requirements associated with the RIIO-ED2 price control arrangements. It includes excel reporting packs, instructions and guidance, commentaries and this document – the glossary.

Regulated Margin – see Margin

Regulatory Tax Losses

Tax losses carried forward in the regulatory accounts for the year of reporting.

Regulatory Year

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

Reinforcement

Network development to relieve an existing network constraint or facilitate new load growth.

Reinforcement deferred

In respect of flexibility, Reinforcement that is identified as being required to relieve an existing network constraint or facilitate new load growth, but which is deferred as a

result of the procurement and management of flexibility services. See also Transformer capacity deferred (gross, counterfactual) and Circuit length deferred (counterfactual).

Re-interruption – see Customers Re-interrupted (RIs)

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 Margin

For the purposes of the Costs, Volumes and Revenue Reporting Pack, this is a Cost Type.

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 it's 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 DNO Affiliates or Related Undertakings that do not Trade/Transact with the DNO

For the purposes of Connections reporting, 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 Total Disallowed

All Disallowed Related Party Margins that are incurred by the DNO on activities for which they are funded through RIIO-ED1 and RIIO-ED2.

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 and RIIO-ED2.

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 and RIIO-ED2.

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.

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 relevant person is:

- 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.

A Relevant Consumer does not have to be the named party on the bill where services or electricity are supplied 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.

Renewable Generation

Technologies and definitions listed in Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources. This Directive lists energy from renewable sources to include: wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases.

Technologies that were included during RIIO-ED1 should also be recorded during RIIO-ED2 to ensure consistency between price control periods.

It follows, therefore, that we expect DNOs to record non-G98 DG in accordance with the list below:

- Onshore wind;
- Offshore wind;
- Photovoltaic;
- Aerothermal – heat pumps;
- Geothermal – heat pumps;
- Hydrothermal – heat pumps;
- Tidal stream & wave power;
- Biomass & energy crops (not CHP);
- Hydro (Including pump storage);
- Landfill gas, sewage gas, biogas (not CHP);
- Waste incineration (not CHP);
- Mini CHP (<1MW);
- Small CHP (>=1MW,<5MW);
- Medium CHP (>=5MW, <50MW);
- Large CHP (>=50MW); and,
- Other generation.

This will serve as a working list of technologies that will be reviewed on a regular basis by the working group. Where a DNO is unsure as to whether a technology fits the definition of the technologies listed above (including the 'other generation' category), it should contact us to seek further guidance and provide additional information within its commentary.

Repair & Maintenance

INCLUDES:

- 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 Refurbishment and Repairs & Maintenance Task Allocation Tables in Chapter 3 of this document.

EXCLUDES:

- Oil changes and associated works specifically carried out to remove or minimise contamination from Persistent Organic Pollutants (include under Environmental)
- Oil testing specifically carried out to determine levels of contamination from Persistent Organic Pollutants, where the testing is carried out as a standalone activity (include under Environmental)
- 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 Management & Clerical Support)
- Data review except the initial recording on site (include under Engineering Management & Clerical Support)
- Maintenance of non-system assets (include under Property Management)
- Tree cutting and tree clearance (include under Tree Cutting)
- Indirect Costs
- Any costs resulting from physically repairing an asset that was instigated by the receipt of a trouble call (this should be included under Faults or Occurrences Not Incentivised)
- 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), which are undertaken as independent programmes of work. 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.

Repair & Maintenance – Substations (Civils)

Repair and maintenance of civils items at Substations (eg fencing, buildings, enclosures and site etc).

Activities considered as Repair & Maintenance – Substation (Civils) are further identified in the Refurbishment and Repairs & Maintenance Task Allocation Tables in Chapter 3 of this document. These are identified under the entry for Substation (Civils).

Repeat Complaint

Has the meaning given to it in Special Condition 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Required Capacity

is the Maximum Capacity agreed with the Customer. In the case of multiple connections (e.g. a housing development) it may be adjusted after consideration of the effects of diversity. Where an existing Customer requests an increase in capacity then it is the increase above their Existing Capacity. Further information on this term is found inCCCM.

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

For the purposes of the IIS, the supply to any premises that has been interrupted will be deemed to have been restored when the Customer is able to use the supply to the premises in the same manner as the supply could have been used before the interruption occurred. For the avoidance of doubt, this principle applies where a temporary generator is provided.

Restoration Stage

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

Returned Costs

Has the same meaning given to it in SpC 1.2 (Definitions and references to the Electricity Distributors)

Has the meaning given to it in the LCN Fund Governance Document.

Returned LCN Fund Royalties

Has the meaning given to it in SpC 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Returned Royalty Income

Has the meaning given to it in SpC 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Revenue Protection Services - see DRS5. Revenue protection Services

RIGs – see Regulatory Instructions and Guidance

RIIO-ED1

The electricity distribution price control period that runs from 1 April 2015 to 31 March 2023.

RIIO-ED2

The electricity distribution price control period that runs from 1 April 2023 to 31 March 2028.

RIIO-ED2 Business Plan

Has the meaning given in SpC 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

RIIO-ED2 CBA Tool

The CBA tool DNOs used when completing their RIIO-ED2 Business Plans.

Ring Fence Costs

Has the meaning given to it in SpC 6.1 (Pass-through expenditure) of the electricity distribution licence.

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 (report under LV Service Associated with RLM).

Risk Index

A monetised risk measure, part of the Network Asset Indices, which represents the Long Term Risk associated with condition based asset failure used in the Network Asset Risk Measure.

RLM – LV Mains Inspected

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

Repair and maintenance work on rising mains for which the company accepts asset management responsibility. Complete replacement of mains should be reported on table CV17 - RLMs.

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

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

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 on table CV17 – RLMs.

RMU (Ring Main Unit)

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.

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.

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.

Scheme Identifier

The unique identification number given to each site covered by the Physical Security Upgrade Programme. This should be reported rather than the site name in worksheet C3 – Physical Security of the Costs, Volumes and Revenue Reporting Pack.

Scottish Environment Protection Agency (SEPA)

Scotland's environmental regulator, a non-departmental public body, accountable through Scottish Ministers to the Scottish Parliament.

Secondary Network

Network assets where the primary voltage is HV or below.

Secondary Reinforcement

Reinforcement of the Secondary Network (see definition).

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 SpC 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Section 22 Connections

A Connection that is pursued by a Customer under Section 22 of the Electricity Act (1989) (Special agreements with respect to connection).

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.

Separately Identifiable Asset Register Asset

A Separately Identifiable Asset Register Asset is a single asset, as recorded in the Asset Register, where works can be undertaken independently to works upon other assets.

For non-linear assets a Separately Identifiable Asset Register Asset is a single complete discrete unit that would be counted as 1 in the Asset Register. For example a transformer is a discrete measured unit and is therefore a Separately Identifiable Asset. A tap-changer or cable termination on a transformer is not counted as a discrete Asset Register category and therefore is a component, not a Separately Identifiable Register Asset.

For linear assets (such as cables) there is no discrete unit. For linear assets a Separately Identifiable Asset Register Asset is any continuous length of asset of a single Asset Register category type, where the length represents the length upon which works are performed under a single prime investment driver. This means that any length can be a Separately Identifiable Asset Register Asset.

Service Alterations (SM)

Work carried out by DNOs to alter a service position (supply cable and service cut out), in order to install a Smart Meter as part of the Smart Meter roll-out.

Service Inspection (Costs only) (SM)

Costs incurred by DNOs for inspections of service terminations requested by supplier or representative as part of a Smart Meter installation during the roll-out.

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).

Severe Weather Exceptional 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.

Shallow Cables

The activity of lowering underground cables where they are found to be non-compliant with the requirements of paragraph 14 (1) of ESQC regulations.

INCLUDES:

- Increasing the depth of cables.
- Ducting, split ducting, or other mechanical protection of the existing cable.

EXCLUDES:

- work pre-notified to the DNO where landowner is changing the land profile and is rechargeable (reported under CV39 Directly Remunerated Services – DRS2 Diversionary works under obligation).
- work in the highway which is part funded by the highways authority and the DNO (as detailed in NRSWA) (reported under CV5 Diversions - Diversions for highways (funded as detailed in NRSWA)).
- changes to the depth of cables required as part of the work required to bring a faulted section of cable back to Pre-Fault Availability (reported as part of the costs associated with the fault in CV26 – Faults).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 Enduring Solution Energy Costs

The cost of the standby arrangements and other enduring solution costs for arrangements in place alongside the Shetland transmission link.

Shetland: Enduring Solution Process Costs (SESPC)

Has the same meaning given to it in SpC 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence held by Scottish Hydro Electric Power Distribution plc.

Shetland Extension Variable Energy Costs

Has the same meaning given to it in SpC 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence held by Scottish Hydro Electric Power Distribution plc.

Shetland: Fixed Energy Costs Allowance

The sum 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 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.

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Shetland Variable Energy Costs

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.
- 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).

Short Interruption

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.

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 in the worksheet C3 - Physical Security in the Costs, Volumes and Revenue Reporting Pack.

Small CHP (>=1MW, <5MW)

A category of DG. Electricity generation using combined heat and power plant that is greater or equal to 1MW but less than 5MW.

Small Tools, Equipment, Plant and Machinery (Non-Operational) (STEPM)

Small tools, equipment, plant and machinery which are used to work on, assist work on or test system assets. (These items are not considered to be permanently connected to the network).

Typically INCLUDES:

- Fault location equipment - re-energising, eg
    - Bidoyng, Modular Rezap, Faultmaster Rezap)
- Fault location equipment - non re-energising, eg
    - Cable Sniffers
    - OHL Pathfinder
    - Cable fault locator (Kehui, EZ Thump, Meggar TDR, Riser Bond TDR, Bicotest TDR, BAUR Test Vans, SEBA Test Vans, Megger EZ Thump 12KV, Megger Test Van) (vans are reported under Vehicles and Transport (Non-Operational) but equipment within vehicles is within STEPM
    - Delta V (still in use but no longer manufactured)
- Hand and power tools
- Instruments and testing equipment, eg
    - Partial discharge monitors
    - Voltage recorder
    - Load monitors
- Power quality monitoring equipment
- Ladders (used at substations and transported on vehicles)

- Lifting and handling gear
- Street Works signing and guarding equipment
- Non-wheel- mounted winches and winching equipment
- Cable drum equipment, eg drum stands
- Workshop equipment, eg pedestal drills, grinding wheels and reciprocating saws
- Misc. Equipment, eg cable spiking guns, pumps, gas hoses and fittings
- Inspection costs for recertification and recalibration associated with STEPM.

EXCLUDES:

- Harness, climbing belts and fall arrest equipment (include as labour cost under the relevant activity of that employee).
- Generators (include capital costs in Vehicles and Transport (Non-Operational) and fuel costs in Vehicles and Transport (CAI)).

Smart Meter Communication Licensee Costs

Has the meaning given to it in SpC 6.1 (Pass-through expenditure) of the electricity distribution licence.

INCLUDES:

- Costs associated with external audits by an Independent Competent Organisation (as defined in the Smart Energy Code)

Smart Meter Information Technology Costs

Expenditure on additional IT assets and services which are specifically associated with the systems required to access, store, process and use smart meter derived data. These include additional hardware and infrastructure and application software development costs required to communicate with the Data Communications Company (DCC) (including via third parties) and with existing DNO internal systems to enable smart metering derived data to be integrated into those systems to deliver the benefits of smart meters for DNOs. This includes integration with established IT applications (such as DNO customer relationship management systems, network control systems, and network design tools). It also includes additional costs that are required to establish and demonstrate compliance with legal and regulatory requirements arising specifically for the use of smart meter data.

Hardware and infrastructure Costs includes:

- Purchase and installation of additional new hardware systems (eg servers, firewalls, load balancers, HSM's, gateways and switches) specifically associated with smart metering requirements.

- Marginal cost of improving the resilience and security of computer rooms. Purchase of additional client equipment (eg additional desktops required related to smart metering).
- Cost of additional infrastructure staff employed directly by the DNO or contracted by them to undertake system environment, configuration and installation work associated with connecting to the DCC.
- Purchase and installation of new additional infrastructure software and their license fees (e.g. FUSE)
- Additional security penetration testing costs associated with the connections to the DCC to meet the necessary security assurances and requirements to be a DCC User.
- Additional ongoing hardware maintenance costs associated with equipment associated with smart metering requirements.
- Technology refresh related to the above items.

Application software development costs includes:

- IT software development costs associated with connections to the DCC and to deliver benefits from smart metering data for the DNO
- New additional and upgraded software licences
- Cost of additional software development staff employed directly by the DNO or contracted to undertake design, development, test and implementation work.
- Purchase and installation of new additional application software and their license fees.
- Additional ongoing software maintenance costs associated with equipment associated with smart metering requirements.
- Software refresh related to the above items.
- Project/ programme management costs

Compliance Costs includes:

- Control documentation preparation, testing, and auditing specifically associated with the implementation of the smart metering related systems
- Cost associated with Smart Energy Code modifications

Integration Costs includes:

- Hardware and infrastructure and application software development costs (including additional people) required to allow smart metering data to be integrated with established DNO IT applications to deliver DNO benefits from smart metering

- The planning and development of new and improved business processes that either on a stand-alone basis, or in conjunction with existing IT applications, will use smart metering data to deliver DNO benefits from smart metering
- Costs associated with the provision of Registration Data Provider (RDP) service specifically associated with initial set up associated with DCC Live R1.2
- Costs associated with the ongoing provision of RDP service on an ongoing basis

Smart Metering DCC Non Pass through costs

Optional data transaction fees related to the use of Smart Meters which are at a DNOs' discretion. These may extend beyond the Smart Meter roll-out period.

Smart Meter Installations Carried Out

Total number of energised electricity Smart Meters installed in the DNOs' operating area.

Smart Meter Interventions – Category A Intervention

A situation in which the Company's Electric Lines or Electrical Plant poses (or is likely to pose) a danger, including danger of death of or injury to persons and/or danger of damage to or destruction of property as defined by the Distribution Connection and Use of System Agreement (DCUSA).

Meter Operation Code of Practice Agreement (MOCOPA) category A intervention codes are defined in the MOCOPA Guidance for Service Termination Issue Reporting document.

These activities are carried out in respect of a Smart Meter Installation (i.e. Electricity or Gas).

Smart Meter Interventions – Category B Intervention

A situation in which the condition of the Company's Electric Lines or Electrical Plant prevents metering work from being carried out or prevents a meter from being exchanged but where the situation is not a Category A Situation.

MOCOPA category B intervention codes are defined in the MOCOPA Guidance for Service Termination Issue Reporting document.

These activities are carried out in respect of a Smart Meter Installation (i.e. Electricity or Gas).

Smart Meter Interventions – Category C Intervention

An issue with the Company's Electric Lines or Electrical Plant that is neither a Category A Situation nor a Category B Situation.

MOCOPA category C intervention codes are defined in the MOCOPA Guidance for Service Termination Issue Reporting document.

These activities are carried out in respect of a Smart Meter Installation (i.e. Electricity or Gas).

Smart Meter Interventions – Extra scheduling and Call centre

Additional costs of scheduling DNO work and of call centre support generated by the Smart Meter roll-out.

Smart Meter Interventions - Meter Operator Hotline

A contact telephone number issued by the DNO for receiving calls from meter operators reporting Category A defects as defined by DCUSA (Distribution Connection and Use of System Agreement). The contact telephone number is available to Meter Operators on the MOCOPA (Meter Operation Code of Practice Agreement) website.

Smart Meter Interventions – Onsite/Physical Activities

One or more of the activities the licensee is required to undertake in respect of a given Smart Meter Installation.

Onsite/Physical activities include:

- Cut Out Changes (SM)
- Service Inspection (Costs only) (SM)
- Service Alternations (SM)
- Abortive Calls (SM)
- Asbestos Meter Board Replacement (SM)
- Miscellaneous Repairs/Safety Repairs (SM).

Smart Meter Interventions – On-site/Physical Activities - Trued Up

The resulting balance of on-site/physical activities following the application of any prior year restatement. These values are calculated within the worksheet.

Smart Meter Interventions – Prior year restatement - Onsite/Physical Activities

It is recognised that a proportion of defects classified as ONIs will require to be reclassified as being associated with the Smart Meter roll-out. This arises because supplier and meter operator data flows do not identify that defects are associated with the Smart Meter roll-out and there is a delay between when DNOs rectify a defect and when this can be associated with a Smart Meter. The delay may be several months and therefore an adjustment may be required to previously stated volumes and costs. This adjustment relates to the volume of defects carried out in Regulatory Years prior to the current reporting Regulatory Year.

For example it may not be possible to assign a defect carried out in 2015/16 with the Smart Meter roll-out until 2017/18. Where additional Smart Meter Interventions have been identified, the adjustment should be shown as a positive value in worksheet CV34 - Smart Meter Intervention DNO of the Costs, Volumes and Revenue Reporting Pack. (There will be a corresponding negative adjustment recorded under ONIs).

Smart Meter Interventions – Proactive Interventions

Proactive Interventions are instances where the licensee becomes aware of defects that would prevent the subsequent installation of a Smart Meter. Proactive Interventions would need to be one or more of the Smart Meter Intervention activities defined in CRC 3E.19 of the RIIO-ED1 licence to qualify.

Examples may include, but are not limited to:

- Where a meter operator identifies an intervention required in the course of an installation or attempted installation of a Gas Smart Meter
- Where the DNO receives a notification of a defect during a smart meter installation from a meter operator and can identify other properties in the same area or same set of circumstances that may have the same issue
- Where the DNO becomes aware of types of cut-out defect (eg fused neutrals) that would specifically prevent the installation of a Smart Meter and can identify others in the same local area that may have the same issue
- Where a customer or their representative requests the licensee to inspect or intervene on the DNO’s equipment ahead of a Smart Meter Installation

Smart Meter Interventions – 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 and to enable communication with the DCC. Costs equate to the cost of modifying the registration system to manage these smart meter specific changes.

Smart Meters

Has the meaning given to it in Condition 1 of the Smart Meter Communication Licence.

Sole Use Expenditure on DG Connection Projects

The element of the DG Connection Project that is fully funded by the connecting party.

Sole Use Expenditure on Metered Connection Projects

The element of the metered Connection Project that is fully funded by the connecting party.

Sole Use Expenditure on Unmetered Connection Projects

The unmetered Connection Project that is fully funded by the connecting party.

Span

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

The average distance between distribution poles or towers for circuits at the relevant voltages.

Spans Affected By Trees

Spans where vegetation growth necessitates the undertaking of tree cutting or other vegetation management (such as removal of ivy) on a periodic basis in order to maintain the clearances specified in ENATS 43-8.

Spans Cut

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)

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,
- 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, or

The reported activity volume should not include any spans inspected, where determining or confirming the need to undertake tree cutting in order to meet the requirements of ENATS 43-8 is NOT a primary objective. 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

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) , this is not included in the definition of specified contact lines.

The Single Emergency Number (SEN) operated by the DNOs does not itself count as a Specified Line. The calls coming from the SEN service to the DNO's individual Specified Lines must be counted as a call to a Specified Line.

Stakeholder Pension & Personal Accounts

Forms of defined benefit contribution pension scheme.

Standards ('the standards' – for connections)

The ECDGS (DG standards), ECGS (generation standards) and the SLC 15 standards (those standards of performance specified in accordance with Standard Condition 15 (Standards for the provision of Non-Contestable Connection Services) 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.

Standalone Installations

Standalone installations refers to all other instance of monitoring equipment installations except monitoring equipment installations bundled as part of another activity – for example, installing a new transformer.

Standard Deviation of Lives

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". This subscription allows DNOs access to specialised spares not available on the open market of non-standard high voltage equipment from National Grid, when they are required in a system emergency.

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 site 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)
- Delivery of materials by store staff to site (include in Labour as part of 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 (not a pre-order of equipment for planned investment activities), where the equipment is: scarce, obsolete, subject to long delivery lead times or will not be available, and where it is of strategic importance to maintain supplies.

Temporary towers which can be used on either capex related work or faults and maintenance are analogous to strategic spares.

Street Works

Activities undertaken by a statutory undertaker which involve the occupation of the highway. Costs and Volumes associated with street works include complying with traffic management legislation designed to tackle congestion and disruption to the road network during DNO activities.

It includes Traditional Street Works and Permit and Lane Rental Schemes.

Traditional Street Works include the following which are separately defined (with the prefix "Street Works"):

- Notices
- Notice Penalties
- Sample Inspections
- Overstay Fines
- Investigatory Inspections and Penalties
- Congestion Charges & Clean Air Zone Charges
- Street Works Admin.

Permits and Lane Rental Schemes include the following which are separately defined (with the prefix "Street Works"):

- Permits
- Permit Penalties
- Permit Condition Costs
- Lane Rentals
- Overstay Fines
- Permit and Lane Rental Set Up Costs
- Permit and Lane Rental Administration Costs.

Street Works - Congestion Charges & Clean Air Zone Charges

Charges paid under congestion charge schemes and clean air zones (such as that operated by Transport for London in London), which were in place as at 1 November 2021 and where the DNO had at least 6 months of cost data by this date relating to these schemes, to enter designated areas for the carrying out of Street Works and other operational activities covered by DUoS charges.

Street Works – Cost Type

For the purposes of the Costs, Volumes and Revenue Reporting Pack, this is a Cost Type.

Costs as defined in Street Works but excluding:

- Street Works Admin
- Permit and Lane Rental Set Up Costs
- Permit and Lane Rental Administration Costs (these are all reported under Engineering Management and Clerical Support).

The costs reported should be net of any Income from Connectee and Penalties Recovered from Contractors (see definitions).

Street Works – Existing Lane Rental Scheme

A lane rental scheme which was in place as at 1 November 2021 and where the DNO had at least 6 months of cost data by this date relating to this scheme.

