WESTERN POWER DISTRIBUTION

Serving the Midlands, South West and Wales

Western Power Distribution

(West Midlands) plc

Use of System Charging Statement

NOTICE OF CHARGES

Effective from 1st April 2019

Version 0.1

This statement is in a form to be approved by the Gas and Electricity Markets Authority.

Version Control

Version	Date	Description of version and any changes made
0.1	December 2017	Published Finals

Contents

1. Introduction

1.1. This statement tells you about our charges and the reasons behind them. It has been prepared consistent with Standard Licence Condition 14 of our Electricity Distribution Licence. The main purpose of this statement is to provide our schedule of charges[1] for the use of our Distribution System and to provide the schedule of adjustment factors[2] that should be applied in Settlement to account for losses from the Distribution System. We have also included guidance notes in Appendix 2 to help improve your understanding of the charges we apply.

1.2. Within this statement we use terms such as 'Users' and 'Customers' as well as other terms which are identified with initial capitalisation. These terms are defined in the glossary.

1.3. The charges in this statement are calculated using the following methodologies as per the Distribution Connection and Use of System Agreement (DCUSA)[3]:

- Common Distribution Charging Methodology (CDCM); for Low Voltage (LV) and High Voltage (HV) Designated Properties as per DCUSA Schedule 16; and
- Extra High Voltage (EHV) Distribution Charging Methodology (EDCM); for Designated EHV Properties as per DCUSA Schedule 17.

1.4. Separate charges are calculated depending on the characteristics of the connection and whether the use of the Distribution System is for demand or generation purposes. Where a generation connection is seen to support the Distribution System the charges will be negative and the Supplier will receive credits for exported energy.

1.5. The application of charges to premises can usually be referenced using the Line Loss Factor Class (LLFC) contained in the charge tables. Further information on how to identify and calculate the charge that will apply for your premises is provided in the guidance notes in Appendix 2.

[1] Charges can be positive or negative.
[2] Also known as Loss Adjustment Factors or Line Loss Factors. The schedule of adjustment factors will be provided in a revised statement shortly after the adjustment factors for the relevant year have been successfully audited by Elexon.
[3] The Distribution and Connection Use of System Agreement (DCUSA) available from http://www.dcusa.co.uk/SitePages/Documents/DCUSA-Document.aspx

1.6. All charges in this statement are shown **exclusive** of VAT. Invoices will include VAT at the applicable rate.

1.7. The annexes that form part of this statement are also available in spreadsheet format. This spreadsheet contains supplementary information used for charging purposes and a simple model to assist you to calculate charges. This spreadsheet can be downloaded from www.westernpower.co.uk .

Validity period

1.8. This charging statement is valid for services provided from the effective date stated on the front of the statement and remains valid until updated by a revised version or superseded by a statement with a later effective date.

1.9. When using this charging statement, care should be taken to ensure that the relevant statement or statements covering the period that is of interest are used.

1.10. Notice of any revision to the statement will be provided to Users of our Distribution System. The latest statements can be downloaded from www.westernpower.co.uk .

Contact details

1.11. If you have any questions about this statement please contact us at this address:

Income Team
Western Power Distribution
Avonbank
Feeder Rd
Bristol
BS2 0TB
Email: wpdpricing@westernpower.co.uk

1.12. All enquiries regarding connection agreements and changes to maximum capacities should be addressed to:

Connection Policy Engineer
Western Power Distribution
Herald Way
East Midlands Airport
Castle Donington
DERBY
DE74 2TU
Email: wpdconnectionpolmids@westernpower.co.uk

1.13. For all other queries please contact our general enquiries telephone number: 0800 096 3080, lines are open 08:00 to 18:00 Monday to Friday

1.14. You can also find us on Facebook and Twitter.

2. Charge application and definitions

2.1. The following section details how the charges in this statement are applied and billed to Users of our Distribution System.

2.2. We utilise two billing approaches depending on the type of metering data received. The 'Supercustomer' approach is used for Non-Half Hourly (NHH) metered, NHH unmetered, Half Hourly (HH) metered premises with whole current metering systems, and all domestic premises. The 'Site-specific' approach is used for non-domestic current transformer (CT) metered premises or pseudo HH unmetered premises.

2.3. Typically, NHH metered or HH metered premises with whole current Metering Systems are domestic and small businesses; premises with non-domestic CT Metering Systems are generally larger businesses or industrial sites; and unmetered premises are normally streetlights.

Supercustomer billing and payment

2.4. Supercustomer billing and payment applies to Meter Point Administration Numbers (MPANs) registered as NHH metered, NHH unmetered or aggregated HH metered. The Supercustomer approach makes use of aggregated data obtained from Suppliers using the 'Aggregated Distribution Use of System (DUoS) Report' data flow.

2.5. Invoices are calculated on a periodic basis and sent to each User for whom we transport electricity through our Distribution System. Invoices are reconciled over a period of approximately 14 months to reflect later and more accurate consumption figures.

2.6. The charges are applied on the basis of the LLFC assigned to the MPAN, and the units consumed within the time periods specified in this statement. These time periods may not necessarily be the same as those indicated by the Time Pattern Regime (TPR) assigned to the Standard Settlement Configuration (SSC). All LLFCs are assigned at our sole discretion, based on the tariff application rules set out in the appropriate charging methodology or elsewhere in this statement. Please refer to the section 'Incorrectly allocated charges' if you believe the allocated LLFC or tariff is incorrect.

Supercustomer charges

2.7. Supercustomer charges include the following components:

- a fixed charge, pence/MPAN/day; there will only be one fixed charge applied to each MPAN; and
- unit charges, pence/kilowatt-hour (kWh); more than one kWh charge may apply depending on the type of tariff for which the MPAN is registered.

2.8. Users who supply electricity to a Customer whose MPAN is registered as Measurement Class A, B, F or G will be allocated the relevant charge structure set out in Annex 1.

2.9. Measurement Class A charges apply to Exit/Entry Points where NHH metering is used for Settlement.

2.10. Measurement Class B charges apply to Exit Points deemed to be suitable as Unmetered Supplies as permitted in the Electricity (Unmetered Supply) Regulations 2001[4] and where operated in accordance with Balancing and Settlement Code (BSC) procedure 520[5].

2.11. Measurement Class F charges apply to Exit/Entry points at domestic premises where HH metering is used for Settlement.

2.12. Measurement Class G charges apply to Exit/Entry points at non-domestic premises with whole current Metering Systems where HH metering is used for Settlement.

2.13. Identification of the appropriate charge can be made by cross-reference to the LLFC.

2.14. Valid Settlement Profile Class (PC)/Standard Settlement Configuration (SSC)/Meter Timeswitch Code (MTC) combinations for LLFCs where the Metering System is Measurement Class A or B are detailed in Market Domain Data (MDD).

2.15. We do not apply a default tariff for invalid combinations.

- For all two rate NHH MPANs night is defined as 00.30 to 07.30 hours.

[4] The Electricity (Unmetered Supply) Regulations 2001 available from http://www.legislation.gov.uk/uksi/2001/3263/made
[5] Balancing and Settlement Code Procedures on unmetered supplies are available from https://www.elexon.co.uk/bsc-related-documents/related-documents/bscps/

2.16. To determine the appropriate charge rate for each SSC/TPR a lookup table is provided in the spreadsheet that accompanies this statement[6].

2.17. The time periods for unit charges where the Metering System is Measurement Class F or G are set out in the table 'Time Bands for Half Hourly Metered Properties' in Annex 1.

2.18. The 'Domestic Off-Peak' and 'Small Non-Domestic Off-Peak' charges are supplementary to either an unrestricted or a two-rate charge.

Site-specific billing and payment

2.19. Site-specific billing and payment applies to MPANs registered as Measurement Class C, D and E or any other relevant Metering System Identifier (MSID). The site-specific billing and payment approach to Use of System (UoS) billing makes use of HH metering data at premises level received through Settlement.

2.20. Invoices are calculated on a periodic basis and sent to each User for whom we transport electricity through our Distribution System. Where an account is based on estimated data, the account shall be subject to any adjustment that may be necessary following the receipt of actual data from the User.

2.21. The charges are applied on the basis of the LLFCs assigned to the MPAN (or the MSID) for Central Volume Allocation (CVA) sites, and the units consumed within the time periods specified in this statement. Where MPANs have not been associated, for example when multiple points of connection fed from different sources are used for a single site, the relevant number of fixed charges will be applied.

2.22. All LLFCs are assigned at our sole discretion, based on the tariff application rules set out in the appropriate charging methodology or elsewhere in this statement. Please refer to the section 'Incorrectly allocated charges' if you believe the allocated LLFC or tariff is incorrect. Where an incorrectly applied LLFC is identified, we may at our sole discretion apply the correct LLFC and/or charges.

Site-specific billed charges

2.23. Site-specific billed charges may include the following components:

- a fixed charge, pence/MPAN/day or pence/MSID/day;

[6] MIDE - Schedule of charges and other tables - 2019 V.0.1.xlsx

- a capacity charge, pence/kilovolt-ampere(kVA)/day, for Maximum Import Capacity (MIC) and/or Maximum Export Capacity (MEC);
- an excess capacity charge, pence/kVA/day, if a site exceeds its MIC and/or MEC;
- unit charges, pence/kWh, more than one unit charge may be applied; and
- an excess reactive power charge, pence/kilovolt-ampere reactive hour(kVArh), for each unit in excess of the reactive charge threshold.