Street Works - Existing Permit Scheme

A permit scheme, (or equivalent if enacted in Scotland), which was in place as at 1 November 2021 and where the DNO had at least 6 months of cost data by this date relating to this scheme.

Street Works - Income from Connectee

Income received from the connectee within the reporting year specific to a Street Works.

Street Works - Investigatory Inspections and Penalties

Investigatory inspections (charged to the DNO) undertaken by the highway authority (roads authority in Scotland). Where these inspections reveal defects or inadequacies, the defect process and associated penalties are triggered. These penalties typically relate to signing, lighting or guarding inadequacies or reinstatements that fail to comply with the necessary specification.

Street Works – Issued Permits

For the purposes of reporting disaggregated permit costs, issued permits are permits granted by highway authorities that have fees applied but exclude chargeable permit variations.

Street Works - Lane Rentals

Charges paid to a highway authority (roads authority in Scotland) under Section 74A of NRSWA (or any equivalent provision established for Scotland) requiring undertakers to pay a daily charge for occupation of the highway.

Street Works – New Lane Rental Scheme

A lane rental scheme which was not operational by 1 November 2021 or where the scheme has been implemented by this date but the DNO did not have at least 6 months of cost data by this date.

Street Works - New Permit Scheme

A permit scheme, (or equivalent if enacted in Scotland), which was not operational by 1 November 2021 or where the scheme has been implemented by this date but the DNO did not have at least 6 months of cost data by this date relating to the scheme.

Street Works – Non-Chargeable Permits

For the purposes of reporting disaggregated permit costs, all permits issued by highway authorities that do not have fees applied are categorised as non-chargeable permits.

Street Works - Notices

An electronic notice required by NRSWA which is sent to a highway authority (roads authority in Scotland) relating to an occupation of the highway. This definition includes all notices (s54, s55 and s57 notices or s113, s114 and s116 in Scotland), registration notifications (s70 or s129 in Scotland) and work start and stop notices (s74 or s133 in Scotland).

For the reporting purposes this category only considers Street Works notices also known as s54, s55, s57, s70 and s74 notices.

EXCLUDES

- Permits.

Street Works - Notice Penalties

Fixed Penalty Notices issued by a highway authority (roads authority in Scotland) if the data in a notification is incorrect or if the notification is sent late. This considers penalties related to notices required under s54, s55, s57, s70, s74 (or s113, s114, s116, s129 and s133 in Scotland) of NRSWA.

Street Works - Overstay Fines

Fines issued by a highway authority (roads authority in Scotland) under Section 74 (Section 113 in Scotland) of NRSWA which allows highway authorities (roads authorities in Scotland) to charge undertakers if Street Works are unreasonably prolonged (ie take longer than previously agreed).

Street Works - Penalties Recovered from Contractors

Income received from the contractor to cover the cost of a penalty initially paid for by the DNO.

Street Works - Permit

An electronic notice required by the Traffic Management Act 2004 (or any equivalent in Scotland as enacted under the Transport (Scotland) Act 2005) which is issued by a highway authority (roads authority in Scotland) following the submission of an application in place of a notification in streets which are covered by a permit scheme. The volumes apply to each works reference where work completed during the period. Permit volumes should exclude non-chargeable permits.

Street Works - Permit – Full and Partial Schemes

For the purposes of regulatory reporting, permit schemes can be considered to be partial (for example, one which is applicable to traffic sensitive roads only) or full (i.e. applicable to all roads). A permit scheme is a full scheme where it applies to the total length of road maintained by any given highway authority that resides in a DNO's network area. Highway authorities which operate both notices and permit schemes should be viewed as operating a partial scheme.

Street Works - Permit and Lane Rental Administration Costs

The costs from processing Permit and Lane rental applications and processing the payment of associated penalties. These costs are reported in Engineering Management and Clerical Support.

Street Works - Permit and Lane Rental Set-Up Costs

One-off costs of developing the necessary IT system to process Permit and Lane Rental applications and associated penalties. These costs are reported in Engineering Management and Clerical Support.

Street Works - Permit 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 working to meet codes of conduct that may be agreed locally. Only incremental costs resulting from the conditions should be reported in this category – any costs that would have be incurred in their absence as part of usual operating practices should not be included.

Those incremental costs reported should be those incurred to comply with the specific conditions set out in the statutory guidance for Highway Authority Permit Schemes – Permit Scheme Conditions as published by the Department for Transport.

Street Works - Permit Penalties

Fixed penalty notices issued by a highway authority (roads authority in Scotland), as provided for in the Traffic Management Act 2004 (or equivalent if enacted in Scotland), for working without a Permit or breaching the conditions of the Permit.

Street Works - Permit Variations

A permit variation is a modification made to a permit and can be imposed by a highway authority (non-chargeable) or requested by a utility company to vary a previously granted permit (chargeable permit variations). Volumes reported should exclude non-chargeable permit variations

Street Works - Sample Inspections

Sample inspections (charged to the DNO) undertaken by the highway authority (roads authority in Scotland). Where these inspections reveal defects or inadequacies, the defect process and associated charges are triggered.

Street Works – Street Works Admin

The cost of processing:

- Notices
- Notice Penalties
- Investigatory Inspections and Penalties
- Overstay Fines
- Congestion Charges.

Street Works – Suspensions and Closures

All works associated with a:

- Temporary Traffic Regulation Order (TTRO)
- Temporary Traffic Regulation Notice (TTRN);
- Bus Stop Suspension
- Parking Bay Suspension

STEPM – See Small Tools, Equipment, Plant and Machinery (Non-Operational)

Subsea Shore Ends – Inspections

Includes the inspection of subsea cable at each shore end, from the mean low water springs to the point of connection with the Overhead or Underground network.

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 or enclosure.

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 Rents

The costs incurred by the DNO for substation rents.

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.

Supplier of Last Resort

Supplier of Last Resort refers to the process when an energy supply company exits the market through the process described in the Supplier of Last Resort Guidance published on Ofgem's website.

Supplier of Last Resort Adjustment

Has the same meaning given to the term SLR in SpC 1.2 (Definitions and references to the Electricity Distributors)

Supplier of Last Resort Net Costs

Has the same meaning given to the term SLRA in SpC 7.5, Part H (Legacy Pass-Through Items) of the electricity distribution licence.

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 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 33kV 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:

- 6.6/11kV and 20kV CB (GM) Primary
- 6.6/11kV and 20kV CB (GM) Secondary
- 6.6/11kV and 20kV RMU (including X-type)
- 6.6/11kV and 20kV CB (PM)
- 6.6/11kV and 20kV Switch (PM)
- 6.6/11kV and 20kV Switch (GM).

System Mapping

A Closely Associated Indirect activity included in the Core CAI worksheet.

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 Street Works - 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 Street Works (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 (CO2) 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 (CO2) as the reference.

TCPs new - licensee requirement

Transmission Connection Point Charges that are specifically related to a licensee requirement for new TCPs.

TCPs reinforced - licensee requirement

Transmission Connection Point Charges that are specifically related to a licensee requirement for reinforced TCPs.

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.

Temporary Traffic Regulation Order (TTRO)

An order from an authority made when it is necessary to temporarily stop or limit vehicular and/or pedestrian traffic along the highway.

Temporary Traffic Regulation Notice (TTRN)

A notice issued in relation to a TTRO.

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).

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 biodiversity net gain

Total amount of biodiversity net gain delivered on new development in the year

Total building floor space

Total floor space of buildings occupied or used by licensee for business or operational purposes.

Total business kilometres travelled

Sum of distance travelled in year for business purposes

Total cost – new projects

Total cost of new projects

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 emissions from substation energy use

tCO2e of energy use at substations forming part of the licensee's distribution network at the end of the year

Total – Losses emissions

Electricity losses are included as scope 2 emissions as per guidance in "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard", Appendix A.

Total emissions – buildings energy use

This includes auxiliary energy use at substations.

Total emissions – other GWP IIGs

tCO2e of total leakage of non-SF6 Interruptible Insulation Gases (IIGs), with a Global Warming Potential (GWP) > 0

Total installed – other GWP IIGs

Total amount of non-SF6 GWP IIGs contained in assets forming part of the licensee's distribution network at the end of the year

Total leakage – other GWP IIGs

Leakage of non-SF6 GWP IIGs from assets operating on the licensee's network

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

The 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

The 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 oil leakage

Total amount of oil leaked from assets that form part of the licensees' distribution system in the year

Total operational kilometres travelled

Sum of distance travelled in year for operational purposes

Total SF6 emissions

tCO2e of total SF6 leakage

Total SF6 installed

Total amount of SF6 gas contained in assets forming part of the licensee's distribution network at the end of the year

Total SF6 leakage

Leakage of SF6 gas from assets operating on the licensee's network

Total substation energy use

Total energy used at substations forming part of the licensee's distribution network at the end of the year

Total - scope 1 emissions

Total emissions from activities owned or controlled by each DNO organisation.

Total - scope 2 emissions (excluding losses)

Total emissions released into the atmosphere that are associated with the consumption of purchased electricity, heat, steam and cooling, not including losses.

Total - scope 3 emissions

Total emissions as a consequence of DNO activities that occur at sources that are not controlled by individual DNOs and which are not classed as scope 2 emissions.

Total waste volume

Total waste arising network business in year in cubic metres

Total waste weight

Total waste arising network business in year in tonnes

Totex

The aggregate net network investment, net network operating costs and indirect costs, less cash proceeds of sale of assets and scrap, DRS.8 Value added Services (net) and income from theft recovery.

It includes the following which are all defined:

- Load Related Capex
- Non-Load Related Capex – Asset Replacement
- Non-Load Related Capex – Other

- Faults
- Tree Cutting
- 100% Revenue Pool Expenditure
- Controllable Opex.

Totex excludes any costs or Legal fees incurred relating to an application for a Judicial Review or an appeal to the CMA in respect of a decision made by Ofgem.[1]

Totex Incentive Mechanism (TIM)

Applies adjustment to the Totex figure to incentivise efficient overall total expenditure. It does this by sharing any over or under spend between the DNOs and Customers.

Each DNO will have a fixed efficiency incentive rate for the duration of RIIO-ED2.

Traffic Lights

Traffic lights means equipment providing standard 'red, amber, green' signals to vehicular traffic using the public highway.

Transformer

A device that is used to "transform" voltage from one level to another, usually from a higher voltage to a lower voltage.

Transformer capacity deferred (gross, counterfactual)

In respect of flexibility, the capacity (MVA) of the transformer that would have been built had flexible solutions not been procured.

Transformer Utilisation

The peak output delivered by a transformer, as a percentage of its maximum operational capacity. As further described in the LRE Volume Drivers Governance Document, the Licensees must develop a joint method statement that ensures that utilisation is measured consistently across licensees.

Transmission Connection Point (TCP)

A point of supply from the GB Transmission System to the DNO's distribution system.

[1] Notwithstanding the above, Ofgem shall pay all legal fees and cost awarded against it by the Judicial review body and the CMA.

Transmission Connection Point Charges

Means the sum of:

- 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.
- charges payable by the licensee to another Authorised distributor in respect of units transported from that person's network.

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).

The charge can be split into:

- Pass-through Transmission Connection Point Charges
- New Transmission Capacity Charges.

Tree Cutting

The activity of physically felling or trimming vegetation from around network assets.

INCLUDES:

- The felling or trimming of vegetation to meet ENATS 43-8 & ETR 132 requirements.
- The inspection of vegetation cut for the sole purpose of ensuring the work has been undertaken in an appropriate manner.
- 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
- The cost of procuring the tree cutting contract except as stated above (include under Finance & Regulation).

Tree Cutting Cycle

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

Policy that 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

Tree cutting activity undertaken to meet the clearance requirements of ENATS 43-8.

Tree Cutting: ETR 132 – Initial Clearance for Compliance

Tree cutting activity carried out to establish compliance with Engineering Technical Recommendation (ETR 132) where such resilience cutting has not been undertaken previously.

Tree Cutting: ETR 132 – Maintenance Clearance for Compliance

Tree cutting activity carried out to ensure continued compliance with ETR 132 where compliance has previously been achieved through Initial Clearance for Compliance.

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 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 will be logged in the Safety and Security of Supplies Enquiry System required under Standard Condition 8 (Safety and Security of Supplies Enquiry Service) of the electricity distribution licence. In some limited cases DNO may use other systems to manage similar but less urgent issues.

Troublecall Occurrences are grouped into two generic categories:

- Faults
- Occurrences Not Incentivised.

Type 1 Refurbishment

Refurbishment activities that are undertaken on asset categories that are included in the NARM deliverable and are interventions that would be included in the measure of delivery of the NARM. All Type 1 Refurbishment activities are reported on worksheet CV9 – Refurbishment NARM.

Type 2 Refurbishment

Refurbishment activities that would relate to interventions that are not included in the measure of delivery of the NARM. All Type 2 Refurbishment activities are reported on worksheet CV8 – Refurbishment Non NARM, irrespective of whether the licensee has an agreed NARM deliverable associated with the asset type.

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 Visual Amenity Allowance scheme.

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 for Visual Amenity

The activity of undergrounding overhead lines in non-designated areas when the primary driver is the reduction of their visual impact on the landscape, which was not undertaken under the Visual Amenity Allowance.

Undrawn Facilities

Loan/credit facilities that are available to an entity but which have not been utilised.

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.

Unlooped Properties

Has the meaning given in the Load Related Expenditure Volume Drivers Governance Document.

Unmetered Connection Category

The reporting categories required for each unmetered Connection Project for the purposes of the Connections Reporting Pack. They include:

- Unmetered DPCR4
- Unmetered Local Authority Connections
- Unmetered Connections provided under Private Finance Initiative
- Other Unmetered Connections (non-LA or PFI).

Unmetered Connection Work

Is made up of:

- Work – Provision of end 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 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.

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 (Connection Policy and Connection Performance) 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

Any incident arising on the licensee's distribution system, where statutory notification 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).

Unplanned Incidents are incentivised under SpC 4.4 (Interruptions incentive scheme output delivery incentive) of the electricity distribution licence.

Unplanned Incidents are 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 (excluding link boxes)- Asset Repair/Replacement Required
- LV Network Plant & Equipment LV link boxes only
- HV Network (11kV & 20kV) Supply Restoration by Switching Only (Non Damage Fault)
- HV Network (11kV & 20kV) UG Cables - Asset Repair/Replacement Required
- HV Network (11kV & 20kV) OH Lines - Asset Repair/Replacement Required
- HV Network (11kV & 20kV) Pole Mounted Switchgear Circuit Breakers - Asset Repair/Replacement Required
- HV Network (11kV & 20kV) Pole Mounted Switchgear (All Types ex CB) Asset Repair/Replacement Required
- HV Network (11kV & 20kV) Pole Mounted Transformers - Asset Repair/Replacement Required
- HV Network (11kV & 20kV) All Other Plant and Equipment (inc GM transformers) - Asset Repair/Replacement Required
- EHV Network (22kV, 33kV & 66kV) Supply Restoration by Switching Only (Non Damage Fault)
- EHV Network (22kV, 33kV & 66kV) UG Cables (Pressure Assisted) - Asset Repair/Replacement Required
- EHV Network (22kV, 33kV & 66kV) UG Cables (Non Pressure Assisted) - Asset Repair/Replacement Required
- EHV Network (22kV, 33kV & 66kV) OH Lines - Asset Repair/Replacement Required
- EHV Network (22kV, 33kV & 66kV) All Other Plant and Equipment - Asset Repair/Replacement Required
- 132kV Network Supply Restoration by onsite switching only
- 132kV Network UG Cables (Pressure Assisted) - Asset Repair/Replacement Required
- 132kV Network UG Cables (Non Pressure Assisted) - Asset Repair/Replacement Required
- 132kV Network OH Lines - Asset Repair/Replacement Required

- 132kV Network All Other Plant and Equipment - Asset Repair/Replacement Required
- HV Network (11kV & 20kV) Submarine Cables - Asset Repair/Replacement Required
- EHV Network (22kV, 33kV & 66kV) Submarine Cables - Asset Repair/Replacement Required
- 132kV Network Submarine Cables - Asset Repair/Replacement Required.

Unregulated Margin – see Margin

Unregulated Margin Period

The period or periods in which DNOs are permitted/choose to apply the Regulated Margin.

Unrestricted Domestic Tariff

The estimated annual cost of distribution to the typical domestic customer under the Common Distribution Charging Methodology, assuming a certain level of consumption for the chosen customer category and the total allowed income that is being targeted (reflecting previous under/over recoveries and various incentives).

Upgrading Connection Projects

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.

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).

Utilisation Band

A range (%) provided for reporting Transformer Utilisation.

V

Valid Bad Debt Claim

Has the same meaning given to it in SpC 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

Variant Costs

Costs which are subject to uncertainty mechanisms.

Vehicles and Transport (Non-Operational)

Expenditure on new and replacement wheeled vehicles and generators which are not system assets but are utilised by the DNO or any other Related Party for the purposes of providing services to the DNO.

INCLUDES:

- Commercial vehicle fleet
- Mobile plant for example:
    - Mobile compressors
    - Cranes
    - Excavators
    - Dumpers
    - Trailers
    - Drum trailers
    - Wheel mounted winches
    - Hiab vehicles and accessories
    - All terrain vehicles
    - Water pumping vehicles
- Generators, which include wheel mounted and non-wheel mounted generators used to power the network and small portable generators, used to power tools.
- The labour costs of fuelling unfuelled generators.

EXCLUDES:

- company cars (except where included under the labour cost)

- Fork lifts (include in stores)
- Fuel costs for wheeled vehicles and generators (report in Vehicles and Transport (CAI)).

Vehicles and Transport (CAI)

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 (including generators and electricity for electric vehicles) and mobile plant, irrespective of whether the vehicle fleet and mobile plant is owned by the DNO or leased by the DNO, except where leased generators are fully fuelled and manned from contractors (report in the relevant direct activity).
- the ongoing maintenance of all Electric Vehicle (EV) Charging Points and fuel tanks on such premises
- Installation of Electric Vehicle Charging Points at operational and non-operational premises
- Congestion Charges & Clean Air Zone Charges

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 Vehicles and Transport (Non-Operational))
- 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 Insurance Totals in Core Business Support)
- Fuel costs of leased generators where leased generators are fully fuelled and manned from contractors (report in the relevant direct activity).

Vehicles and Transport – Electric Vehicle

Vehicles wholly driven by an electric motor that is wholly powered through a battery and does not produce any tailpipe emissions.

Vehicles and Transport - Heavy Good Vehicles

Total fleet volume of vehicles that have a net weight transmitted to the road, excluding any material load, of 7.5 tonnes or greater as of year end (31st March)

Vehicles and Transport – Hybrid Electrical Vehicle

A vehicle powered both by a conventional petrol or diesel engine and an electric battery. The electric battery must be used to propel the vehicle. This excludes vehicles that use a battery just for start stop functions.

Vehicles and Transport – Internal Combustion Engine (ICE)

Vehicle with a conventional internal combustion. Fuel may include petrol, diesel or other fossil fuel source originating from crude oil

Vehicles and Transport - Medium and Commercial Vehicles

Total fleet volume of vehicles that have a net weight transmitted to the road, excluding any material load, of 3.5 tonnes or greater but less than 7.5 tonnes as of year end (31st March)

Vehicles and Transport – Mobile Generators

An electric generator which is handheld or mounted to a trailer or vehicle chassis.

Vehicles and Transport – Small Vehicles

Total fleet volume of vehicles that have a net weight transmitted to the road, excluding any material load, of less than 3.5 tonnes as of year end (31st March)

Vertical Clearance

The vertical distance between an overhead line, the ground or a building or structure.

Visual Amenity Allowance

The mechanism for funding Visual Amenity Projects provided for in SpC 3.4 (Use It or Lose It Allowances) of the electricity distribution licence.

Visual Amenity Expenditure

The actual expenditure on Visual Amenity Projects under the Visual Amenity Allowance funding mechanism described in SpC 3.4 (Use It or Lose It Allowances) of the electricity distribution licence, in any Regulatory Year.

Visual Amenity Inside Designated Areas

Activity undertaken as part of a Visual Amenity Project funded under the Visual Amenity Allowance finding mechanism described in SpC 3.4 (Use It or Lose It Allowances) of the electricity distribution licence. It relates to overhead distribution assets located within a Designated Area.

Visual Amenity Outside Designated Areas

Activity undertaken as part of a Visual Amenity Project funded under the Visual Amenity Allowance funding mechanism described in SpC 3.4 (Use It or Lose It Allowances) of the electricity distribution licence. It relates to overhead distribution assets which form part of an overhead line which spans the boundary of a Designated Area and is located outside the boundaries of the DNO's Designated Area, for which up to 10% of the Visual Amenity Allowance funding mechanism may be used.

Visual Amenity Project

Has the meaning given to it in SpC 1.2 (Definitions and references to the Electricity Distributors) of the electricity distribution licence.

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 and Easements/Servitudes Admin Costs

A sub-activity of the 'Wayleaves' Indirect activity included with Closely Associated Indirects.

INCLUDES:

- Obtaining, managing and administering Wayleaves, 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 (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 purpose of the Costs, Volumes and Revenue Reporting Pack, this cost type also includes the payments of substation rents.

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;

EXCLUDES:

- Purchase of easements / servitudes (include as Diversions or as relevant Connections activity within or outside price control).
- Cost of substation rent payments.

Works required by an alteration of premises – see DRS3.Works Required by an Alteration of Premises

Worst Served Customers (WSC)

DPCR5 definition is customers experiencing 15 or more higher voltage unplanned Interruptions over a three year period, with 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.

RIIO-ED2 definition is customers experiencing on average at least four higher voltage interruptions per year, over a three-year period (ie 12 or more over three years, with a minimum of two interruptions per year)

WSC - Calculated Number of Customers Interrupted in Reference Period

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. This is calculated in the Costs, Volumes and Revenue Reporting Pack.

WSC - Calculated Number of Customers Interrupted Post Scheme Completion

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. This is calculated in the Costs, Volumes and Revenue Reporting Pack.

WSC - Circuit Reference Number

A unique identification number for a circuit on a DNO's distribution system.

WSC - Feeder Name/Ref

Name or reference number of the feeder that the Worst Served Customers are connected to.

WSC - Improvement Qualifies for Revenue Recovery

Calculated based on "% 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 Special Condition 3.4 (Use It Or Lose It Allowances)".

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

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

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. This is calculated in the Costs, Volumes and Revenue Reporting Pack.

WSC - Number of Higher Voltage Customers Interrupted Post Scheme Completion

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. This is calculated in the Costs, Volumes and Revenue Reporting Pack.

WSC - Number of HV+ Incidents Post Scheme Completion

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

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

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

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 electricity distribution licence.

WSC - Primary Name

The name of the primary substation upstream of the Worst Served Customers.

WSC - 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 RIIO-ED1 values are recorded in Licence Condition CRC 3H (Allowed expenditure on improving services to Worst Served Customers) of the electricity distribution licence.

WSC - Scheme ID (Project Number)

A unique DNO reference for the Worst Served Customer scheme being undertaken.

WSC - Secondary Substation (name)/Customer Details

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

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

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)

A brief description of the work being undertaken as part of the scheme (eg line refurbishment, undergrounding, additional network automation).

WSC - Year Project Completed

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)

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". This is calculated in the Costs, Volumes and Revenue Reporting Pack.

X

Y

Year ahead forecast (PMT/GMT) utilisation

The forecast Transformer Utilisation for existing PMT/GMT assets, for the Regulatory Year ahead, ie up to 31 March following each RRP submission.

Z

Zero Margin Period

The period, or periods, that a DNO is unable to retain any margin on connections work.

1. Numerical definitions

100% 'revenue pool' expenditure

This is a PCFM Cost Type, which reports Pension costs which have been stripped out from all of the other six PCFM Cost Types, which are:

- Load Related Capex
- Non-Load Related Capex - Asset Replacement
- Non-Load Related Capex – Other
- Faults
- Tree Cutting
- Controllable Opex.

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.

6.6/11kV 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.

6.6/11kV CB (GM) Secondary

6.6 or 11kV 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.

6.6/11kV CB (PM)

6.6 or 11kV Circuit Breaker (Pole Mounted)

Includes - all Pole mounted Circuit Breakers and Auto Reclosers.

6.6/11kV OHL (BLX or similar Conductor)

6.6kV or 11kV 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.

6.6/11kV OHL (Conventional Conductor)

6.6kV or 11kV 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.

6.6/11kV Poles

6.6kV or 11kV Overhead Line Pole

Includes - supports constructed of wood, concrete or steel (both single and double circuits).

6.6/11kV 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 - 6.6/11kV X-type RMU.

6.6/11kV Switch (GM)

Ground Mounted 11/6.6kV Switches & Fuse Switches (both indoor and outdoor) that do not form part of a Ring Main Unit.

6.6/11kV Switch (PM)

Includes - 6.6 and 11kV 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 11kV 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.

6.6/11kV Transformer (GM)

Ground Mounted Power Transformer with a primary winding voltage of 6.6 or 11kV

Includes - 6.6 and 11kV reactors & regulators.

6.6/11kV Transformer (PM)

Pole Mounted Power Transformer with a primary winding voltage of 6.6 or 11kV

Includes - 6.6 and 11kV reactors & regulators.

6.6/11kV UG Cable

6.6/11kV Underground Cable

Includes - all design types of Underground Cable.

6.6/11kV 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.

20kV CB (GM) Primary

20kV 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.

20kV CB (GM) Secondary

20kV 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.

20kV CB (PM)

20kV Circuit Breaker (Pole Mounted)

Includes - all Pole mounted Circuit Breakers and Auto Reclosers.

20kV 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.

20kV OHL (BLX or similar Conductor)

20kV 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.

20kV Poles

6.6kV or 11kV Overhead Line Pole

Includes - supports constructed of wood, concrete or steel (both single and double circuits).

20kV RMU

A 20kV 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.

20kV Switch (GM)

Ground Mounted 20kV Switches & Fuse Switches (both indoor and outdoor) that do not form part of a Ring Main Unit.

20kV 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'.

20kV Transformer (GM)

Ground Mounted Power Transformer with a primary winding voltage of 20kV

Includes - 20kV reactors & regulators.

20kV Transformer (PM)

Pole Mounted Power Transformer with a primary winding voltage of 20kV

Includes - 20kV reactors & regulators.

20kV UG Cable

20kV Underground Cable

Includes - all design types of Underground Cable.

33kV CB (Air Insulated Busbars) (ID) (GM)

33kV (includes 22 & 25kV) 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)

33kV (includes 22 & 25kV) 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)

33kV (includes 22 & 25kV) 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) (ID) Single Busbar (GM)

33kV (includes 22 & 25kV) Ground Mounted single busbar 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) (ID) Double Busbar (GM)

33kV (includes 22 & 25kV) Ground Mounted double busbar 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)

33kV (includes 22 & 25kV) 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 CB (Gas Insulated Busbars) (OD) Single Busbar (GM)

33kV (includes 22 & 25kV) Ground Mounted single busbar 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 CB (Gas Insulated Busbars) (OD) Double Busbar (GM)

33kV (includes 22 & 25kV) Ground Mounted double busbar 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

33kV (includes 22 & 25kV) 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

33kV (includes 22 & 25kV) 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

33kV (includes 22 & 25kV) 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 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)

33kV (includes 22 & 25kV) Switch (Ground Mounted)

Includes - all indoor and outdoor Ground Mounted Switches & Fuse Switches.

Excludes - Circuit breakers 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)

33kV (includes 22 & 25kV) Switch (Pole Mounted)

Includes - All Pole mounted Circuit Breakers, Switches and auto sectionalisers.

33kV 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.

33kV Tower

33kV (includes 22 & 25kV) Overhead line tower

Includes - Steel lattice towers.

Excludes - Small footprint steel masts.

33kV Transformer (GM)

33kV (includes 22 & 25kV) Ground Mounted Power Transformer with a primary winding voltage of voltage of 33kV (includes 22 and 25kV)

Includes - 33kV reactors & regulators.

Excludes - All Auxiliary Transformers.

33kV Transformer (PM)

33kV (includes 22 & 25kV) Pole Mounted Power Transformer with a primary winding voltage of 33kV (includes 22 and 25kV)

Includes - 33kV reactors & regulators.

Excludes - all Auxiliary Transformers.

33kV UG Cable (Gas)

33kV (includes 22 & 25kV) Underground pressured assisted gas filled cable

Excludes - non pressured assisted designs and oil filled cables.

33kV UG Cable (Non Pressurised)

33kV (includes 22 & 25kV) Underground non pressured assisted cables

Includes - XLPE, EPR and paper insulated cables. Excludes pressured assisted designs.

33kV UG Cable (Oil)

33kV (includes 22 & 25kV) Underground pressured assisted oil filled cable

Excludes - non pressured assisted designs and gas filled cables.

66kV CB (Air Insulated Busbars) (ID) (GM)

66kV 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)

66kV 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)

66kV 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)

66kV 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).

66kV OHL (Tower Line) Conductor

66kV 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.

66kV Pole

66kV 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

66kV 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 66kV

Includes - 66kV 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)

66kV 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 Systems

The lower boundary of the 132kV system should be taken as the supply terminals of the DNO's customers supplied at 132kV or the load-side terminals of switchgear controlling the secondary (lower voltage) side of 132kV transformers. If no switchgear exists between the secondary side of the 132kV transformer and the primary side of an EHV or HV system transformer, the lower boundary should be taken as the secondary-side terminals of the 132kV transformer. The lower voltage busbars and their protection equipment at 132kV/lower voltage substations are not included.

The upper boundary of the 132kV system should be taken as the point at which ownership of the 132kV circuit or plant becomes the responsibility of the DNO.

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)

132kV 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)

132kV 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)

132kV 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)

132kV Ground Mounted Circuit Breaker

Includes - all CB designs with any arc extinction media having air (or equivalent) busbar insulation situated outdoor.

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 OHL (Pole Line) Conductor

132kV 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

132kV 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

132kV 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 lake, 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

132kV Overhead Line Tower

Includes - Steel lattice towers.

Excludes - Small footprint steel masts.

132kV Transformer

Power Transformer with a primary winding voltage of 132kV

Includes - 132kV reactors & regulators.

Excludes - All Auxiliary Transformers earthing transformers and arc suppression coils.

132kV UG Cable (Gas)

132kV Under Ground Cable (Gas Filled)

Includes - All pressure assisted Gas Filled Cables.

132kV UG Cable (Non Pressurised)

132kV Underground Cable (Non Pressurised)

Includes - all non-pressure assisted cables (eg XLPE, EPR or paper insulated cables).

132kV UG Cable (Oil)

132kV Underground Cable (Oil Filled)

Includes - all pressure assisted Oil Filled Cables.

2. Refurbishment and Repairs & Maintenance Task Allocation Tables

LV Main (OHL) Conductor			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Removal and testing of overhead conductor core samples from existing overhead line	Yes		
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	Yes		
Replacement of interphase spacers	Yes		
Replacement of bird flight deterrents	Yes		
Shrouding (Temporary) to prevent contact with conductors in order to achieve safe working clearances when third parties are working near LV overhead lines.	*Yes*		

LV Service (OHL)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
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	Yes		
Replacement of individual insulators	Yes		
Repairs to / replacement of brackets	Yes		
Recleating of service lead-in cable	Yes		
Remaking cut out termination	Yes		
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) {note: complete replacement of a service is reported as Asset Replacement}		Yes	
Replacement of multi service box	Yes		
Shrouding (Temporary) to prevent contact with conductors in order to achieve safe working clearances when third parties are working near LV overhead lines.	*Yes*		

LV Poles			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Pole testing using diagnostic equipment	Yes		
Repairs to existing stay and stay insulators that do not constitute complete replacement of the stay wire and insulator.	Yes		
Replacement of individual insulators or fittings	Yes		
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	Yes		
Replacement of signs and notices	Yes		
Repair or replacement of pole earthing	Yes		
Remedial application of wood pole preservative (e.g. insertion of boron rods)	Yes		
Patch welding repairs to steel poles	Yes		
Replacement of a complete set of insulators associated with an existing pole		Yes	
Complete replacement of pole top steelwork (including associated insulators and fittings)		Yes	
The complete replacement of stay wire and insulator (including stay block or anchor as necessary) at an existing pole		Yes	
Replacement of steelwork associated with pole mounted switchgear and equipment		Yes	
Pole Strengthening (e.g. clamping a steelwork supporting bracket to an existing pole)			*Yes*
Small footprint steel masts: Replacement of individual bolts	Yes		

Small footprint steel masts: Repairs to existing steelwork members (e.g. welding)	Yes		
Small footprint steel masts: Patch painting following steelwork repair	Yes		
Small footprint steel masts: Replacement of step bolts		Yes	
Small footprint steel masts: Replacement of individual steelwork members			*Yes*
Small footprint steel masts: Painting of mast		Yes	
Small footprint steel masts: Repairs to foundations	*Yes*		

LV Main (UG Consac)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of cable joints and terminations (including sealing ends)	*Yes*		

LV Main (UG Plastic)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of cable joints and terminations (including sealing ends)	*Yes*		

LV Main (UG Paper)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of cable joints and terminations (including sealing ends)	*Yes*		

Rising & Lateral Mains			

Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of cable joints and terminations (including sealing ends)	*Yes*		

LV Service (UG)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Sheath repairs	Yes		
Replacement of joints or remaking cut out termination	Yes		
Replacement of a section of service cable within an existing LV underground service (but not complete replacement of the service) {note: complete replacement of a service is reported as Asset Replacement}	Yes		
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).		*Yes*	

LV Service (UG)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Sheath repairs	Yes		
Replacement of joints or remaking cut out termination	Yes		
Replacement of a section of service cable within an existing LV underground service (but not complete replacement of the service) {note: complete replacement of a service is reported as Asset Replacement}	Yes		
LV underground service transfers - associated with the installation of new LV UG Mains cable (i.e. the activity of connecting existing		*Yes*	

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	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Sheath repairs	Yes		
Replacement of joints, remaking cut out termination or terminations at distribution boards	*Yes*		

LV Circuit Breaker			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. infrared temperature measurement etc.)	Yes		
Painting of equipment	Yes		
General cleaning of equipment (internal & external)	Yes		
Vegetation management (e.g. weed clearance)	Yes		
Replacement of barriers	Yes		
Replacement of doors or locks	Yes		
Replacement of MCCB unit within existing cabinet	Yes		
Replacement of protection module	Yes		
Replacement of contacts (ACB)	Yes		
Replacement of individual components of the operating mechanism (ACB)	Yes		
Replacement of individual components of the drive rods and linkages (ACB)	Yes		
Complete replacement of the operating mechanism (ACB)			*Yes*
Complete replacement of drive rods and linkages (ACB)		Yes	
Replacement of test sockets		*Yes*	

LV Pillar (ID)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. infrared temperature measurement etc.)	Yes		
Painting of equipment	Yes		
General cleaning of equipment (internal & external)	Yes		
Vegetation management (e.g. weed clearance)	Yes		
Clean and grease spare fuse carriers/ links	Yes		
Replacement of barriers	Yes		
Replacement of doors or locks	Yes		
Replacement of damaged fuse carriers/ links	Yes		
Replacement of complete feederway			*Yes*
Replacement of test sockets		*Yes*	

LV Pillar (OD at Substation)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. infrared temperature measurement etc.)	Yes		
Painting of equipment	Yes		
General cleaning of equipment (internal & external)	Yes		
Vegetation management (e.g. weed clearance)	Yes		
Clean and grease spare fuse carriers/ links	Yes		
Replacement of barriers	Yes		
Replacement of doors or locks	Yes		
Replacement of damaged fuse carriers/ links	Yes		
Replacement of complete feederway			*Yes*
Replacement of test sockets		*Yes*	

LV Pillar (OD at Substation)			

Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. infrared temperature measurement etc.)	Yes		
Painting of equipment	Yes		
General cleaning of equipment (internal & external)	Yes		
Vegetation management (e.g. weed clearance)	Yes		
Clean and grease spare fuse carriers/ links	Yes		
Replacement of barriers	Yes		
Replacement of doors or locks	Yes		
Replacement of damaged fuse carriers/ links	Yes		
Replacement of complete feederway			*Yes*
Replacement of test sockets		*Yes*	

LV Board (WM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. infrared temperature measurement etc.)	Yes		
Painting of equipment	Yes		
General cleaning of equipment (internal & external)	Yes		
Vegetation management (e.g. weed clearance)	Yes		
Replacement of barriers	Yes		
Replacement of doors or locks	Yes		
Replacement of test sockets		*Yes*	

LV UGB			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
General cleaning of equipment (internal & external)	Yes		
Vegetation management (e.g. weed clearance)	Yes		
Clean and grease spare fuse carriers/ links	Yes		

Replacement of barriers	Yes		
Replacement of damaged fuse carriers/ links	Yes		
Pumping water from link disconnecting box pit	Yes		
Replacement of link disconnecting box lid/ bell cover	Yes		
Repair of link disconnecting box frame	*Yes*		

Cut Out (Metered)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
No specific Repair & Maintenance or Refurbishment activities identified			

LV Board (X-type Network) (WM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. infrared temperature measurement etc.)	Yes		
Painting of equipment	Yes		
General cleaning of equipment (internal & external)	Yes		
Vegetation management (e.g. weed clearance)	Yes		
Clean and grease spare fuse carriers/ links	Yes		
Replacement of barriers	Yes		
Replacement of damaged fuse carriers/ links	Yes		
Replacement of complete feederway		Yes	
Replacement of test sockets		*Yes*	

LV Transformers/Regulators			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
No specific Repair & Maintenance or Refurbishment activities identified			

6.6/11kV OHL (Conventional Conductor)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Diagnostic testing of overhead conductor (e.g. corman testing)	Yes		
Removal and testing of overhead conductor core samples from existing overhead line	Yes		
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	Yes		
Replacement of bird flight deterrents	*Yes*		

6.6/11kV OHL (BLX or similar Conductor)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Diagnostic testing of overhead conductor (e.g. corman testing)	Yes		
Removal and testing of overhead conductor core samples from existing overhead line	Yes		
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	Yes		
Replacement of spiral vibration dampers	Yes		
Replacement of bird flight deterrents	*Yes*		

20kV OHL (Conventional Conductor)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Diagnostic testing of overhead conductor (e.g. corman testing)	Yes		

Removal and testing of overhead conductor core samples from existing overhead line	Yes		
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	Yes		
Replacement of bird flight deterrents	*Yes*		

20kV OHL (BLX or similar Conductor)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Diagnostic testing of overhead conductor (e.g. corman testing)	Yes		
Removal and testing of overhead conductor core samples from existing overhead line	Yes		
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	Yes		
Replacement of spiral vibration dampers	Yes		
Replacement of bird flight deterrents	*Yes*		

6.6/11kV Poles			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Pole testing using diagnostic equipment	Yes		
Repairs to existing stay and stay insulators that do not constitute complete replacement of the stay wire and insulator.	Yes		
Replacement of individual insulators or fittings	Yes		
Repairs to pole top steelwork (such as crossarms, outrigger brackets, bracing) involving the replacement of individual	Yes		

steelwork components such as bolts or individual crossarm members			
Replacement of signs and notices	Yes		
Repair or replacement of pole earthing	Yes		
Remedial application of wood pole preservative (e.g. insertion of boron rods)	Yes		
Replacement of a complete set of insulators associated with an existing pole		Yes	
Complete replacement of pole top steelwork (including associated insulators and fittings)		Yes	
The complete replacement of stay wire and insulator (including stay block or anchor as necessary) at an existing pole		Yes	
Replacement of steelwork associated with pole mounted switchgear and equipment		Yes	
Pole Strengthening (e.g. clamping a steelwork supporting bracket to an existing pole)			*Yes*
Small footprint steel masts: Replacement of individual bolts	Yes		
Small footprint steel masts: Repairs to existing steelwork members (e.g. welding)	Yes		
Small footprint steel masts: Patch painting following steelwork repair	Yes		
Small footprint steel masts: Replacement of step bolts		Yes	
Small footprint steel masts: Replacement of individual steelwork members			*Yes*
Small footprint steel masts: Painting of mast		Yes	
Small footprint steel masts: Repairs to foundations	*Yes*		

20kV Poles			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Pole testing using diagnostic equipment	Yes		
Repairs to existing stay and stay insulators that do not	Yes		

constitute complete replacement of the stay wire and insulator.			
Replacement of individual insulators or fittings	Yes		
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	Yes		
Replacement of signs and notices	Yes		
Repair or replacement of pole earthing	Yes		
Remedial application of wood pole preservative (e.g. insertion of boron rods)	Yes		
Replacement of a complete set of insulators associated with an existing pole		Yes	
Complete replacement of pole top steelwork (including associated insulators and fittings)		Yes	
The complete replacement of stay wire and insulator (including stay block or anchor as necessary) at an existing pole		Yes	
Replacement of steelwork associated with pole mounted switchgear and equipment		Yes	
Pole Strengthening (e.g. clamping a steelwork supporting bracket to an existing pole)			*Yes*
Small footprint steel masts: Replacement of individual bolts	Yes		
Small footprint steel masts: Repairs to existing steelwork members (e.g. welding)	Yes		
Small footprint steel masts: Patch painting following steelwork repair	Yes		
Small footprint steel masts: Replacement of step bolts		Yes	
Small footprint steel masts: Replacement of individual steelwork members			*Yes*
Small footprint steel masts: Painting of mast		Yes	
Small footprint steel masts: Repairs to foundations	*Yes*		

6.6/11kV UG Cable			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of cable joints and terminations (including sealing ends)	*Yes*		

20kV UG Cable			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of cable joints and terminations (including sealing ends)	*Yes*		

HV Sub Cable			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of cable joints and terminations (including sealing ends)	Yes		
Replacement of physical protection of submarine cable (e.g. split piping, backfill cover to exposed cables at shoreline etc.)	*Yes*		

6.6/11kV CB (PM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (oil	Yes		

testing, SF6 leak detection etc.)			
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of external bushings	Yes		
Replacement of arcing horns	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism		Yes	
Complete replacement of drive rods and linkages		Yes	
Painting of plant	Yes		
Replacement of control/communications battery	Yes		
Replacement or repair of control box (and/or communications devices)	*Yes*		

6.6/11kV CB (GM) Primary			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6	Yes		

and oil), whether reprocessed or not			
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Replacement of the moving portion (truck) in withdrawable equipment			*Yes*
Complete factory refurbishment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Repairs to interlocks	Yes		
Repairs to racking device	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

6.6/11kV CB (GM) Secondary			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing	Yes		

tests, oil testing, SF6 leak detection etc.)			
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Replacement of the moving portion (truck) in withdrawable equipment			*Yes*
Complete factory refurbishment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Painting of plant	Yes		
Repairs to interlocks	Yes		
Repairs to racking device	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

6.6/11kV Switch (PM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests etc.)	Yes		

Invasive diagnostic testing requiring removal of covers or physical connections (oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of external bushings	Yes		
Replacement of arcing horns	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism		Yes	
Complete replacement of drive rods and linkages		Yes	
Painting of plant	Yes		
Replacement of control/communications battery	Yes		
Replacement or repair of control box (and/or communications devices)	*Yes*		

6.6/11kV Switchgear - Other (PM			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (operating tests etc.)	Yes		
Lubrication of moving parts	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of braids	Yes		
Replacement of interruptor heads	Yes		

Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of bushings	Yes		
Repair/ replacement of earth bonding and earth mats	Yes		
Repair/ replacement of interlocks	Yes		
Complete replacement of the operating mechanism		Yes	
Complete replacement of drive rods and linkages		Yes	
Replacement of control/communications battery	Yes		
Replacement or repair of control box (and/or communications devices)	Yes		
Replacement of removable element only of fuseable links/ ASLs (i.e. not complete replacement of asset)	*Yes*		