2.24. Users who wish to supply electricity to Customers whose Metering System is Measurement Class C, D or E or is settled via CVA will be allocated the relevant charge structure dependent upon the voltage and location of the Metering Point.

2.25. Measurement Class C, E or CVA charges apply to Exit/Entry Points where HH metering data is used for Settlement purposes for non-domestic premises that have CT metering.

2.26. Measurement Class D charges apply to Exit Points deemed to be suitable as Unmetered Supplies as permitted in the Electricity (Unmetered Supply) Regulations 2001 and where operated in accordance with BSC procedure 520[7].

2.27. Fixed charges are generally levied on a pence per MPAN/MSID per day basis. Where two or more HH MPANs/MSIDs are located at the same point of connection (as identified in the Connection Agreement), with the same LLFC, and registered to the same Supplier, only one daily fixed charge will be applied.

2.28. LV and HV Designated Properties will be charged in accordance with the CDCM and allocated the relevant charge structure set out in Annex 1.

2.29. For LV and HV Designated Properties that utilise a combination of Intermittent and Non-Intermittent generation technologies metered through a single MPAN/MSID, we will allocate the tariff based on the dominant technology. The dominant technology will have a higher combined installed capacity as evidenced in ratings contained in the Connection Agreement.

2.30. Designated EHV Properties will be charged in accordance with the EDCM and allocated the relevant charge structure set out in Annex 2.

[7] Balancing and Settlement Code Procedures on unmetered supplies and available from https://www.elexon.co.uk/bsc-related-documents/related-documents/bscps/

2.31. Where LV and HV Designated Properties or Designated EHV Properties have more than one point of connection (as identified in the Connection Agreement) then separate charges will be applied to each point of connection.

2.32. Due to the seasonal nature of charges for Unmetered Supplies, changes between Measurement Classes B and D (or vice versa) shall not be agreed except with effect from 1 April in any charging year.

Time periods for half hourly metered properties

2.33. The time periods for the application of unit charges to LV and HV Designated Properties that are HH metered are detailed in Annex 1. We have not issued a notice to change the time bands.

2.34. The time periods for the application of unit charges to Designated EHV Properties are detailed in Annex 2. We have not issued a notice to change the time bands.

Time periods for pseudo half hourly unmetered properties

2.35. The time periods for the application of unit charges to Unmetered Supply Exit Points that are pseudo HH metered are detailed in Annex 1. We have not issued a notice to change the time bands.

Application of capacity charges

2.36. The following sections explain the application of capacity charges and exceeded capacity charges.

Chargeable capacity

2.37. The chargeable capacity is, for each billing period, the MIC/MEC, as detailed below.

2.38. The MIC/MEC will be agreed with us at the time of connection or pursuant to a later change in requirements. Following such an agreement (be it at the time of connection or later) no reduction in MIC/MEC will be allowed for a 12 month period.

2.39. Reductions to the MIC and/or MEC may only be permitted once in a 12 month period. Where the MIC and/or MEC is reduced the new lower level will be agreed with reference to the level of the Customer's maximum demand. The new MIC and/or MEC will be applied from the start of the next billing period after the date that the request was received. It should be noted that, where a

new lower level is agreed, the original capacity may not be available in the future without the need for network reinforcement and associated charges.

2.40. In the absence of an agreement, the chargeable capacity, save for error or omission, will be based on the last MIC and/or MEC previously agreed by the distributor for the relevant premises' connection. A Customer can seek to agree or vary the MIC and/or MEC by contacting us using the contact details in section 1.12

Exceeded capacity

2.41. Where a Customer takes additional unauthorised capacity over and above the MIC/MEC, the excess will be classed as exceeded capacity. The exceeded portion of the capacity will be charged at the excess capacity charge p/kVA/day rate, based on the difference between the MIC/MEC and the actual capacity used. This will be charged for the full duration of the billing period in which the breach occurs.

Demand exceeded capacity

$$\text{Demand exceeded capacity} = \max(2 \times \sqrt{AI^2 + \max(RI, RE)^2} - MIC, 0)$$

Where:

AI = Active import (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

MIC = Maximum import capacity (kVA)

2.42. Only reactive import and reactive export values occurring at times of active import are used in the calculation. Where data for two or more MPANs is aggregated for billing purposes the HH consumption values are summated prior to the calculation above.