6.6/11kV Switch (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		

Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Complete factory refurbishment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Painting of plant	Yes		
Repairs to interlocks	Yes		
Repairs to racking device	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

6.6/11kV RMU			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		

Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Complete factory refurbishment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Painting of plant	Yes		
Repairs to interlocks	*Yes*		

6.6/11kV X-type RMU			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		

Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Complete factory refurbishment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Painting of plant	Yes		
Repairs to interlocks	*Yes*		

20kV CB (PM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		

Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of external bushings	Yes		
Replacement of arcing horns	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism		Yes	
Complete replacement of drive rods and linkages		Yes	
Painting of plant	Yes		
Replacement of control/communications battery	Yes		
Replacement or repair of control box (and/or communications devices)	*Yes*		

20kV CB (GM) Primary			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		

Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Replacement of the moving portion (truck) in withdrawable equipment			*Yes*
Complete factory refurbishment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Repairs to interlocks	Yes		
Repairs to racking device	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

20kV CB (GM) Secondary			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		

Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Replacement of the moving portion (truck) in withdrawable equipment			*Yes*
Complete factory refurbishment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Painting of plant	Yes		
Repairs to interlocks	Yes		
Repairs to racking device	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

20kV Switch (PM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		

Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of external bushings	Yes		
Replacement of arcing horns	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism		Yes	
Complete replacement of drive rods and linkages		Yes	
Painting of plant	Yes		
Replacement of control/communications battery	Yes		
Replacement or repair of control box (and/or communications devices)	*Yes*		

20kV Switchgear - Other (PM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (operating tests etc.)	Yes		
Lubrication of moving parts	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of braids	Yes		
Replacement of interruptor heads	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of bushings	Yes		
Repair/ replacement of earth bonding and earth mats	Yes		
Repair/ replacement of interlocks	Yes		

Complete replacement of the operating mechanism		Yes	
Complete replacement of drive rods and linkages		Yes	
Replacement of control/communications battery	Yes		
Replacement or repair of control box (and/or communications devices)	Yes		
Replacement of removable element only of fuseable links/ ASLs (i.e. not complete replacement of asset)	*Yes*		

20kV Switch (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		

Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Complete factory refurbishment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Painting of plant	Yes		
Repairs to interlocks	Yes		
Repairs to racking device	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

20kV RMU			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*

Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Complete factory refurbishment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Painting of plant	Yes		
Repairs to interlocks	*Yes*		

6.6/11kV Transformer (PM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Bushing replacement	Yes		
Replacement of gaskets and seals	Yes		
Sight glass replacement	Yes		
Align arcing horns	Yes		
Complete workshop/factory refurbishment		*Yes*	

6.6/11kV Transformer (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (oil testing, partial discharge testing etc.)	Yes		
Oil filtration and replacement	Yes		
Painting	Yes		
Sight glass replacement	Yes		
Bolt tightening	Yes		
General housekeeping (remove debris from radiator etc.)	Yes		
Repair/ replacement of connections to earthing system	Yes		

Minor repair to existing cooling radiators (rust/ leaks)	Yes		
On site processing to recondition oil to remove moisture and acidity from windings			*Yes*
Replacement of cooling radiators			*Yes*
Replacement of conservator tanks		Yes	
Replacement of bushings		Yes	
Replacement of cable box			*Yes*
Installation of replacement windings			*Yes*
Complete factory refurbishment			*Yes*

20kV Transformer (PM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Bushing replacement	Yes		
Replacement of gaskets and seals	Yes		
Sight glass replacement	Yes		
Align arcing horns	Yes		
Complete workshop/factory refurbishment		*Yes*	

20kV Transformer (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (oil testing, partial discharge testing etc.)	Yes		
Oil filtration and replacement	Yes		
Painting	Yes		
Sight glass replacement	Yes		
Bolt tightening	Yes		
General housekeeping (remove debris from radiator etc.)	Yes		
Repair/ replacement of connections to earthing system	Yes		
Minor repair to existing cooling radiators (rust/ leaks)	Yes		
On site processing to recondition oil to remove			*Yes*

moisture and acidity from windings			
Replacement of cooling radiators			*Yes*
Replacement of conservator tanks		Yes	
Replacement of bushings		Yes	
Replacement of cable box			*Yes*
Installation of replacement windings			*Yes*
Complete factory refurbishment			*Yes*

Batteries at GM HV Substations			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Examination of electrolyte level, plates, connections etc.	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. internal impedance measurements, discharge tests etc.)	Yes		
Topping up individual cells	Yes		
Cleaning/ re-tightening of inter-cell connections	Yes		
Replacement of individual cells	*Yes*		

33kV OHL (Pole Line) Conductor			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Diagnostic testing of overhead conductor (e.g. corman testing)	Yes		
Removal and testing of overhead conductor core samples from existing overhead line	Yes		
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	Yes		
Replacement of spiral vibration dampers	Yes		

Replacement of bird flight deterrents	*Yes*		

33kV Pole			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Pole testing using diagnostic equipment	Yes		
Repairs to existing stay and stay insulators that do not constitute complete replacement of the stay wire and insulator.	Yes		
Replacement of individual insulators or fittings	Yes		
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	Yes		
Replacement of signs and notices	Yes		
Repair or replacement of pole earthing	Yes		
Remedial application of wood pole preservative (e.g. insertion of boron rods)	Yes		
Replacement of a complete set of insulators associated with an existing pole		Yes	
Complete replacement of pole top steelwork (including associated insulators and fittings)		Yes	
The complete replacement of stay wire and insulator (including stay block or anchor as necessary) at an existing pole		Yes	
Replacement of steelwork associated with pole mounted switchgear and equipment		Yes	
Pole Strengthening (e.g. clamping a steelwork supporting bracket to an existing pole)			*Yes*
Small footprint steel masts: Replacement of individual bolts	Yes		
Small footprint steel masts: Repairs to existing steelwork members (e.g. welding)	Yes		

Small footprint steel masts: Patch painting following steelwork repair	Yes		
Small footprint steel masts: Replacement of step bolts		Yes	
Small footprint steel masts: Replacement of individual steelwork members			*Yes*
Small footprint steel masts: Painting of mast		Yes	
Small footprint steel masts: Repairs to foundations	*Yes*		

66kV OHL (Pole Line) Conductor			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Diagnostic testing of overhead conductor (e.g. corman testing)	Yes		
Removal and testing of overhead conductor core samples from existing overhead line	Yes		
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	Yes		
Replacement of spiral vibration dampers	Yes		
Replacement of bird flight deterrents	*Yes*		

66kV Pole			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Pole testing using diagnostic equipment	Yes		
Repairs to existing stay and stay insulators that do not	Yes		

constitute complete replacement of the stay wire and insulator.			
Replacement of individual insulators or fittings	Yes		
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	Yes		
Replacement of signs and notices	Yes		
Repair or replacement of pole earthing	Yes		
Remedial application of wood pole preservative (e.g. insertion of boron rods)	Yes		
Replacement of a complete set of insulators associated with an existing pole		Yes	
Complete replacement of pole top steelwork (including associated insulators and fittings)		Yes	
The complete replacement of stay wire and insulator (including stay block or anchor as necessary) at an existing pole		Yes	
Pole Strengthening (e.g. clamping a steelwork supporting bracket to an existing pole)			*Yes*
Small footprint steel masts: Replacement of individual bolts	Yes		
Small footprint steel masts: Repairs to existing steelwork members (e.g. welding)	Yes		
Small footprint steel masts: Patch painting following steelwork repair	Yes		
Small footprint steel masts: Replacement of step bolts		Yes	
Small footprint steel masts: Replacement of individual steelwork members			*Yes*
Small footprint steel masts: Painting of mast		Yes	
Small footprint steel masts: Repairs to foundations	*Yes*		

33kV OHL (Tower line) Conductor			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Diagnostic testing of overhead conductor (e.g. corman testing)	Yes		
Removal and testing of overhead conductor core samples from existing overhead line	Yes		
Repairs to overhead conductor, such as remaking compression joints, replacement of jumpers or repair of broken strands	Yes		
Replacement of individual suspension clamps	Yes		
Replacement of individual dampers and spacer dampers	*Yes*		

33kV Tower			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Diagnostic testing (e.g. line polarisation resistance tests or transient dynamic response tests on foundations)	Yes		
Vegetation management around the tower base	Yes		
Replacement of individual bolts	Yes		
Replacement of signs and notices	Yes		
Repairs to existing steelwork members (e.g. welding)	Yes		
Patch painting following steelwork repair	Yes		
Replacement of anti-climbing devices (e.g. complete outrigger or barbed wire only)	Yes		
Replacement of step bolts		Yes	
Replacement of individual steelwork members			*Yes*
Painting of tower			*Yes*
Repairs to tower foundations (e.g. remuffing)	Yes		
Replacement of tower foundations			*Yes*

33kV Fittings			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Repairs to insulation and fitting sub components, including replacement of individual insulators, dishes, shackles, arcing horns etc.	Yes		
Replacement of individual suspension clamps	Yes		
Replacement of individual dampers and spacer dampers	Yes		
Replacement of individual insulator strings { note: replacement of a complete set of insulators/ fittings is an 'Asset Replacement' activity }		*Yes*	

66kV OHL (Tower line) Conductor			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Diagnostic testing of overhead conductor (e.g. corman testing)	Yes		
Removal and testing of overhead conductor core samples from existing overhead line	Yes		
Repairs to overhead conductor, such as remaking compression joints, replacement of jumpers or repair of broken strands	Yes		
Replacement of individual suspension clamps	Yes		
Replacement of individual dampers and spacer dampers	*Yes*		

66kV Tower			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Diagnostic testing (e.g. line polarisation resistance tests or transient dynamic response tests on foundations)	Yes		
Vegetation management around the tower base	Yes		
Replacement of individual bolts	Yes		
Replacement of signs and notices	Yes		

Repairs to existing steelwork members (e.g. welding)	Yes		
Patch painting following steelwork repair	Yes		
Replacement of anti-climbing devices (e.g. complete outrigger or barbed wire only)	Yes		
Replacement of step bolts		Yes	
Replacement of individual steelwork members			*Yes*
Painting of tower			*Yes*
Repairs to tower foundations (e.g. remuffing)	Yes		
Replacement of tower foundations			*Yes*

66kV Fittings			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Repairs to insulation and fitting sub components, including replacement of individual insulators, dishes, shackles, arcing horns etc.	Yes		
Replacement of individual suspension clamps	Yes		
Replacement of individual dampers and spacer dampers	Yes		
Replacement of individual insulator strings { note: replacement of a complete set of insulators/ fittings is an 'Asset Replacement' activity }		*Yes*	

33kV UG Cable (Non Pressurised)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of cable joints and terminations (including sealing ends)		*Yes*	

33kV UG Cable (Oil)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of an individual cable joint or termination (including sealing ends)		Yes	
Remaking an individual existing joint or termination in situ		Yes	
Replacement/remaking of all fluid filled cable joints and terminations (including sealing ends) within a hydraulic section – where undertaken as a single planned intervention			*Yes*
Repressurising of cable fluid system (e.g. top up of oil)	Yes		
Resealing of pressurising equipment (e.g. resealing tanks)	Yes		
Resoldering of pressurising equipment pipework	Yes		
Replacement of pressurising equipment valves and/or gauges		Yes	
Replacement of pressurising equipment pipework and/or tanks		Yes	
Re-engineering (replacement/refurbishment/relocation) of pressurising system equipment with the objective of reducing the normal operating fluid pressure in the cable system		*Yes*	

33kV UG Cable (Gas)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of an individual cable joint or termination (including sealing ends)		Yes	
Remaking an individual existing joint or termination in situ		Yes	
Replacement/remaking of all fluid filled cable joints and terminations (including sealing ends) within a			*Yes*

hydraulic section – where undertaken as a single planned intervention			
Repressurising of cable fluid system (e.g. top up of gas)	Yes		
Resealing of pressurising equipment (e.g. resealing tanks)	Yes		
Resoldering of pressurising equipment pipework	Yes		
Replacement of pressurising equipment valves and/or gauges		Yes	
Replacement of pressurising equipment pipework and/or tanks		Yes	
Re-engineering (replacement/refurbishment/relocation) of pressurising system equipment with the objective of reducing the normal operating fluid pressure in the cable system		*Yes*	

66kV UG Cable (Non Pressurised)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of cable joints and terminations (including sealing ends)		*Yes*	

66kV UG Cable (Oil)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of an individual cable joint or termination (including sealing ends)		Yes	
Remaking an individual existing joint or termination in situ		Yes	
Replacement/remaking of all fluid filled cable joints and terminations (including sealing ends) within a hydraulic section – where undertaken as a single planned intervention			*Yes*

Repressurising of cable fluid system (e.g. top up of oil)	Yes		
Resealing of pressurising equipment (e.g. resealing tanks)	Yes		
Resoldering of pressurising equipment pipework	Yes		
Replacement of pressurising equipment valves and/or gauges		Yes	
Replacement of pressurising equipment pipework and/or tanks		Yes	
Re-engineering (replacement/refurbishment/relocation) of pressurising system equipment with the objective of reducing the normal operating fluid pressure in the cable system		*Yes*	

66kV UG Cable (Gas)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of an individual cable joint or termination (including sealing ends)		Yes	
Remaking an individual existing joint or termination in situ		Yes	
Replacement/remaking of all fluid filled cable joints and terminations (including sealing ends) within a hydraulic section – where undertaken as a single planned intervention			*Yes*
Repressurising of cable fluid system (e.g. top up of gas)	Yes		
Resealing of pressurising equipment (e.g. resealing tanks)	Yes		
Resoldering of pressurising equipment pipework	Yes		
Replacement of pressurising equipment valves and/or gauges		Yes	
Replacement of pressurising equipment pipework and/or tanks		Yes	
Re-engineering (replacement/refurbishment/relocation) of pressurising system equipment with the objective of reducing the normal operating fluid pressure in the cable system		*Yes*	

EHV Sub Cable			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of cable joints and terminations (including sealing ends)		Yes	
Replacement of physical protection of submarine cable (e.g. split piping, backfill cover to exposed cables at shoreline etc.)	*Yes*		

33kV CB (Air Insulated Busbars)(ID) (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*

Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Replacement of the moving portion (truck) in withdrawable equipment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Repairs to interlocks	Yes		
Repairs to racking device	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

33kV CB (Air Insulated Busbars)(OD) (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		

Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Replacement of arcing horns	Yes		
Replacement of outdoor bay components: busbar, connections, clamps or droppers	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Replacement of the moving portion (truck) in withdrawable equipment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Painting of plant	Yes		
Repairs to interlocks	*Yes*		

33kV CB (Gas Insulated Busbars)(ID) (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		

Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Replacement of the moving portion (truck) in withdrawable equipment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Repairs to interlocks	Yes		
Repairs to racking device	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

33kV CB (Gas Insulated Busbars)(OD) (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests,	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		

Replacement of contacts (arcing contacts/ main	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Replacement of arcing horns	Yes		
Replacement of outdoor bay components: busbar, connections, clamps or droppers	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated		Yes	
Complete Refurbishment (factory or onsite) e.g. strip			*Yes*
Painting of plant	Yes		
Repairs to interlocks	*Yes*		

33kV Switch (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6	Yes		

and oil), whether reprocessed or not			
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of the moving portion (truck) in withdrawable equipment			*Yes*
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Painting of plant	Yes		
Repairs to interlocks	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

33kV Switchgear - Other			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (operating tests etc.)	Yes		
Lubrication of moving parts	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of braids	Yes		
Replacement of interruptor heads	Yes		
Replacement of individual components of the operating mechanism	Yes		

Replacement of individual components of the drive rods and linkages	Yes		
Replacement of bushings	Yes		
Repair/ replacement of earth bonding and earth mats	Yes		
Repair/ replacement of interlocks	Yes		
Complete replacement of the operating mechanism		Yes	
Complete replacement of drive rods and linkages		Yes	
Replacement of control/communications battery	Yes		
Replacement or repair of control box (and/or communications devices)	*Yes*		

33kV Switch (PM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of external bushings	Yes		
Replacement of arcing horns	Yes		
Repair/ replacement of earth bonding	Yes		

Complete replacement of the operating mechanism		Yes	
Complete replacement of drive rods and linkages		Yes	
Painting of plant	Yes		
Replacement of control/communications battery	Yes		
Replacement or repair of control box (and/or communications devices)	*Yes*		

33kV RMU			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	

Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Painting of plant	Yes		
Repairs to interlocks	*Yes*		

66kV CB (Air Insulated Busbars)(ID) (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Complete Refurbishment (factory or onsite) e.g. strip			*Yes*

down & rebuild, replacing all worn parts			
Repairs to interlocks	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

66kV CB (Air Insulated Busbars)(OD) (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Replacement of arcing horns	Yes		
Replacement of outdoor bay components: busbar, connections, clamps or droppers	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	

Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Painting of plant	Yes		
Repairs to interlocks	*Yes*		

66kV CB (Gas Insulated Busbars)(ID) (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Repairs to interlocks	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

66kV CB (Gas Insulated Busbars)(OD) (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Replacement of arcing horns	Yes		
Replacement of outdoor bay components: busbar, connections, clamps or droppers	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Complete Refurbishment (factory or onsite) e.g. strip			*Yes*

down & rebuild, replacing all worn parts			
Painting of plant	Yes		
Repairs to interlocks	*Yes*		

66kV Switchgear - Other			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	**Refurbishment (NARM)**
Functional testing (operating tests etc.)	Yes		
Lubrication of moving parts	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of braids	Yes		
Replacement of interruptor heads	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of bushings	Yes		
Repair/ replacement of earth bonding and earth mats	Yes		
Repair/ replacement of interlocks	Yes		
Complete replacement of the operating mechanism		Yes	
Complete replacement of drive rods and linkages		Yes	
Replacement of control/communications battery	Yes		
Replacement or repair of control box (and/or communications devices)	Yes		

33kV Transformer (PM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Bushing replacement	Yes		
Replacement of gaskets and seals	Yes		
Sight glass replacement	Yes		
Align arcing horns	Yes		
Complete workshop/factory refurbishment		*Yes*	

33kV Transformer (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Test operation of forced cooling (fans/ pumps)	Yes		
Test Bucholz & winding temperature indicators/ relays	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (oil testing, partial discharge testing etc.)	Yes		
Change silica gel in breather	Yes		
Oil filtration and replacement	Yes		
Painting	Yes		
Sight glass replacement	Yes		
Bolt tightening	Yes		
General housekeeping (remove debris from radiator etc.)	Yes		
Repair/ replacement of connections to earthing system	Yes		
Minor repair to existing cooling radiators (rust/ leaks)	Yes		
Replacement of breather unit	Yes		
Tapchanger diverter contact replacement	Yes		
Tapchanger selector contact replacement	Yes		
Replacement of individual fan motors	Yes		
Replacement of pumps	Yes		
Replacement of gaskets & seals			*Yes*
On site processing to recondition oil to remove moisture and acidity from windings			*Yes*
Replacement of cooling radiators			*Yes*
Replacement of conservator tanks		Yes	
Standalone replacement of auxiliary transformer and/or earthing devices		Yes	
Replacement of tap changers or full replacement of tap changer mechanism			*Yes*
Replacement of bushings			*Yes*
Replacement of cable box			*Yes*

Installation of replacement windings			*Yes*
Complete factory refurbishment			*Yes*

66kV Transformer (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Test operation of forced cooling (fans/ pumps)	Yes		
Test Bucholz & winding temperature indicators/ relays	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (oil testing, partial discharge testing etc.)	Yes		
Change silica gel in breather	Yes		
Oil filtration and replacement	Yes		
Painting	Yes		
Sight glass replacement	Yes		
Bolt tightening	Yes		
General housekeeping (remove debris from radiator etc.)	Yes		
Repair/ replacement of connections to earthing system	Yes		
Minor repair to existing cooling radiators (rust/ leaks)	Yes		
Replacement of breather unit	Yes		
Tapchanger diverter contact replacement	Yes		
Tapchanger selector contact replacement	Yes		
Replacement of individual fan motors	Yes		
Replacement of pumps	Yes		
Replacement of gaskets & seals			*Yes*
On site processing to recondition oil to remove moisture and acidity from windings			*Yes*
Replacement of cooling radiators			*Yes*
Replacement of conservator tanks		Yes	
Standalone replacement of auxiliary transformer and/or earthing devices		Yes	

Replacement of tap changers or full replacement of tap changer mechanism			*Yes*
Replacement of bushings			*Yes*
Replacement of cable box			*Yes*
Installation of replacement windings			*Yes*
Complete factory refurbishment			*Yes*

Batteries at 33kV Substations			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Examination of electrolyte level, plates, connections etc.	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. internal impedance measurements, discharge tests etc.)	Yes		
Topping up individual cells	Yes		
Cleaning/ re-tightening of inter-cell connections	Yes		
Replacement of individual cells	*Yes*		

Batteries at 66kV Substations			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	**Refurbishment (NARM)**
Examination of electrolyte level, plates, connections etc.	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. internal impedance measurements, discharge tests etc.)	Yes		
Topping up individual cells	Yes		
Cleaning/ re-tightening of inter-cell connections	Yes		
Replacement of individual cells	Yes		

132kV OHL (Pole Line) Conductor			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	**Refurbishment (NARM)**
Diagnostic testing of overhead conductor (e.g. corman testing)	Yes		
Removal and testing of overhead conductor core samples from existing overhead line	Yes		
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	Yes		
Replacement of bird flight deterrents	Yes		

132kV Pole			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Pole testing using diagnostic equipment	Yes		
Repairs to existing stay and stay insulators that do not constitute complete replacement of the stay wire and insulator.	Yes		
Replacement of individual insulators or fittings	Yes		
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	Yes		
Replacement of signs and notices	Yes		
Repair or replacement of pole earthing	Yes		
Remedial application of wood pole preservative (e.g. insertion of boron rods)	Yes		
Replacement of a complete set of insulators associated with an existing pole		Yes	
Complete replacement of pole top steelwork (including associated insulators and fittings)		Yes	
The complete replacement of stay wire and insulator (including stay block or anchor as necessary) at an existing pole		Yes	
Replacement of steelwork associated with pole mounted switchgear and equipment		Yes	
Pole Strengthening (e.g. clamping a steelwork supporting bracket to an existing pole)		Yes	
Small footprint steel masts: Replacement of individual bolts	Yes		
Small footprint steel masts: Repairs to existing steelwork members (e.g. welding)	Yes		

Small footprint steel masts: Patch painting following steelwork repair	Yes		
Small footprint steel masts: Replacement of step bolts		Yes	
Small footprint steel masts: Replacement of individual steelwork members		Yes	
Small footprint steel masts: Painting of mast		Yes	
Small footprint steel masts: Repairs to foundations	*Yes*		

132kV OHL (Tower line) Conductor			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Diagnostic testing of overhead conductor (e.g. corman testing)	YesYes		
Removal and testing of overhead conductor core samples from existing overhead line	YesYes		
Repairs to overhead conductor, such as remaking compression joints, replacement of jumpers or repair of broken strands	Yes		
Replacement of individual suspension clamps	Yes		
Replacement of individual dampers and spacer dampers	*Yes*		

132kV Tower			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Diagnostic testing (e.g. line polarisation resistance tests or transient dynamic response tests on foundations)	Yes		
Vegetation management around the tower base	Yes		
Replacement of individual bolts	Yes		
Replacement of signs and notices	Yes		
Repairs to existing steelwork members (e.g. welding)	Yes		
Patch painting following steelwork repair	Yes		

Replacement of anti-climbing devices (e.g. complete outrigger or barbed wire only)	Yes		
Replacement of step bolts		Yes	
Replacement of individual steelwork members			*Yes*
Painting of tower			*Yes*
Repairs to tower foundations (e.g. remuffing)	Yes		
Replacement of tower foundations			*Yes*

132kV Fittings			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Repairs to insulation and fitting sub components, including replacement of individual insulators, dishes, shackles, arcing horns etc.	Yes		
Replacement of individual suspension clamps	Yes		
Replacement of individual dampers and spacer dampers	Yes		
Replacement of individual insulator strings { note: replacement of a complete set of insulators/ fittings is an 'Asset Replacement' activity }		*Yes*	

132kV UG Cable (Non Pressurised)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of cable joints and terminations (including sealing ends)		*Yes*	

132kV UG Cable (Oil)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical	Yes		

connections (e.g. partial discharge testing, sheath testing etc.)			
Sheath repairs	Yes		
Replacement of an individual cable joint or termination (including sealing ends)		Yes	
Remaking an individual existing joint or termination in situ		Yes	
Replacement/remaking of all fluid filled cable joints and terminations (including sealing ends) within a hydraulic section – where undertaken as a single planned intervention			*Yes*
Repressurising of cable fluid system (e.g. top up of oil)	Yes		
Resealing of pressurising equipment (e.g. resealing tanks)	Yes		
Resoldering of pressurising equipment pipework	Yes		
Replacement of pressurising equipment valves and/or gauges		Yes	
Replacement of pressurising equipment pipework and/or tanks		Yes	
Re-engineering (replacement/refurbishment/relocation) of pressurising system equipment with the objective of reducing the normal operating fluid pressure in the cable system		*Yes*	

132kV UG Cable (Gas)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of an individual cable joint or termination (including sealing ends)		Yes	
Remaking an individual existing joint or and termination in situ		Yes	
Replacement/remaking of all fluid filled cable joints and terminations (including sealing ends) within a hydraulic section – where undertaken as a single planned intervention			*Yes*
Repressurising of cable fluid system (e.g. top up of gas)	Yes		
Resealing of pressurising equipment (e.g. resealing tanks)	Yes		

Resoldering of pressurising equipment pipework	Yes		
Replacement of pressurising equipment valves and/or gauges		Yes	
Replacement of pressurising equipment pipework and/or tanks		Yes	
Re-engineering (replacement/refurbishment/relocation) of pressurising system equipment with the objective of reducing the normal operating fluid pressure in the cable system		*Yes*	

132kV Sub Cable			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. partial discharge testing, sheath testing etc.)	Yes		
Sheath repairs	Yes		
Replacement of cable joints and terminations (including sealing ends)		Yes	
Replacement of physical protection of submarine cable (e.g. split piping, backfill cover to exposed cables at shoreline etc.)	*Yes*		

132kV CB (Air Insulated Busbars)(ID) (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		

Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Repairs to interlocks	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

132kV CB (Air Insulated Busbars)(OD) (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		

Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Replacement of arcing horns	Yes		
Replacement of outdoor bay components: busbar, connections, clamps or droppers	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Painting of plant	Yes		
Repairs to interlocks	*Yes*		

132kV CB (Gas Insulated Busbars)(ID) (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		

Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Repairs to interlocks	Yes		
Repairs to busbar joints (extensible switchgear)	*Yes*		

132kV CB (Gas Insulated Busbars)(OD) (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (trip tests, operation of interlocks etc.)	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (insulation resistance testing, continuity testing, partial discharge testing, trip timing tests, oil testing, SF6 leak detection etc.)	Yes		
Lubrication of moving parts	Yes		
Renewal and replacement of insulation medium (e.g. SF6 and oil), whether reprocessed or not	Yes		

Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of crossjet pots (turbulator)	Yes		
Replacement of individual gaskets and seals	Yes		
Replacement of barriers	Yes		
Replacement of individual components of the operating mechanism	Yes		
Replacement of individual components of the drive rods and linkages	Yes		
Replacement of cable boxes			*Yes*
Replacement of bushings (e.g. external bushings, cable box bushings etc.)	Yes		
Replacement of arcing horns	Yes		
Replacement of outdoor bay components: busbar, connections, clamps or droppers	Yes		
Repair/ replacement of earth bonding	Yes		
Complete replacement of the operating mechanism			*Yes*
Complete replacement of drive rods and linkages		Yes	
Replacement of vacuum bottles (including replacement of associated seals)		Yes	
Complete Refurbishment (factory or onsite) e.g. strip down & rebuild, replacing all worn parts			*Yes*
Painting of plant	Yes		
Repairs to interlocks	*Yes*		

132kV Switchgear - Other			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing (operating tests etc.)	Yes		
Lubrication of moving parts	Yes		
Replacement of contacts (arcing contacts/ main contacts)	Yes		
Replacement of braids	Yes		
Replacement of interruptor heads	Yes		
Replacement of individual components of the operating mechanism	Yes		

Replacement of individual components of the drive rods and linkages	Yes		
Replacement of bushings	Yes		
Repair/ replacement of earth bonding and earth mats	Yes		
Repair/ replacement of interlocks	Yes		
Complete replacement of the operating mechanism		Yes	
Complete replacement of drive rods and linkages		Yes	
Replacement of control/communications battery	Yes		
Replacement or repair of control box (and/or communications devices)	*Yes*		

132kV Transformer (GM)			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Test operation of forced cooling (fans/ pumps)	Yes		
Test Bucholz & winding temperature indicators/ relays	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (oil testing, partial discharge testing etc.)	Yes		
Change silica gel in breather	Yes		
Oil filtration and replacement	Yes		
Painting	Yes		
Sight glass replacement	Yes		
Bolt tightening	Yes		
General housekeeping (remove debris from radiator etc.)	Yes		
Repair/ replacement of connections to earthing system	Yes		
Minor repair to existing cooling radiators (rust/ leaks)	Yes		
Replacement of breather unit	Yes		
Tapchanger diverter contact replacement	Yes		
Tapchanger selector contact replacement	Yes		
Replacement of individual fan motors	Yes		

Replacement of pumps	Yes		
Replacement of gaskets & seals			*Yes*
On site processing to recondition oil to remove moisture and acidity from windings			*Yes*
Replacement of cooling radiators			*Yes*
Replacement of conservator tanks		Yes	
Standalone replacement of auxiliary transformer and/or earthing devices		Yes	
Replacement of tap changers or full replacement of tap changer mechanism			*Yes*
Replacement of bushings			*Yes*
Replacement of cable box			*Yes*
Installation of replacement windings			*Yes*
Complete factory refurbishment			*Yes*

Batteries at 132kV Substations			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Examination of electrolyte level, plates, connections etc.	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. internal impedance measurements, discharge tests etc.)	Yes		
Topping up individual cells	Yes		
Cleaning/ re-tightening of inter-cell connections	Yes		
Replacement of individual cells	*Yes*		

Pilot Wire Overhead			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing - where not undertaken as part of 'Repair & Maintenance - Protection schemes (all voltages)' activities	Yes		
Invasive diagnostic testing requiring removal of covers or physical connections (e.g. insulation resistance tests) - where not undertaken as part of 'Repair & Maintenance -	Yes		

Protection schemes (all voltages)' activities			
Sheath repairs	Yes		
Replacement of joints or remaking of terminations	Yes		
Repairs to catenary	*Yes*		

Pilot Wire Underground			
Activity	**Repair & Maintenance**	**Refurbishment (Non NARM)**	***Refurbishment (NARM)***
Functional testing - where not undertaken as	Yes		
Invasive diagnostic testing requiring removal of covers or physical	Yes		
Sheath repairs	Yes		
Replacement of	*Yes*		

Substation (Civils)		
Activity	**Repair & Maintenance**	***Civil Works Driven By Condition Of Civil Items***
Painting/ Timber treatment of Substation Civil Items (e.g. doors, window frames, fencing	Yes	
Weeding of substation grounds	Yes	
Maintenance of security lighting	Yes	
Maintenance of perimeter security system	Yes	
Replacement of individual security lighting		*Yes*
Replacement of security lighting system		*Yes*
Replacement of perimeter security system		*Yes*
Installation of a new plinth		*Yes*
Significant modification to existing plinth		*Yes*
Removal of graffiti/ vandalism	Yes	
Full replacement of GRP or steel enclosures		*Yes*
Renewal, or significant modification to		*Yes*
Building extension/ complete replacement of		*Yes*
Building foundation works		*Yes*
Repair/ renewal affecting less than 20% of	Yes	
Renewal of 20% or more of roof		*Yes*
Full replacement of roof		*Yes*
Pointing (including building and bound		*Yes*
Replacement of individual glass panes	Yes	
Replacement of sills	Yes	
Full replacement of window (incl. frame)		*Yes*
Full replacement of door (and door frame, if		*Yes*

Repair, or replacement, of locks/ handles	Yes	
Replacement of sections of guttering,		*Yes*
Repairs to heaters or dehumidifying equipment	Yes	
Replacement of internal lighting systems		*Yes*
Replacement of individual heater panels		*Yes*
Replacement of internal heating systems		*Yes*
Replacement of dehumidifying equipment		*Yes*
Works on below ground drainage		*Yes*
Repairs to boundary walls, fences and gates	Yes	
Full, or partial replacement, of boundary walls		*Yes*
Full, or partial replacement, of security fences		*Yes*
Replacement of gates		*Yes*
Groundworks (i.e. works associated with the external surface area of a substation site, such as tarmacking, chippings within site curtilage,		*Yes*

3. Asset Replacement Scope of Works

For reporting of Asset Replacement, the following unit cost scope, for each asset applies. The column '**Report As Prime Asset**' is marked only as 'Yes' where asset volumes are required to be reported on the Asset Replacement Costs and Volumes table.

LV main (OHL) conductor

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Dismantle, remove and dispose of existing LV OH line conductor	Yes	
Supply and erect replacement LV OH line conductor	Yes	
Undertake any necessary tree cutting		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	Report Costs And Activity As Separate Prime Asset Replacement	Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset
Remove and dispose of existing LV insulators		LV Pole refurbishment (non NARM) /Pole Repair & Maintenance
Supply and fit replacement LV insulators		LV Pole refurbishment (non NARM) /Pole Repair & Maintenance
Replacement of poles	LV Pole	
Installation of additional poles	LV Pole	
Renew stays on an existing pole (where required), including excavate stay holes		LV Pole refurbishment (non NARM) /Pole Repair & Maintenance

LV service (OHL)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Dismantle, remove and dispose of existing LV OH service flight	Yes	
Dismantle, remove and dispose of existing LV OH undereaves wiring	Yes	
Supply and install replacement LV OH service flight	Yes	
Supply and install replacement LV OH undereaves wiring	Yes	

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	Report Costs And Activity As Separate Prime Asset Replacement	Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset
Dismantle, remove and dispose of existing LV cut out (including meter board where required)	Metered cut-out	
Supply & install replacement LV cut out (including meter board where required)	Metered cut-out	

LV Poles

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Dismantle, remove and dispose of existing pole (where applicable)	Yes	
Excavate pole hole		
Dress and erect new pole (including insulators etc)	Yes	
Disconnect/reconnect/re-erect LV OH service flights		
Disconnect/reconnect/re-erect streetlight		
Undertake any necessary tree cutting		
Excavate stay holes		
Renew stays (where required)		
Disconnect, dismantle, remove and dispose of existing LV UG cable and associated pole termination (where appropriate)		LV Main (UG Plastic)
Excavate joint hole (where appropriate)		

Supply and make off replacement LV UG cable pole termination (where appropriate)		
Supply and make off LV UG cable joint at base of pole (where appropriate)		
Supply and erect LV UG cable and associated pole termination (where appropriate). Connect to overhead line		LV Main (UG Plastic)
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replace undereaves service wiring	LV Service OHL	

LV Main (UG Plastic)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply & Install replacement LV UG Mains Cable	Yes	
Disconnect and abandon existing LV cable (where applicable)	Yes	
All trench excavation, backfilling & reinstatement (including joint holes for all mains joints, with the exception of joint holes for mains/ service joints where excavated separately to trenchwork for LV mains UG cable) associated with LV mains UG cable		
Supply & installation of cable ducting as required		
Supply & Make Off LV Mains/mains Joint(s)		
Dismantle existing LV overhead line (where applicable)	Yes	
Disconnect, dismantle, remove and dispose of existing pole termination (where appropriate)		
Supply and erect pole termination (where appropriate). Connect to overhead line		
Associated network operations (Switching, linking, use of mobile generation,		

issuing safety documentation, pre-commissioning tests and energisation)		
Purchase easement		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply & Install replacement LV UG Service Cable, where complete service cable replaced	LV Service (UG)	
All trench excavation, backfilling & reinstatement (including joint holes) associated with LV UG service cable, where complete service cable replaced	LV Service (UG)	
Supply & Make Off LV Mains/service Joint(s), where complete service cable replaced	LV Service (UG)	
Supply & Install replacement LV UG Service Cable, to extend existing LV underground service cable		LV Services UG Refurbishment non NARM
All trench excavation, backfilling & reinstatement (including joint holes) associated with new LV UG service cable, required to extend existing LV underground service cable		LV Services UG Refurbishment non NARM
Supply & Make Off LV Mains/service Joint(s), to transfer existing LV underground service cable onto replacement LV main		LV Services UG Refurbishment non NARM
Supply & Make Off LV service/service Joint(s), to transfer existing LV underground service cable onto replacement LV main		LV Services UG Refurbishment non NARM SD
Associated replacement of LV UG link box	LV UGB & Pillars (OD not at Substation)	

Rising and Lateral Mains

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Disconnect and remove existing rising & lateral mains cabling systems including	Yes	

busbars / cabling / containment systems and distribution boards		
Installation of new distribution board(s) and connecting cables to building supply intake point		
Installation of rising and lateral cabling systems from distribution board(s) to each individual premise, including making ways in building, installing cables, (& busbars (if required)) and installation of cable containment & support systems plus mechanical protection (incl making good any cable ways)	Yes	
Installation of cableheads / disconnection capabilities at each premise & all cable termination work		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replacement of incoming underground cable to multi-occupancy building	LV Service (UG)/ LV Main (UG) (as appropriate)	

LV service (UG)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install LV service cable	Yes	
Disconnect and abandon existing LV UG service cable	Yes	
All trench excavation, backfilling & reinstatement (including joint holes) associated with LV UG service cable		
Supply & installation of cable ducting as required		
Supply and make off LV mains/LV UG service joint (where appropriate)		

Supply and make off LV UG service/LV UG service joint (where appropriate)		
Pot end existing LV UG service (where appropriate)		
Connect LV UG service to LV OH Main (where appropriate)		
Dismantle, remove and dispose of existing LV overhead service flight (where appropriate)		
Dismantle, remove and dispose of existing LV undereaves service (where appropriate)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Dismantle, remove and dispose of existing LV cut out (including meter board where required)	Cut Out (Metered)	
Supply & install replacement LV cut out (including meter board where required)	Cut Out (Metered)	

LV service associated with RLM

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

LV circuit breaker

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**

Dismantle, remove and dispose of existing LV CB	Yes	
Supply & Install Replacement LV CB	Yes	
Supply and install LV cable		LV Main (UG Plastic)
Supply and make off LV connections		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of mechanical aids to facilitate installation		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

LV Pillar (ID)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing LV switchgear (eg LV pillar, LV Board (WM) including any integral LV circuit breaker)	Yes	
Supply & Install Replacement LV Pillar	Yes	
Supply & Install Replacement transformer-mounted fuse chamber	Yes	
Supply & Install LV UG Cable		LV Main (UG Plastic)
Disconnect and abandon existing LV UG cable		LV Main (UG Plastic)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off Permanent Joint		
Supply & Make Off Temporary Joints (if required)		
Terminate LV UG cables into replacement LV pillar		

Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Dismantle existing 6.6/11kV GM transformer	6.6/11kV Transformer (GM)	
Supply and install replacement 6.6/11kV GM transformer	6.6/11kV Transformer (GM)	
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth)		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement

LV Pillar (OD)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing LV switchgear (eg LV pillar, LV Board (WM) including any integral LV circuit breaker)	Yes	
Supply & Install Replacement LV Pillar	Yes	
Supply & Install Replacement transformer-mounted fuse chamber	Yes	
Supply & Install LV UG Cable		LV Main (UG Plastic)
Disconnect and abandon existing LV UG cable		LV Main (UG Plastic)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off Permanent Joint		

Supply & Make Off Temporary Joints (if required)		
Terminate LV UG cables into replacement LV pillar		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Dismantle existing 6.6/11kV GM transformer	6.6/11kV Transformer (GM)	
Supply and install replacement 6.6/11kV GM transformer	6.6/11kV Transformer (GM)	
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth)		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement

LV board (WM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing LV switchgear (eg LV pillar, LV Board (WM) including any integral LV circuit breaker)	Yes	
Supply & Install Replacement LV Board (WM)	Yes	
Supply & Install LV UG Cable		LV Main (UG Plastic)
Disconnect and abandon existing LV UG cable		LV Main (UG Plastic)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		

Supply & Make Off Permanent Joint		
Supply & Make Off Temporary Joints (if required)		
Terminate LV UG cables into replacement LV board		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

Cut Out (Metered)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing LV cut out (including meter board where required)	Yes	
Supply & install replacement LV cut out (including meter board where required)	Yes	

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

LV board (X-type network) (WM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Dismantle, remove and dispose of existing LV switchgear (eg LV pillar, LV Board (WM) including any integral LV circuit breaker)	Yes	
Supply & Install Replacement LV Board (WM)(X Type Network)	Yes	
Supply & Install LV UG Cable		LV Main (UG Plastic)
Disconnect and abandon existing LV UG cable		LV Main (UG Plastic)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off Permanent Joint		
Supply & Make Off Temporary Joints (if required)		
Terminate LV UG cables into replacement LV board		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		

6.6/11kV OHL (Conventional Conductor)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Dismantle, remove and dispose of existing HV OH line conductor	Yes	
Supply and erect replacement HV OH line conductor	Yes	
Install, and remove, temporary back stays required to facilitate conductor replacement		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Undertake any necessary tree cutting		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Remove and dispose of existing HV insulators/ crossarms		6.6/11kV Pole refurbishment (non NARM)/ Pole Repair & Maintenance
Supply and fit replacement HV insulators/ crossarms		6.6/11kV Pole refurbishment (non NARM)/ Pole Repair & Maintenance
Replacement of poles	6.6/11kV Pole	
Installation of additional poles	6.6/11kV Pole	
Renew stays on an existing pole (where required), including excavate stay holes		6.6/11kV Pole refurbishment (non NARM)/ Pole Repair & Maintenance

20kV Poles

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing pole (where appropriate)	Yes	
Excavate pole hole		
Dress and erect new (additional or replacement) pole (including cross arm and insulators etc)	Yes	
Undertake any necessary tree cutting		
Excavate stay holes		
Renew stays (where required)		
Dismantle, remove and dispose of existing HV UG cable and associated pole termination (where appropriate)		6.6/11kV UG cable
Excavate joint hole (where appropriate)		
Supply and make of replacement HV UG cable pole termination (where appropriate)		
Supply and make of HV UG cable joint at base of pole (where appropriate)		
Supply and erect HV UG cable and associated pole termination (where appropriate)		6.6/11kV UG cable

Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Remove Pole Mounted equipment where appropriate (eg CB, switch, transformer)	As appropriate	
Supply and erect Pole Mounted equipment where appropriate (eg CB, switch, transformer)	As appropriate	

6.6/11kV UG cable

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply & Install 6.6/11kV UG Cable	Yes	
Disconnect and abandon 6.6/11kV UG Cable (where applicable)	Yes	
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & installation of cable ducting as required		
Disconnect, dismantle, remove and dispose of existing pole termination (where appropriate)		
Supply and erect pole termination (where appropriate). Connect to overhead line		
Supply & Make Off 6.6/11kV Joint(s)		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Purchase Easements		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or**

		Disposal Of Asset
Supply and install UG pilot cable	Pilot Wire Underground	

20kV UG cable

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply & Install 20kV UG Cable	Yes	
Disconnect and abandon 6.6/11kV UG Cable (where applicable)	Yes	
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & installation of cable ducting as required		
Disconnect, dismantle, remove and dispose of existing pole termination (where appropriate)		
Supply and erect pole termination (where appropriate). Connect to overhead line		
Supply & Make Off 20kV Joint(s)		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Purchase Easements		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply and install UG pilot cable	Pilot Wire Underground	

HV Sub cables

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install HV submarine cable	Yes	
Disconnect and abandon existing HV submarine cable	Yes	

Vessel mobilisation/demobilisation		
Dive team mobilisation/demobilisation		
Jointers mobilisation/demobilisation		
Ploughing or post lay burial jetting.		
Protection where burial not achieved.		
Transition Jointing on shore		
Shore end protection burial		
Tide and weather delays		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

6.6/11kV CB (PM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 6.6/11kV pole mounted circuit breaker	Yes	
Dismantle, remove and dispose of 6.6/11kV pole mounted circuit breaker	Yes	
Supply and install HV earthwire (assuming original CB was unearthed)		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Dismantle, remove and dispose of existing radio and RTU for remote control functionality (where radio and RTU existed previously)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In**

		Addition Or Disposal Of Asset
Replace existing HV pole (if required)	6.6/11kV Pole	
Supply and install radio and RTU for remote control functionality (where radio and RTU existed previously)		Operational IT & Telecoms
Supply and install radio and RTU for remote control functionality (where no radio or RTU existed previously)		QoS
Supply and install bypass isolator/ switch	As appropriate	

6.6/11kV CB (GM) Primary

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Supply and install replacement 6.6/11kV GM circuit breaker (including protection relays and transducers)	Yes	
Dismantle, remove and dispose of existing 6.6/11kV GM circuit breaker (including protection relays and transducers)	Yes	
Supply & Install 6.6/11kV UG Cable (including interplant cables to power transformers)		6.6/11kV UG cable
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & installation of cable ducting as required		
Supply & Make Off 6.6/11kV Joint(s)		
Terminate 6.6/11kV UG cable into circuit breaker		
Replacement of associated protection, control or SCADA equipment located at the same site as the prime asset being replaced		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Connection to substation earth bar (including extension of substation earth grid, where required)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	Report Costs And Activity As Separate Prime Asset Replacement	Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset
Supply & install replacement battery and associated charger	Batteries at HV GM substation	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at HV GM substation	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment - Protection
Construction of new switchroom/demolition of existing switchroom/Modification to		Civil Works Driven By Asset Replacement

switchroom (including plinth and trenchwork integral to the building)		
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth), located externally to a building		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement

6.6/11kV CB (GM) Secondary

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 6.6/11kV GM circuit breaker (including protection relays and transducers)	Yes	
Dismantle, remove and dispose of existing 6.6/11kV GM circuit breaker (including protection relays)	Yes	
Supply & Install 6.6/11kV UG Cable (including interplant cables to power transformers)		6.6/11kV UG cable
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 6.6/11kV Joint(s)		
Terminate 6.6/11kV UG cable into circuit breaker		
Replacement of associated protection, control or SCADA equipment located at the same site as the prime asset being replaced		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply & install replacement battery and associated charger (where applicable)	Batteries at HV GM substation	

Dismantle, remove and dispose of existing battery and associated charger (where applicable)	Batteries at HV GM substation	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment - Protection
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenchwork integral to the building)		Civil Works Driven By Asset Replacement
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth), located externally to a building		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement
Install RTU and associated telecommunications (where no SCADA functionality existed previously) (ie as an enhancement)		QoS
Renew RTU and/or associated telecommunications (where SCADA functionality existed previously)		Operational IT & Telecoms

6.6/11kV Switch (PM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing sectionaliser	Yes	
Supply and install new sectionaliser	Yes	
Supply and install HV earthwire (assuming original switch was unearthed)		
Dismantle, remove and dispose of existing radio and RTU for remote control functionality (where radio and RTU existed previously)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replace existing HV pole (if required)	6.6/11kV Pole	
Supply and install radio and RTU for remote control functionality (where radio and RTU existed previously)		Operational IT & Telecoms

Supply and install radio and RTU for remote control functionality (where no radio or RTU existed previously)		QoS

6.6/11kV Switchgear - Other (PM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing Other HV PM switchgear (eg ABI, ABSD, ASL & HV PM fuse)	Yes	
Supply and install new Other HV PM Switchgear (eg ABI, ABSD, ASL & HV PM fuse)	Yes	
Supply and install HV earthwire (assuming original switchgear was unearthed)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replace existing HV pole (if required)	6.6/11kV Pole	

6.6/11kV Switch (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 6.6/11kV GM switch	Yes	
Dismantle, remove and dispose of existing 6.6/11kV switchgear (eg GM switch, RMU & GM CB)	Yes	
Supply & Install 6.6/11kV UG Cable (including interplant cables to power transformers)		6.6/11kV UG cable
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 6.6/11kV Joint(s)		
Terminate 6.6/11kV UG cable into GM switch		
Associated network operations (Switching, linking, use of mobile generation,		

issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Fit actuators etc, for remote operation (where functionality existed previously)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenchwork integral to the building)		Civil Works Driven By Asset Replacement
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth), located externally to a building		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement
Fit actuators etc, for remote operation (where no functionality existed previously)		QoS
Fit RTU and telecommunications equipment for remote operation (where no functionality existed previously)		QoS
Fit RTU and telecommunications equipment for remote operation (where functionality existed previously)		Operational IT & Telecoms

6.6/11kV RMU

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and Install Replacement 6.6/11kV RMU	Yes	
Dismantle, remove and dispose of existing 6.6/11kV switchgear (eg GM switch, RMU & GM CB)	Yes	
Supply & Install 6.6/11kV UG Cable (including interplant cables to power transformers)		6.6/11kV UG cable
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		

Supply & Make Off 6.6/11kV Joint(s)		
Terminate 6.6/11kV UG cable into RMU		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Fit actuators etc, for remote operation (where functionality existed previously)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenchwork integral to the building)		Civil Works Driven By Asset Replacement
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth), located externally to a building		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement
Fit actuators etc, for remote operation (where no functionality existed previously)		QoS
Fit RTU and telecommunications equipment for remote operation (where no functionality existed previously)		QoS
Fit RTU and telecommunications equipment for remote operation (where functionality existed previously)		Operational IT & Telecoms

6.6/11kV X-type RMU

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and Install Replacement 6.6/11kV X-type RMU including 2 sets of unit protection CTs	Yes	
Dismantle, remove and dispose of existing 6.6/11kV switchgear (eg GM switch, RMU & GM CB)	Yes	

Supply & Install 6.6/11kV UG Cable		6.6/11kV UG Cable
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 6.6/11kV Joint(s)		
Terminate 6.6/11kV UG cable into RMU		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Replace unit protection equipment at the same site as the prime asset being replaced		
Multicore cabling - remove & replace existing cabling (including all retermination)		
Breakdown transformer end box and replace CTs. Install CTs in Transformer endbox, remake and recommission		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replace associated unit protection equipment at a remote site to the prime asset being replaced		Refurbishment - Protection
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenchwork integral to the building)		Civil Works Driven By Asset Replacement
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth), located externally to a building		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement

20kV CB (PM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 20kV pole mounted circuit breaker	Yes	

Dismantle, remove and dispose of 20kV pole mounted circuit breaker	Yes	
Supply and install HV earthwire (assuming original CB was unearthed)		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Dismantle, remove and dispose of existing radio and RTU for remote control functionality		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replace existing HV pole (if required)	20kV Pole	
Supply and install radio and RTU for remote control functionality (where radio and RTU existed previously)		Operational IT & Telecoms
Supply and install radio and RTU for remote control functionality (where no radio or RTU existed previously)		QoS
Supply and install bypass isolator/ switch	As appropriate	

20kV CB (GM) Primary

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 20kV GM circuit breaker (including protection relays and transducers)	Yes	
Dismantle, remove and dispose of existing 20kV GM circuit breaker (including protection relays and transducers)	Yes	
Supply & Install 20kV UG Cable (including interplant cables to power transformers)		20kV UG cable
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 20kV Joint(s)		
Terminate 6.6/11kV UG cable into circuit breaker		

Replacement of associated protection, control or SCADA equipment located at the same site as the prime asset being replaced		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Connection to substation earth bar (including extension of substation earth grid, where required)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply & install replacement battery and associated charger	Batteries at HV GM substation	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at HV GM substation	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment - Protection
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenchwork integral to the building)		Civil Works Driven By Asset Replacement
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth), located externally to a building		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement

20kV CB (GM) Secondary

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 20kV GM circuit breaker (including protection relays)	Yes	

Dismantle, remove and dispose of existing 20kV GM circuit breaker (including protection relays)	Yes	
Supply & Install 20kV UG Cable (including interplant cables to power transformers)		20kV UG cable
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 20kV Joint(s)		
Terminate 20kV UG cable into circuit breaker		
Replacement of associated protection, control or SCADA equipment located at the same site as the prime asset being replaced		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply & install replacement battery and associated charger (where applicable)	Batteries at HV GM substation	
Dismantle, remove and dispose of existing battery and associated charger (where applicable)	Batteries at HV GM substation	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment - Protection
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenchwork integral to the building)		Civil Works Driven By Asset Replacement
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth), located externally to a building		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement
Install RTU and associated telecommunications (where no SCADA		QoS

functionality existed previously) (ie as an enhancement)		
Renew RTU and/or associated telecommunications (where SCADA functionality existed previously)		Operational IT & Telecoms

20kV Switch (PM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing sectionaliser	Yes	
Supply and install new sectionaliser	Yes	
Supply and install HV earthwire (assuming original switch was unearthed)		
Dismantle, remove and dispose of existing radio and RTU for remote control functionality (where radio and RTU existed previously)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replace existing HV pole (if required)	20kV Pole	
Supply and install radio and RTU for remote control functionality (where radio and RTU existed previously)		Operational IT & Telecoms
Supply and install radio and RTU for remote control functionality (where no radio or RTU existed previously)		QoS

20kV Switchgear - Other (PM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing Other HV PM switchgear (eg ABI, ABSD, ASL & HV PM fuse)	Yes	
Supply and install new Other HV PM Switchgear (eg ABI, ABSD, ASL & HV PM fuse)	Yes	

Supply and install HV earthwire (assuming original switchgear was unearthed)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replace existing HV pole (if required)	20kV Pole	

20kV Switch (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 20kV GM switch	Yes	
Dismantle, remove and dispose of existing 20kV switchgear (eg GM switch, RMU & GM CB)	Yes	
Supply & Install 20kV UG Cable (including interplant cables to power transformers)		20kV UG cable
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 20kV Joint(s)		
Terminate 20kV UG cable into GM switch		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Fit actuators etc, for remote operation (where functionality existed previously)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenchwork integral to the building)		Civil Works Driven By Asset Replacement
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth), located externally to a building		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement
Fit actuators etc, for remote operation (where no functionality existed previously)		QoS
Fit RTU and telecommunications equipment for remote operation (where no functionality existed previously)		QoS
Fit RTU and telecommunications equipment for remote operation (where functionality existed previously)		Operational IT & Telecoms

20kV RMU

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and Install Replacement 20kV RMU	Yes	
Dismantle, remove and dispose of existing 20kV switchgear (eg GM switch, RMU & GM CB)	Yes	
Supply & Install 20kV UG Cable (including interplant cables to power transformers)		20kV UG cable
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 20kV Joint(s)		
Terminate 20kV UG cable into RMU		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Fit actuators etc, for remote operation (where functionality existed previously)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not**

		Result In Addition Or Disposal Of Asset
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenchwork integral to the building)		Civil Works Driven By Asset Replacement
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth), located externally to a building		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement
Fit actuators etc, for remote operation (where no functionality existed previously)		QoS
Fit RTU and telecommunications equipment for remote operation (where no functionality existed previously)		QoS
Fit RTU and telecommunications equipment for remote operation (where functionality existed previously)		Operational IT & Telecoms

6.6/11kV Transformer (PM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle existing 6.6/11kV transformer (either pole mounted or ground mounted)	Yes	
Supply and install replacement pole mounted 6.6/11kV transformer	Yes	
Renew LV fusegear and associated wiring		
Make off HV & LV connections		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

Replace existing HV pole (if required)	6.6/11kV Pole	

6.6/11kV Transformer (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle existing 6.6/11kV transformer (either pole mounted or ground mounted)	Yes	
Supply and install replacement 6.6/11kV GM transformer	Yes	
Direct connection of LV switchgear/equipment to transformer, where applicable (eg transformer mounted pillar)		
Direct connection of HV switchgear/equipment to transformer, where applicable (eg transformer mounted RMU)		
Supply & Install interplant cables to HV switchgear, where applicable		6.6/11kV UG cable
All trenching for interplant cables to HV switchgear, where applicable		
Supply & Install interplant cables to LV switchgear, where applicable		LV UG cable
All trenching for interplant cables to LV switchgear, where applicable		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth)		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement
Dismantle, remove, dispose of existing LV Pillar	LV Pillar	
Supply and install replacement LV Pillar	LV Pillar	

Dismantle, remove, dispose of existing 6.6/11kV GM switchgear	6.6/11kV GM switchgear (as appropriate)	
Supply and install 6.6/11kV GM switchgear	6.6/11kV GM switchgear (as appropriate)	

20kV Transformer (PM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle existing 20kV transformer (either pole mounted or ground mounted)	Yes	
Supply and install replacement pole mounted 20kV transformer	Yes	
Renew LV fusegear and associated wiring		
Make off HV & LV connections		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replace existing HV pole (if required)	20kV Pole	

20kV Transformer (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle existing 20kV transformer (either pole mounted or ground mounted)	Yes	
Supply and install replacement 20kV GM transformer	Yes	
Connect LV switchgear/equipment to transformer (eg cable box or transformer mounted pillar)		

Connect HV switchgear/equipment to transformer (eg cable box or transformer mounted RMU)		
Direct connection of LV switchgear/equipment to transformer, where applicable (eg transformer mounted pillar)		
Direct connection of HV switchgear/equipment to transformer, where applicable (eg transformer mounted RMU)		
Supply & Install interplant cables to HV switchgear, where applicable		20kV UG cable
All trenching for interplant cables to HV switchgear, where applicable		
Supply & Install interplant cables to LV switchgear, where applicable		LV UG cable
All trenching for interplant cables to LV switchgear, where applicable		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth)		Civil Works Driven By Asset Replacement
Modify substation surround/Supply and install substation enclosure		Civil Works Driven By Asset Replacement
Dismantle, remove, dispose of existing LV Pillar	LV Pillar	
Supply and install replacement LV Pillar	LV Pillar	
Dismantle, remove, dispose of existing 20kV GM switchgear	20kV GM switchgear (as appropriate)	
Supply and install 20kV GM switchgear	20kV GM switchgear (as appropriate)	

Batteries at GM HV Substations

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**

Supply & install replacement battery and associated charger	Yes	
Dismantle, remove and dispose of existing battery and associated charger	Yes	
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Construction/Modification to building, or enclosure to accommodate batteries	Appropriate civils works category	

33kV OHL (Pole Line) conductor

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing EHV wood pole OH line conductor	Yes	
Supply and erect replacement EHV wood pole OH line conductor	Yes	
Install, and remove, temporary back stays required to facilitate conductor replacement		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Undertake any necessary tree cutting		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Remove and dispose of existing EHV insulators/ crossarms		33kV Pole refurbishment (non NARM)/

		Pole Repair & Maintenance
Supply and fit replacement EHV insulators/ crossarms		33kV Pole refurbishment (non NARM)/ Pole Repair & Maintenance
Replacement of poles	33kV Pole	
Installation of additional poles	33kV Pole	
Renew stays on an existing pole (where required), including excavate stay holes		33kV Pole refurbishment (non NARM)/ Pole Repair & Maintenance

33kV Pole

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing pole (where appropriate)	Yes	
Excavate pole hole		
Dress and erect new (additional or replacement) pole (including cross arm and insulators etc)	Yes	
Undertake any necessary tree cutting		
Excavate stay holes		
Renew stays (where required)		
Dismantle cross bracing (on H poles)		
Supply and fit replacement cross bracing (on H poles)		
Dismantle, remove and dispose of existing 33kV UG cable and associated pole termination (where appropriate)		33kV UG Cable
Excavate joint hole (where appropriate)		
Supply and make off replacement 33kV UG cable pole termination (where appropriate)		
Supply and make off 33kV UG cable joint at base of pole (where appropriate)		
Supply and erect 33kV UG cable and associated pole box (where appropriate)		33kV UG Cable
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate**	**Report Costs And Activity As Separate**

	Prime Asset Replacement	**Activity That Does Not Result In Addition Or Disposal Of Asset**
Remove Pole Mounted equipment where appropriate (eg CB, switch, transformer)	As appropriate	
Supply and erect Pole Mounted equipment where appropriate (eg CB, switch, transformer)	As appropriate	

66kV OHL (Pole Line) Conductor

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing EHV wood pole OH line conductor	Yes	
Supply and erect replacement EHV wood pole OH line conductor	Yes	
Install, and remove, temporary back stays required to facilitate conductor replacement		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Undertake any necessary tree cutting		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Remove and dispose of existing EHV insulators		66kV Pole refurbishment (non NARM)/ Pole Repair & Maintenance
Supply and fit replacement EHV insulators		66kV Pole refurbishment (non NARM)/ Pole Repair & Maintenance
Replacement of poles	66kV Pole	
Installation of additional poles	66kV Pole	
Renew stays on an existing pole (where required), including excavate stay holes		66kV Pole refurbishment

		(non NARM)/ Pole Repair & Maintenance

66kV Pole

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing pole (where appropriate)	Yes	
Excavate pole hole		
Dress and erect new (additional or replacement) pole (including cross arm and insulators etc)	Yes	
Undertake any necessary tree cutting		
Excavate stay holes		
Renew stays (where required)		
Dismantle cross bracing (on H poles)		
Supply and fit replacement cross bracing (on H poles)		
Dismantle, remove and dispose of existing 66kV UG cable and associated pole termination (where appropriate)		66kV UG Cable
Excavate joint hole (where appropriate)		
Supply and make off replacement 66kV UG cable pole termination (where appropriate)		
Supply and make off 66kV UG cable joint at base of pole (where appropriate)		
Supply and erect 66kV UG cable and associated pole termination (where appropriate)		66kV UG Cable
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Remove Pole Mounted equipment where appropriate (eg CB, switch, transformer)	As appropriate	
Supply and erect Pole Mounted equipment where appropriate (eg CB, switch, transformer)	As appropriate	

33kV OHL (Tower Line) conductor

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Dismantle, remove and dispose of existing EHV tower line OH conductor	Yes	
Supply and erect replacement EHV tower line OH conductor	Yes	
Dismantle, remove and dispose of existing aerial earthwire		
Supply and erect replacement aerial earth wire		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Undertake any necessary tree cutting		
Provision and use of mechanical aids, scaffolding etc		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	Report Costs And Activity As Separate Prime Asset Replacement	Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset
Supply and erect wrapped pilot cable	Pilot wire Overhead	
Remove and dispose of existing EHV insulator sets	33kV Fittings	
Supply and fit replacement EHV insulator sets	33kV Fittings	

33kV Tower

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Dismantle, remove and dispose of existing tower	Yes	
Supply erect new or replacement tower	Yes	
Undertake any necessary tree cutting		
Break up existing foundations and make good ground (where appropriate)		

Excavate and install new or replacement tower foundations (where appropriate)		
Lower and re-erect existing conductors (where appropriate)		
Temporarily divert existing conductors		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Provision and use of mechanical aids, scaffolding etc		
Purchase easements		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Dismantle, remove and dispose of existing insulator sets	33kV Fittings	
Supply and erect new or replacement insulator sets	33kV Fittings	

33kV fittings

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing insulator sets, and fittings (as appropriate)	Yes	
Supply and erect new or replacement insulator sets, and fittings (as appropriate)	Yes	
Lower and re-erect existing conductors (where appropriate)		
Temporarily divert existing conductors		
Undertake any necessary tree cutting		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Provision and use of mechanical aids, scaffolding etc		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

66kV OHL (Tower Line) Conductor

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing EHV tower line OH conductor	Yes	
Supply and erect replacement EHV tower line OH conductor	Yes	
Dismantle, remove and dispose of existing aerial earthwire		
Supply and erect replacement aerial earth wire		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Undertake any necessary tree cutting		
Provision and use of mechanical aids, scaffolding etc		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply and erect wrapped pilot cable	Pilot wire Overhead	
Remove and dispose of existing EHV insulator sets	66kV Fittings	
Supply and fit replacement EHV insulator sets	66kV Fittings	

66kV Tower

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Dismantle, remove and dispose of existing tower	Yes	
Supply erect new or replacement tower	Yes	
Undertake any necessary tree cutting		
Break up existing foundations and make good ground (where appropriate)		
Excavate and install new or replacement tower foundations (where appropriate)		
Lower and re-erect existing conductors (where appropriate)		
Temporarily divert existing conductors		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Provision and use of mechanical aids, scaffolding etc		
Purchase easements		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	Report Costs And Activity As Separate Prime Asset Replacement	Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset
Dismantle, remove and dispose of existing insulator sets	66kV Fittings	
Supply and erect new or replacement insulator sets	66kV Fittings	

66kV Fittings

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Dismantle, remove and dispose of existing insulator sets, and fittings (as appropriate)	Yes	
Supply and erect new or replacement insulator sets, and fittings (as appropriate)	Yes	
Lower and re-erect existing conductors (where appropriate)		
Temporarily divert existing conductors		
Undertake any necessary tree cutting		

Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Provision and use of mechanical aids, scaffolding etc		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

33kV UG cable (Non Pressurised)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply & Install 33kV non pressurised UG Cable	Yes	
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & installation of cable ducting as required		
Supply & Make Off 33kV Joint(s) and terminations		
Disconnect, dismantle, remove and dispose of existing pole or tower termination (where appropriate)		
Supply and erect pole or tower termination (where appropriate). Connect to overhead line		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Fully decommission redundant 33kV cable (pressurised and non pressurised)	Yes	
Dismantle, remove and dispose of pressurised oil tanks etc (where appropriate)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not**

		Result In Addition Or Disposal Of Asset
Supply and install pilot cable	Pilot Wire Underground	
Supply and make off pilot cable joints and terminations	Pilot Wire Underground	

66kV UG Cable (Non Pressurised)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply & Install 66kV non pressurised UG Cable	Yes	
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & installation of cable ducting as required		
Supply & Make Off 66kV Joint(s) and terminations		
Disconnect, dismantle, remove and dispose of existing pole or tower termination (where appropriate)		
Supply and erect pole or tower termination (where appropriate). Connect to overhead line		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Fully decommission redundant 66kV cable (pressurised and non pressurised)	Yes	
Dismantle, remove and dispose of pressurised oil tanks etc (where appropriate)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply and install pilot cable	Pilot wire underground	
Supply and make off pilot cable joints and terminations	Pilot wire underground	

EHV Sub Cable

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Supply and install EHV submarine cable	Yes	
Disconnect and abandon existing EHV submarine cable	Yes	
Vessel mobilisation/demobilisation		
Dive team mobilisation/demobilisation		
Jointers mobilisation/demobilisation		
Ploughing or post lay burial jetting.		
Protection where burial not achieved.		
Transition Jointing on shore		
Shore end protection burial		
Tide and weather delays		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	Report Costs And Activity As Separate Prime Asset Replacement	Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset

33kV CB (Air Insulated Busbars) (ID) (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Supply and install replacement 33kV Indoor circuit breaker (including protection relays and transducers)	Yes	
Dismantle, remove and dispose of existing 33kV CB (either indoor or outdoor including protection relays and transducers)	Yes	
Supply & Install 33kV UG Cable (including interplant cables to power transformers)		33kV UG Cable (Non Pressurised)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		

Supply & Make Off 33kV Joint(s)		
Terminate 33kV UG cable into circuit breaker		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Connection to substation earth bar (including extension of substation earth grid, where required)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply & install replacement battery and associated charger	Batteries at 33kV Substations	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at 33kV Substations	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment - Protection
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenching within building)		Civil Works Driven By Asset Replacement

33kV CB (Air Insulated Busbars) (OD) (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing 33kV CB and associated structures	Yes	
Dismantle, remove and dispose of existing 33kV busbars and associated structures		
Supply and install replacement 33kV outdoor circuit breaker and associated structures	Yes	

Supply and install 33kV busbars and associated structures		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Supply and install replacement control/protection panel at the same site as the prime asset being replaced		
Remove existing control/protection panel at the same site as the prime asset being replaced		
Connection to substation earthing system (including extension of substation earth grid, where required)		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Dismantle, remove and dispose of 33kV isolators and associated structures	33kV Switchgear - Other	
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth)		Civil Works Driven By Asset Replacement
Supply and install 33kV isolators and associated structures where the asset is replaced independently of integral major plant asset replacement	33kV Switchgear - Other	
Supply & install replacement battery and associated charger	Batteries at 33kV Substations	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at 33kV Substations	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes
Construction/Modification of building/ enclosure to accommodate control/protection panel		Civil Works Driven By Asset Replacement

33kV CB (Gas Insulated Busbars) (ID) (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 33kV Indoor circuit breaker (including protection relays and transducers)	Yes	
Dismantle, remove and dispose of existing 33kV CB (either indoor or outdoor including protection relays and transducers)	Yes	
Supply & Install 33kV UG Cable (including interplant cables to power transformers)		33kV UG Cable (Non Pressurised)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 33kV Joint(s)		
Terminate 33kV UG cable into circuit breaker		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Connection to substation earth bar (including extension of substation earth grid, where required)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply & install replacement battery and associated charger	Batteries at 33kV Substations	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at 33kV Substations	
Replacement of associated protection, control or SCADA equipment located at a		Refurbishment – Protection Schemes

remote site to the prime asset being replaced		
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenching within building)		Civil Works Driven By Asset Replacement

33kV CB (Gas Insulated Busbars) (OD) (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing 33kV CB and associated structures	Yes	
Dismantle, remove and dispose of existing 33kV busbars and associated structures		
Supply and install replacement 33kV outdoor circuit breaker and associated structures	Yes	
Supply and install 33kV busbars and associated structures		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Supply and install replacement control/protection panel at the same site as the prime asset being replaced		
Remove existing control/protection panel at the same site as the prime asset being replaced		
Connection to substation earthing system (including extension of substation earth grid, where required)		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Dismantle, remove and dispose of 33kV isolators and associated structures	33kV Switchgear - Other	

Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth)		Civil Works Driven By Asset Replacement
Supply and install 33kV isolators and associated structures, where the asset is replaced independently of integral major plant asset replacement	33kV Switchgear - Other	
Supply & install replacement battery and associated charger	Batteries at 33kV Substations	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at 33kV Substations	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes
Construction/Modification of building/ enclosure to accommodate control/protection panel		Civil Works Driven By Asset Replacement

33kV Switch (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 33kV GM switch	Yes	
Dismantle, remove and dispose of existing 33kV switchgear	Yes	
Supply & Install 33kV UG Cable		33kV UG Cable (Non Pressurised)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 33kV Joint(s)		
Terminate 33kV UG cable into switch		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Connection to substation earthing system (including extension of substation earth grid, where required)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom/Modification to plinth		Civil Works Driven By Asset Replacement

33kV Switchgear - Other

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 33kV disconnectors, fault throwers, earthing switches and associated structures	Yes	
Dismantle, remove and dispose of existing 33kV disconnectors, fault throwers, earthing switches and associated structures	Yes	
Supply & Install 33kV UG Cable / busbars and connectors		33kV UG Cable (Non Pressurised)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 33kV Joint(s) if appropriate		
Terminate 33kV UG cable into switch (if appropriate)		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Supply and install replacement control/protection panel at the same site as the prime asset being replaced		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Connection to substation earthing system (including extension of substation earth grid, where required)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth)		Civil Works Driven By Asset Replacement

33kV Switch (PM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing switch	Yes	
Supply and install new switch	Yes	
Supply and install earthwire (assuming original switch was unearthed)		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Dismantle, remove and dispose of existing radio and RTU for remote control functionality (where radio and RTU existed previously)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replace existing 33kV pole (if required)	33kV Pole	
Supply and install radio and RTU for remote control functionality (where radio and RTU existed previously)		Operational IT & Telecoms

Supply and install radio and RTU for remote control functionality (where no radio or RTU existed previously)		QoS

33kV RMU

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 33kV RMU	Yes	
Dismantle, remove and dispose of existing 33kV switchgear	Yes	
Supply & Install 33kV UG Cable		33kV UG Cable (Non Pressurised)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 33kV Joint(s)		
Terminate 33kV UG cable into RMU		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Supply and install replacement control/protection panel at the same site as the prime asset being replaced		
Remove existing control/protection panel at the same site as the prime asset being replaced		
Connection to substation earthing system (including extension of substation earth grid, where required)		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

Supply & install replacement battery and associated charger	Batteries at 33kV Substations	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at 33kV Substations	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenchwork integral to the building)		Civil Works Driven By Asset Replacement
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth), located externally to a building		Civil Works Driven By Asset Replacement

66kV CB (Air Insulated Busbars) (ID) (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 66kV Indoor circuit breaker (including protection relays and transducers)	Yes	
Dismantle, remove and dispose of existing 66kV CB (either indoor or outdoor including protection panels, relays and transducers)	Yes	
Supply & Install 66kV UG Cable (including interplant cables to power transformers)		66kV UG Cable (Non Pressurised)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 66kV Joint(s)		
Terminate 66kV UG cable into circuit breaker		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Connection to substation earth bar (including extension of substation earth grid, where required)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply & install replacement battery and associated charger	Batteries at 33kV Substations	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at 33kV Substations	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenchwork integral to the building)		Civil Works Driven By Asset Replacement

66kV CB (Air Insulated Busbars) (OD) (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing 66kV CB and associated structures	Yes	
Dismantle, remove and dispose of existing 66kV busbars and associated structures		
Supply and install replacement 66kV outdoor circuit breaker and associated structures	Yes	
Supply and install 66kV busbars and associated structures		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Supply and install replacement control/protection panel at the same site as the prime asset being replaced		
Remove existing control/protection panel at the same site as the prime asset being replaced		
Connection to substation earthing system (including extension of substation earth grid, where required)		

Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Dismantle, remove and dispose of 66kV isolators and associated structures	66kV Switchgear - Other	
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth)		Civil Works Driven By Asset Replacement
Supply and install 66kV isolators and associated structures	66kV Switchgear - Other	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at 66kV Substations	
Supply & install replacement battery and associated charger	Batteries at 66kV Substations	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes
Construction/Modification of building/ enclosure to accommodate control/protection panel		Civil Works Driven By Asset Replacement

66kV CB (Gas Insulated Busbars) (ID) (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 66kV Indoor circuit breaker (including protection relays and transducers)	Yes	
Dismantle, remove and dispose of existing 66kV CB (either indoor or outdoor including protection panels, relays and transducers)	Yes	
Supply & Install 66kV UG Cable (including interplant cables to power transformers		66kV UG Cable (Non-Pressurised)

Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 66kV Joint(s)		
Terminate 66kV UG cable into circuit breaker		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Connection to substation earth bar (including extension of substation earth grid, where required)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply & install replacement battery and associated charger	Batteries at 33kV Substations	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at 33kV Substations	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom (including plinth and trenchwork integral to the building)		Civil Works Driven By Asset Replacement

66kV CB (Gas Insulated Busbars) (OD) (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing 66kV CB and associated structures	Yes	

Dismantle, remove and dispose of existing 66kV busbars and associated structures		
Supply and install replacement 66kV outdoor circuit breaker and associated structures	Yes	
Supply and install 66kV busbars and associated structures		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Supply and install replacement control/protection panel at the same site as the prime asset being replaced		
Remove existing control/protection panel at the same site as the prime asset being replaced		
Connection to substation earthing system (including extension of substation earth grid, where required)		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Dismantle, remove and dispose of 66kV isolators and associated structures	66kV Switchgear - Other	
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth)		Civil Works Driven By Asset Replacement
Supply and install 66kV isolators and associated structures	66kV Switchgear - Other	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at 66kV Substations	
Supply & install replacement battery and associated charger	Batteries at 66kV Substations	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes

Construction/Modification of building/ enclosure to accommodate control/protection panel		Civil Works Driven By Asset Replacement

66kV Switchgear - Other

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 66kV disconnectors, fault throwers, earthing switches and associated structures	Yes	
Dismantle, remove and dispose of existing 66kV disconnectors, fault throwers, earthing switches and associated structures	Yes	
Supply & Install 66kV UG Cable / busbars and connectors		66kV UG Cable (Non Pressurised)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 66kV Joint(s) if appropriate		
Terminate 66kV UG cable into switch (if appropriate)		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Supply and install replacement control/protection panel at the same site as the prime asset being replaced		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Connection to substation earthing system (including extension of substation earth grid, where required)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth)		Civil Works Driven By Asset Replacement

33kV Transformer (PM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle existing 33kV transformer (either pole mounted or ground mounted)	Yes	
Supply and install replacement pole mounted 33kV transformer	Yes	
Renew LV fusegear and associated wiring		
Make off EHV & LV connections		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replace existing 33kV pole (if required)	33kV Pole	

33kV Transformer (GM)

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install 33kV GM power transformer	Yes	
Dismantle, remove and dispose of existing power transformer	Yes	
Supply and install secondary voltage earthing transformer/reactor/resistor		
Dismantle existing earthing transformer/reactor/resistor		

Supply and install replacement multicore cable		
Make off multicore terminations		
Remove existing multicore cable		
Supply and install replacement AVC/control & protection panel		
Remove existing AVC/control & protection panel		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab etc to aid plant installation		
Connection to substation earthing system (including extension of substation earth grid, where required)		
For cable connected transformers:		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Install 33kV Interplant cables		33kV UG Cable (Non Pressurised)
Supply & make off 33kV cable terminations		
Supply & make off 33kV cable joints		
Supply & install secondary interplant cables (6.6kV, 11kV & 20kV)		UG cable as appropriate
Supply & make off secondary cable terminations (6.6kV, 11kV & 20kV)		
Supply & make off secondary cable joints (6.6kV, 11kV & 20kV)		
For overhead connected transformers:		
Dismantle, remove and dispose of existing 33kV OH terminations (inc busbars and supports)		
Supply & Make Off 33kV OH terminations (inc busbars and supports)		
Dismantle, remove and dispose of existing secondary OH terminations (inc busbars and supports)		
Supply & Make Off secondary OH terminations (inc busbars and supports)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or**

		Disposal Of Asset
Modification to concrete plinths/bases (including where appropriate complete new plinths and break of existing plinths)		Civil Works Driven By Asset Replacement
Construct/refurbish oil bund (where oil bund previously existed)		Civil Works Driven By Asset Replacement
Construct oil bund (where no oil bund previously existed)		Oil Pollution Mitigation Schemes
Dismantlement/modification/reconstruction of noise enclosures		Civil Works Driven By Asset Replacement
Modification of site walls		Civil Works Driven By Asset Replacement
Construction/Modification to switchroom to accommodate control/protection panel		Civil Works Driven By Asset Replacement

66kV Transformer

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install 66kV GM power transformer	Yes	
Dismantle, remove and dispose of existing power transformer	Yes	
Supply and install secondary voltage earthing transformer/reactor/resistor		
Dismantle existing earthing transformer/reactor/resistor		
Supply and install replacement multicore cable		
Make off multicore terminations		
Remove existing multicore cable		
Supply and install replacement AVC/control & protection panel		
Remove existing AVC/control & protection panel		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab etc to aid plant installation		

Connection to substation earthing system (including extension of substation earth grid, where required)		
For cable connected transformers:		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Install 66kV Interplant cables		66kV UG Cable (Non pressurised)
Supply & make off 66kV cable terminations		
Supply & make off 66kV cable joints		
Supply & install secondary interplant cables (6.6kV, 11kV & 20kV)		UG cable as appropriate
Supply & make off secondary cable terminations (6.6kV, 11kV & 20kV)		
Supply & make off secondary cable joints (6.6kV, 11kV & 20kV)		
For overhead connected transformers:		
Dismantle, remove and dispose of existing 66kV OH terminations (inc busbars and supports)		
Supply & Make Off 66 kV OH terminations (inc busbars and supports)		
Dismantle, remove and dispose of existing secondary OH terminations (inc busbars and supports)		
Supply & Make Off secondary OH terminations (inc busbars and supports)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Modification to concrete plinths/bases (including where appropriate complete new plinths and break of existing plinths)		Civil Works Driven By Asset Replacement
Construct/refurbish oil bund (where oil bund previously existed)		Civil Works Driven By Asset Replacement
Construct oil bund (where no oil bund previously existed)		Oil Pollution Mitigation Schemes
Dismantlement/modification/reconstruction of noise enclosures		Civil Works Driven By

		Asset Replacement
Modification of site walls		Civil Works Driven By Asset Replacement
Construction/Modification to switchroom to accommodate control/protection panel		Civil Works Driven By Asset Replacement

Batteries at 33kV Substations

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Supply & install replacement battery and associated charger	Yes	
Dismantle, remove and dispose of existing battery and associated charger	Yes	
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

Costs Outside Scope of Replacing Prime Asset	Report Costs And Activity As Separate Prime Asset Replacement	Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset
Construction/Modification to building, or enclosure to accommodate batteries		Civil Works Driven By Asset Replacement

Batteries at 66kV Substations

COSTS WITHIN SCOPE OF REPLACING PRIME ASSET	Report As Prime Asset	Report As Consequential Asset
Supply & install replacement battery and associated charger	Yes	
Dismantle, remove and dispose of existing battery and associated charger	Yes	
Associated network operations		

(Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Construction/Modification to building, or enclosure to accommodate batteries		Civil Works Driven By Asset Replacement

132kV OHL (Pole Line) Conductor

Costs Within Scope of Replacing Prime Asset	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing 132kV wood pole OH line conductor	Yes	
Supply and erect replacement 132kV wood pole OH line conductor	Yes	
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Undertake any necessary tree cutting		

Costs Outside Scope of Replacing Prime Asset	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Remove and dispose of existing 132kV insulators		132kV Pole Refurbishment (non NARM/ Pole Repair & Maintenance

Supply and fit replacement 132kV insulators		132kV Pole Refurbishment (non NARM)/ Pole Repair & Maintenance
Replacement of poles	132kV Pole	
Installation of additional poles	132kV Pole	

132kV Pole

Costs Within Scope of Replacing Prime Asset	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing pole (where appropriate)	Yes	
Excavate pole hole		
Dress and erect new (additional or replacement) pole (including cross arm and insulators etc)	Yes	
Undertake any necessary tree cutting		
Excavate stay holes		
Renew stays (where required)		
Dismantle cross bracing (on H poles)		
Supply and fit replacement cross bracing (on H poles)		
Dismantle, remove and dispose of existing 132kV UG cable and associated cable termination (where appropriate)		132kV UG Cable (as appropriate)
Excavate joint hole (where appropriate)		
Supply and make off replacement 132kV pole top UG cable termination (where appropriate)		
Supply and make of 132kV UG cable joint at base of pole (where appropriate)		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Purchase easements		

Costs Outside Scope of Replacing Prime Asset	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

132kV OHL (Tower Line) Conductor

Costs Within Scope of Replacing Prime Asset	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing 132kV tower line OH conductor	Yes	

Supply and erect replacement 132kV tower line OH conductor	Yes	
Dismantle, remove and dispose of existing aerial earthwire		
Supply and erect replacement aerial earth wire		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Undertake any necessary tree cutting		
Provision and use of mechanical aids, scaffolding etc		

Costs Outside Scope of Replacing Prime Asset	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply and erect wrapped pilot cable	Pilot Wire Overhead	
Remove and dispose of existing 132kV insulator sets	132kV Fittings	
Supply and fit replacement 132kV insulator sets	132kV Fittings	

132kV Tower

Costs Within Scope of Replacing Prime Asset	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing tower	Yes	
Supply erect new or replacement tower	Yes	
Undertake any necessary tree cutting		
Break up existing foundations and make good ground (where appropriate)		
Excavate and install new or replacement tower foundations (where appropriate)		
Lower and re-erect existing conductors (where appropriate)		
Temporarily divert existing conductors		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Provision and use of mechanical aids, scaffolding etc		
Purchase easements		

Costs Outside Scope of Replacing Prime Asset	Report Costs And Activity As Separate Prime Asset Replacement	Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset
Dismantle, remove and dispose of existing insulator sets	132kV Fittings	
Supply and erect new or replacement insulator sets	132kV Fittings	

132kV Fittings

Costs Within Scope of Replacing Prime Asset	Report As Prime Asset	Report As Consequential Asset
Dismantle, remove and dispose of existing insulator sets and fittings	Yes	
Supply and erect new or replacement insulator sets and fittings	Yes	
Lower and re-erect existing conductors (where appropriate)		
Temporarily divert existing conductors		
Undertake any necessary tree cutting		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Provision and use of mechanical aids, scaffolding etc		

Costs Outside Scope of Replacing Prime Asset	Report Costs And Activity As Separate Prime Asset Replacement	Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset

132kV UG Cable (Non Pressurised)

Costs Within Scope of Replacing Prime Asset	Report As Prime Asset	Report As Consequential Asset
Supply & Install 132kV non pressurised UG Cable	Yes	
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & installation of cable ducting as required		
Supply & Make Off 132kV Joint(s) and terminations		
Disconnect, dismantle, remove and dispose of existing pole or tower termination (where appropriate)		
Supply and erect pole or tower termination (where appropriate). Connect to overhead line		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Fully decommission redundant pressurised 132kV cable	Yes	
Dismantle, remove and dispose of pressurised oil tanks etc (where appropriate)		

Costs Outside Scope of Replacing Prime Asset	Report Costs And Activity As Separate Prime Asset Replacement	Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset
Supply and install pilot cable	Pilot Wire Underground	
Supply and make off pilot cable joints and terminations	Pilot Wire Underground	

132kV Sub cable

Costs Within Scope of Replacing Prime Asset	Report As Prime Asset	Report As Consequential Asset
Supply and install 132kV submarine cable	Yes	
Disconnect and abandon existing 132kV submarine cable	Yes	
Vessel mobilisation/demobilisation		
Dive team mobilisation/demobilisation		
Jointers mobilisation/demobilisation		
Ploughing or post lay burial jetting.		
Protection where burial not achieved.		
Transition Jointing on shore		
Shore end protection burial		
Tide and weather delays		

Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

Costs Outside Scope of Replacing Prime Asset	Report Costs And Activity As Separate Prime Asset Replacement	Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset

132kV CB (Air Insulated Busbars) (ID)

Costs Within Scope of Replacing Prime Asset	Report As Prime Asset	Report As Consequential Asset
Supply and install replacement 132kV Indoor circuit breaker (including protection relays and transducers)	Yes	
Dismantle, remove and dispose of existing 132kV CB (either indoor or outdoor including protection panels, relays and transducers)	Yes	
Supply & Install 132kV UG Cable (including interplant cables to power transformers)		132kV UG Cable (Non Pressurised)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 132kV Joint(s)		
Terminate 132kV UG cable into circuit breaker		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Connection to substation earth bar (including extension of substation earth grid, where required)		

Costs Outside Scope of Replacing Prime Asset	Report Costs And Activity As Separate Prime Asset Replacement	Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset
Supply & install replacement battery and associated charger	Batteries at 132kV Substations	

Dismantle, remove and dispose of existing battery and associated charger	Batteries at 132kV Substations	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment Protection Schemes
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom		Civil Works Driven By Asset Replacement

132kV CB (Air Insulated Busbars) (OD)

Costs Within Scope of Replacing Prime Asset	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing 132kV CB and associated structures	Yes	
Dismantle, remove and dispose of existing 132kV busbars and associated structures		
Supply and install replacement 132kV outdoor circuit breaker and associated structures (including post mounted CTs and structures for use with live tank circuit breakers)	Yes	
Supply and install 132kV busbars and associated structures		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Supply and install replacement control/protection panel at the same site as the prime asset being replaced		
Remove existing control/protection panel at the same site as the prime asset being replaced		
Connection to substation earthing system (including extension of substation earth grid, where required)		

Costs Outside Scope of Replacing Prime Asset	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Dismantle, remove and dispose of 132kV isolators and associated structures	132kV Switchgear - Other	
Modification to concrete plinth/base (including where appropriate		Civil Works Driven By Asset Replacement

complete new plinths and break of existing plinth)		
Supply and install 132kV isolators and associated structures	132kV Switchgear - Other	
Supply & install replacement battery and associated charger	Batteries at 132kV Substations	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at 132kV Substations	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes
Construction/Modification of building/ enclosure to accommodate control/protection panel		Civil Works Driven By Asset Replacement

132kV CB (Gas Insulated Busbars) (ID)

Costs Within Scope of Replacing Prime Asset	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 132kV Indoor circuit breaker (including protection relays and transducers)	Yes	
Dismantle, remove and dispose of existing 132kV CB (either indoor or outdoor including protection panels, relays and transducers)	Yes	
Supply & Install 132kV UG Cable (including interplant cables to power transformers, except where associated power transformer replacement is undertaken coincident with the circuit breaker replacement)		132kV UG Cable (Non Pressurised)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 132kV Joint(s)		
Terminate 132kV UG cable into circuit breaker		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Connection to substation earth bar (including extension of substation earth grid, where required)		

Costs Outside Scope of Replacing Prime Asset	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Supply & install replacement battery and associated charger	Batteries at 132kV Substations	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at 132kV Substations	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes
Construction of new switchroom/demolition of existing switchroom/Modification to switchroom		Civil Works Driven By Asset Replacement

132kV CB (Gas Insulated Busbars) (OD)

Costs Within Scope of Replacing Prime Asset	**Report As Prime Asset**	**Report As Consequential Asset**
Dismantle, remove and dispose of existing 132kV CB and associated structures	Yes	
Dismantle, remove and dispose of existing 132kV busbars and associated structures		
Supply and install replacement 132kV outdoor circuit breaker and associated structures (including post mounted CTs and structures for use with live tank circuit breakers)	Yes	
Supply and install 132kV busbars and associated structures		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Supply and install replacement control/protection panel at the same site as the prime asset being replaced		
Remove existing control/protection panel at the same site as the prime asset being replaced		
Connection to substation earthing system (including extension of substation earth grid, where required)		

COSTS OUTSIDE SCOPE OF REPLACING PRIME ASSET	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Dismantle, remove and dispose of 132kV isolators and associated structures	132kV Switchgear - Other	
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth)		Civil Works Driven By Asset Replacement
Supply and install 132kV isolators and associated structures	132kV Switchgear - Other	
Supply & install replacement battery and associated charger	Batteries at 132kV Substations	
Dismantle, remove and dispose of existing battery and associated charger	Batteries at 132kV Substations	
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes
Construction/Modification of building/ enclosure to accommodate control/protection panel		Civil Works Driven By Asset Replacement

132kV Switchgear - Other

Costs Within Scope of Replacing Prime Asset	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install replacement 132kV disconnectors, fault throwers, earthing switches and associated structures	Yes	
Dismantle, remove and dispose of existing 132kV disconnectors, fault throwers, earthing switches and associated structures	Yes	
Supply & Install 132kV UG Cable / busbars and connectors		132kV UG Cable (Non Pressurised)
Supply & installation of cable ducting as required		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Make Off 132kV Joint(s) if appropriate		
Terminate 132kV UG cable into switch (if appropriate)		
Make off multicore terminations		
Dismantle, remove and dispose of existing multicore cable		
Supply and install replacement control/protection panel at the same site as the prime asset being replaced		

Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab to aid plant installation		
Connection to substation earthing system (including extension of substation earth grid, where required)		

Costs Outside Scope of Replacing Prime Asset	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Replacement of associated protection, control or SCADA equipment located at a remote site to the prime asset being replaced		Refurbishment – Protection Schemes
Modification to concrete plinth/base (including where appropriate complete new plinths and break of existing plinth)		Civil Works Driven By Asset Replacement

132kV Transformer

Costs Within Scope of Replacing Prime Asset	**Report As Prime Asset**	**Report As Consequential Asset**
Supply and install 132kV power transformer	Yes	
Dismantle, remove and dispose of existing power transformer (either 132kV, 66kV or 33kV)	Yes	
Supply and install secondary voltage earthing transformer/reactor/resistor		
Dismantle existing earthing transformer/reactor/resistor (either 33kV , 66kV, 20kV or 11kV)		
Supply and install replacement multicore cable		
Make off multicore terminations		
Dismantle remove dispose of existing multicore cable		
Supply and install replacement AVC/control & protection panel		
Remove existing AVC/control & protection panel		
Associated network operations (Switching, linking, use of mobile generation,		

issuing safety documentation, pre-commissioning tests and energisation)		
Delivery of plant to site and use of crane/hiab etc to aid plant installation		
Connection to substation earthing system (including extension of substation earth grid, where required)		
For cable connected transformers:		
All trench excavation, backfilling & reinstatement (including joint holes)		
Supply & Install 132kV Interplant cables		132kV UG Cable (non pressurised)
Supply & make off 132kV cable terminations		
Supply & make off 132kV cable joints		
Supply & install secondary interplant cables (66kV, 33kV & 11kV)		UG cable as appropriate
Supply & make off secondary cable terminations (66kV, 33kV & 11kV)		
Supply & make off secondary cable joints (66kV, 33kV & 11kV)		
For overhead connected transformers:		
Dismantle, remove and dispose of existing 132kVkV OH terminations (inc busbars and supports)		
Supply & Make Off 132kVkV OH terminations (inc busbars and supports)		
Dismantle, remove and dispose of existing secondary OH terminations (inc busbars and supports)		
Supply & Make Off secondary OH terminations (inc busbars and supports)		

Costs Outside Scope of Replacing Prime Asset	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Modification to concrete plinths/bases (including where appropriate complete new plinths and break of existing plinths)		Civil Works Driven By Asset Replacement
Construct/refurbish oil bund (where oil bund previously existed)		Civil Works Driven By Asset Replacement
Construct oil bund (where no oil bund previously existed)		Oil Pollution Mitigation Schemes

Dismantlement/modification/reconstruction of noise enclosures		Civil Works Driven By Asset Replacement
Modification of site walls		Civil Works Driven By Asset Replacement
Construction/ Modification to switchroom to accommodate control/ protection panel		Civil Works Driven By Asset Replacement

Batteries at 132kVkV Substations

Costs Within Scope of Replacing Prime Asset	**Report As Prime Asset**	**Report As Consequential Asset**
Supply & install replacement battery and associated charger	Yes	
Dismantle, remove and dispose of existing battery and associated charger	Yes	
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

Costs Outside Scope of Replacing Prime Asset	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**
Construction/Modification to accommodate batteries		Civil Works Driven By Asset Replacement

Pilot Wire Overhead

Costs Within Scope of Replacing Prime Asset	**Report As Prime Asset**	**Report As Consequential Asset**
Supply & Install overhead pilot cable (OPGW or separate span)	Yes	
Disconnect and remove existing overhead pilot cable or abandon existing Cable (where applicable)	Yes	
Supply and make off pilot cable joints		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

Costs Outside Scope of Replacing Prime Asset	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or**

Pilot Wire Underground

Costs Within Scope of Replacing Prime Asset	**Report As Prime Asset**	**Report As Consequential Asset**
Supply & Install underground pilot cable	Yes	
Disconnect and remove existing overhead pilot cable or abandon existing Cable (where applicable)	Yes	
Supply and make off pilot cable joints		
Associated network operations (Switching, linking, use of mobile generation, issuing safety documentation, pre-commissioning tests and energisation)		

Costs Outside Scope of Replacing Prime Asset	**Report Costs And Activity As Separate Prime Asset Replacement**	**Report Costs And Activity As Separate Activity That Does Not Result In Addition Or Disposal Of Asset**

4. DSO cost mapping matrix

(Note that this is an ongoing exercise and further work is still required to complete the cost mapping matrix)

Planning and Network Development

Cost Item	Description	Cost area/Table	Line item and breakdown (List Level 3, 4 & 5 where relevant)
Active Network Management	Infrastructure and systems to run, optimise and co-ordinate and maintain the ANM system.	CV11 – Operational IT&T	Control Centre Hardware and Software
Commercial & Legal Management	Managing and co-ordinating DSO commercial contracts (including flexibility services contracts), including company specific projects or requirements	C12 -Core BS	Finance & Regulation: Procurement
Planning & Data Exchange	Increased planning data exchange both internally and externally. This includes IT, licenses, data management costs etc	C9 – Core CAI	Network Design and Engineering: Economic development of the distribution network
Planning & Data Exchange	Increased planning data exchange both internally and externally. This includes IT, licenses, data management costs etc	C4 – IT&T (Non-Op)	Hardware and Infrastructure Costs: Purchase and installation of new hardware systems (eg servers, firewalls, switches & ISDXs). Application Software Development Costs: Purchase and installation of new application software and their license fees
Planning & Data Exchange	Increased planning data exchange both internally and externally. This	C13 – IT&T (BS)	

	includes IT, licenses, data management costs etc		
ICCP Link	Costs associated with a New or upgraded ICCP link to enable direct communication with the ESO, and other DNOs included against all functions. This includes the costs to maintain it.	CV11 – Operational IT&T	Control Centre Hardware and Software:
Emergency Planning	DSO planning for emergency scenarios. Labour costs associated with planning activities and any systems required to support it.	C9 – Core CAI	Control Centre: Operational management and control of the network
Produce and publish DFES, network development plans and support whole system FES	DNOs publish their DFES and network development plans. Includes maintenance activities associated with the DFES and support for the whole system FES. Includes labour, stakeholder engagement, publication costs etc.	C9 – Core CAI	Network Design and Engineering: Economic development of the distribution network
Data portal	IT infrastructure, website infrastructure, labour, purchase, and operation costs associated with a data portal for external data provision	C4 – IT&T (Non-Op)	Hardware and Infrastructure Costs: Purchase and installation of new hardware systems (eg servers, firewalls, switches & ISDXs). Application Software Development Costs: Purchase and installation of new application software and their license fees
Data portal	IT infrastructure, website infrastructure, labour, purchase, and operation costs associated with a data portal for external data provision	C9 – Core CAI	Network Design and Engineering: Economic development of the distribution network
Data purchasing	Purchase of data to enhance network visibility and any other activities		

Forecasting, Analysis & Modelling	New and existing forecasting capabilities with associated analytics and modelling systems. Includes systems, IT costs and labour costs. The enabling tools for long term and short-term forecasting requirements	C9 – Core CAI	Network Design and Engineering: Economic development of the distribution network. Maintenance of network design data models
Forecasting, Analysis & Modelling	New and existing forecasting capabilities with associated analytics and modelling systems. Includes systems, IT costs and labour costs. The enabling tools for long term and short-term forecasting requirements	C4 – IT&T (Non-Op)	Hardware and Infrastructure Costs: Purchase and installation of new hardware systems (eg servers, firewalls, switches & ISDXs). Application Software Development Costs: Purchase and installation of new application software and their license fees
Forecasting, Analysis & Modelling	New and existing forecasting capabilities with associated analytics and modelling systems. Includes systems, IT costs and labour costs. The enabling tools for long term and short-term forecasting requirements	C13 – IT&T (BS)	
Assessing Network Options	Processes and tools for the assessment of network options vs flex vs other options. Labour costs associated	C9 – Core CAI	Network Design and Engineering: Economic development of the distribution network. Maintenance of network design data models
Assessing Network Options	Processes and tools for the assessment of network options vs flex vs other options. Labour costs associated	C4 – IT&T (Non-Op)	Hardware and Infrastructure Costs: Purchase and installation of new hardware systems (eg servers, firewalls, switches & ISDXs). Application Software Development Costs: Purchase and installation of new

			application software and their license fees
Assessing Network Options	Processes and tools for the assessment of network options vs flex vs other options. Labour costs associated	C13 – IT&T (BS)	
Stakeholder engagement in relation to the DSO (treatment of stakeholder related costs and activities still open)	Consultation with stakeholders on DSO activities and performance	C12 -Core BS	Finance & Regulation:
Cyber security costs		CV11 – Operational IT&T	Communications for Switching and Monitoring: Control Centre Hardware and Software:
Cyber security costs		C4 – IT&T (Non-Op)	Hardware and Infrastructure Costs: Purchase of IT equipment that is either located away from network assets, or does not directly relate to the control of those assets. Application Software Development Costs: IT software upgrade costs: New and upgraded software licences where the benefit is received over more than one year.
Cyber security costs		C13 – IT&T (BS)	
Flexible Connections	Flexible Connection Product Suite and associated procedures and systems (over and above ANM).	C9 – Core CAI	Network Design and Engineering: Economic development of the Distribution Network
Codes & Regulatory	DSO related regulation, legal and code work	C12 - Core BS	Finance & Regulation: Regulation.

			All costs of monitoring, complying with and updating the regulatory licence (includes collaborative work with Ofgem)
DSO Labour	Labour associated with engineering team, business administration and business support costs (Potential issue on double accounting and labour reporting - BPDT to review).	C9 – Core CAI	Engineering Management and Clerical Support: Clerical Support

Network Operation

Cost Item	**Description**	**Cost area/Table (where indicated)**	**Line item and breakdown (List Level 3, 4 & 5 where relevant)**
Ongoing Co-ordination activities	Support of projects which require combined working with other DNOs, TOs, ESO, OFGEM & BEIS e.g. Open networks. Labour and consultancy costs	C9 – Core CAI	Network Policy: Development, regular review and updating of engineering policies
Facilitate Non-DSO Services	Facilitate local energy trading or exchange capacity and curtailment obligations. IT/infrastructure changes may be required to provide data for the facilitation of new markets and identification and management of potential conflicts.	C9 – Core CAI	Network Design and Engineering: Economic development of the distribution network
Facilitate Non-DSO Services	Facilitate local energy trading or exchange capacity and curtailment obligations. IT/infrastructure changes may be required to provide data for the facilitation of new markets and identification and management of potential conflicts.	C4 – IT&T (Non-Op)	Hardware and Infrastructure Costs: Purchase and installation of new hardware systems (e.g. servers, firewalls, switches & ISDXs). Application Software Development Costs: Purchase and installation of new application software

			and their license fees
Facilitate Non-DSO Services	Facilitate local energy trading or exchange capacity and curtailment obligations. IT/infrastructure changes may be required to provide data for the facilitation of new markets and identification and management of potential conflicts.	C13 – IT&T (BS)	
Network Monitoring	Asset & Monitoring infrastructure (installation, operation and maintenance)	CV11 – Operational IT&T	Communications for Switching and Monitoring:
Telecoms Network	Telecommunications to connect monitoring and system / databases.	CV11 – Operational IT&T	Communications for Switching and Monitoring:
Data Storage	Either server installation operation and maintenance and/or licensing costs associated with cloud storage	CV11 – Operational IT&T	Control Centre Hardware and Software:
Network Control	Increased levels of network control across networks (such as NCPs), at all voltage levels. (installation, operation and maintenance of all IT, hardware and labour costs (both for installation and operation), and RTS systems). Includes control room operation and activities associated with network operation.	C9 – Core CAI	Control Centre: Operational management and control of the network
Network Control	Increased levels of network control across networks (such as NCPs), at all voltage levels. (installation, operation and maintenance of all IT, hardware and labour costs (both for installation and operation), and RTS systems). Includes control room operation and activities associated with network operation.	CV11 – Operational IT&T	Control Centre Hardware and Software
Network Management Systems	New and existing Network Management Systems across different voltage levels.	CV11 – Operational IT&T	Control Centre Hardware and Software

	(hardware, software, maintenance and operation)		
Operational Data & Exchange	DNOs to provide enhanced data sharing of operational data internally and externally. Includes OT and IT costs and associated labour and license costs	C9 – Core CAI	Network Design and Engineering: Economic development of the distribution network
Operational Data & Exchange	DNOs to provide enhanced data sharing of operational data internally and externally. Includes OT and IT costs and associated labour and license costs	C4 – IT&T (Non-Op)	Hardware and Infrastructure Costs: Purchase and installation of new hardware systems (eg servers, firewalls, switches & ISDXs). Application Software Development Costs: Purchase and installation of new application software and their license fees
Operational Data & Exchange	DNOs to provide enhanced data sharing of operational data internally and externally. Includes OT and IT costs and associated labour and license costs	C13 – IT&T (BS)	
Operational Data & Exchange	DNOs to provide enhanced data sharing of operational data internally and externally. Includes OT and IT costs and associated labour and license costs	CV11 – Operational IT&T	Control Centre Hardware and Software:
CIM Development	Implementation of a CIM model for each DNO with a view to further supporting common exchange of data. (Labour, consultancies, costs associated with delivery of CIM)	C9 – Core CAI	Network Design and Engineering: Economic development of the distribution network
CIM Development	Implementation of a CIM model for each DNO with a view to further supporting common exchange of data. (Labour, consultancies, costs associated with delivery of CIM)	C4 – IT&T (Non-Op)	Hardware and Infrastructure Costs: Purchase and installation of new hardware systems (eg servers, firewalls, switches & ISDXs).

			Application Software Development Costs: Purchase and installation of new application software and their license fees
CIM Development	Implementation of a CIM model for each DNO with a view to further supporting common exchange of data. (Labour, consultancies, costs associated with delivery of CIM)	C13 – IT&T (BS)	
DNOs to upgrade network modelling and analysis capability.	See Forecasting, Analysis and Modelling but focusing on operational time frames	C9 – Core CAI	Network Design and Engineering: Economic development of the distribution network
Network Access Planning	Labour costs with any associated systems for network outage planning and co-ordination	C9 – Core CAI	Control Centre: Operational management and control of the network
Smart Meter Integration & Other Third Party Data Integration	DNOs to use Smart Meter data and integration of data from other third party sources. (labour, licencing costs)	C9 – Core CAI	Network Design and Engineering: Economic development of the distribution network. Maintenance of network design data models
Smart Meter Integration & Other Third Party Data Integration	DNOs to use Smart Meter data and integration of data from other third party sources. (labour, licencing costs)	C4 – IT&T (Non-Op)	Hardware and Infrastructure Costs: Purchase and installation of new hardware systems (eg servers, firewalls, switches & ISDXs). Application Software Development Costs: Purchase and installation of new application software and their license fees

DSO Account Management	Labour associated with managing relationships and conflicts associated with DSO functions and activities	C9 – Core CAI	Network Design and Engineering: Economic development of the distribution network Control Centre: Operational management and control of the network
DSO Account Management	Labour associated with managing relationships and conflicts associated with DSO functions and activities	C12 - Core BS	Finance & Regulation: Procurement
Emergency Operations	DSO actions in the event of an emergency scenario.	C9 – Core CAI	Control Centre: Operational management and control of the network

Market Development

Cost Item	**Description**	**Cost area/Table (where indicated)**	**Line item and breakdown (List Level 3, 4 & 5 where relevant)**
DSO Flexibility Service Facilitation	The development and use of DSO services to meet customer and network requirements. (Labour costs, third party platform(s) and DSO flexibility platform(s), and any collaborative platforms. This could include peer-to-peer provision	C9 – Core CAI	Network Design and Engineering: Economic development of the distribution network. Maintenance of network design data models. Maintenance of network design data models.

DSO Flexibility Service Facilitation	The development and use of DSO services to meet customer and network requirements. (Labour costs, third party platform(s) and DSO flexibility platform(s), and any collaborative platforms. This could include peer-to-peer provision	C4 – IT&T (Non-Op)	Hardware and Infrastructure Costs: Purchase and installation of new hardware systems (e.g. servers, firewalls, switches & ISDXs). Application Software Development Costs: Purchase and installation of new application software and their license fees
DSO Flexibility Service Facilitation	The development and use of DSO services to meet customer and network requirements. (Labour costs, third party platform(s) and DSO flexibility platform(s), and any collaborative platforms. This could include peer-to-peer provision	C13 – IT&T (BS)	
DSO Flexibility Service Facilitation	The development and use of DSO services to meet customer and network requirements. (Labour costs, third party platform(s) and DSO flexibility platform(s), and any collaborative platforms. This could include peer-to-peer provision	CV1 – Primary Reinforcement CV2 – Secondary Reinforcement	Flexibility (Defined above)
DSO Contestable Service Provision	Development of DSO specific services (TBC) - systems such as Power Potential and Pathfinder.	C4 – IT&T (Non-Op)	Hardware and Infrastructure Costs: Purchase and installation of new hardware systems (eg servers, firewalls, switches & ISDXs). Application Software Development Costs: Purchase and installation of new application software and their license fees
Market Data & Sharing	Develop user interfaces to access relevant data stored on DNO systems	C4 – IT&T (Non-Op)	Application Software Development Costs: Purchase and installation of new application software

			and their license fees.
Flexibility Procurement Systems	IT systems used for Procurement of flexibility services and associated labour.	C4 – IT&T (Non-Op)	Application Software Development Costs: Purchase and installation of new application software and their license fees