2.43. This calculation is completed for every half hour and the maximum value from the billing period is applied.

Generation exceeded capacity

$$\text{Generation exceeded capacity} = \max(2 \times \sqrt{AE^2 + \max(RI, RE)^2} - MEC, 0)$$

Where:

AE = Active export (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

MEC = Maximum export capacity (kVA)

2.44. Only reactive import and reactive export values occurring at times of active export are used in the calculation. Where data for two or more MPANs is aggregated for billing purposes the HH consumption values occurring at times of kWh export are summated prior to the calculation above.

2.45. This calculation is completed for every half hour and the maximum value from the billing period is applied.

Standby capacity for additional security on site

2.46. Where standby capacity charges are applied, the charge will be set at the same rate as that applied to normal MIC. Should a Customer's request for additional security of supply require the provision of capacity from two different sources, we reserve the right to charge for the capacity held at each source.

Minimum capacity levels

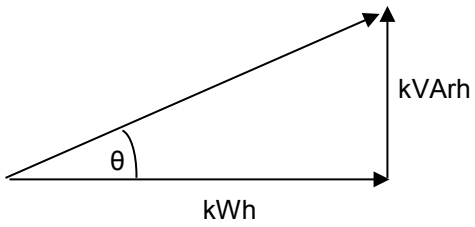
2.47. There is no minimum capacity threshold.

Application of charges for excess reactive power

2.48. When an individual HH metered MPAN's reactive power (measured in kVArh) at LV and HV Designated Properties exceeds 33% of its total active power (measured in kWh), excess reactive power charges will apply. This threshold is equivalent to an average power factor of 0.95 during the period. Any reactive units in excess of the 33% threshold are charged at the rate appropriate to the particular charge.

2.49. Power Factor is calculated as follows:

Cos θ = Power Factor



2.50. The chargeable reactive power is calculated as follows:

Demand chargeable reactive power

$$\text{Demand chargeable kVArh} = \max\left(\max(RI,RE) - \left(\sqrt{\left(\frac{1}{0.95^2} - 1\right)} \times AI\right), 0\right)$$

Where:

AI = Active import (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

2.51. Only reactive import and reactive export values occurring at times of active import are used in the calculation. Where data for two or more MPANs is aggregated for billing purposes the HH consumption values are summated prior to the calculation above.

2.52. The square root calculation will be to two decimal places.

2.53. This calculation is completed for every half hour and the values summated over the billing period.

Generation chargeable reactive power

$$\text{Generation chargeable kVArh} = \max\left(\max(RI,RE) - \left(\sqrt{\left(\frac{1}{0.95^2} - 1\right)} \times AE\right), 0\right)$$

Where:

AE = Active export (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

2.54. Only reactive import and reactive export values occurring at times of active export are used in the calculation. Where data for two or more MPANs is aggregated for billing purposes the HH consumption values are summated prior to the calculation above.

2.55. The square root calculation will be to two decimal places.

2.56. This calculation is completed for every half hour and the values summated over the billing period.

Incorrectly allocated charges

2.57. It is our responsibility to apply the correct charges to each MPAN/MSID. The allocation of charges is based on the voltage of connection, import/export details including multiple MPANs, metering information and, for some tariffs, the metering location. Where an MPAN/MSID is used for export purposes in relation to an LV or HV Designated Property, the type of generation (Intermittent or Non-Intermittent) also determines the allocation of charges.

2.58. We are responsible for deciding the voltage of connection. Generally, this is determined by where the metering is located and where responsibility for the electrical equipment transfers from us to the connected Customer.

2.59. The Supplier determines and provides us with the metering information and data. This enables us to allocate charges where there is more than one charge per voltage level. The metering information and data is likely to change over time if, for example, a Supplier changes from a two rate meter to a single rate meter. When we are notified this has happened we will change the allocation of charges accordingly.

2.60. If it has been identified that a charge may have been incorrectly allocated due to the metering information and/or data then a request for investigation should be made to the Supplier.

2.61. Where it has been identified that a charge may have been incorrectly allocated due to the voltage of connection, import/export details, metering location or any other relevant factor then a request to investigate the applicable charges should be made to us. Requests from persons other than the Customer or the current Supplier must be accompanied by a Letter of Authority from the Customer; the current Supplier must also acknowledge that they are aware a request has been made. Any request must be supported by an explanation of why it is believed that the current charge should be changed, along with supporting information including, where appropriate, photographs of metering positions or system diagrams. Any request to change the current charge that also includes a request for backdating must include justification as to why it is considered appropriate to backdate the change.

2.62. An administration charge (covering our reasonable costs) may be made if a technical assessment or site visit is required, but we will not apply any charge where we agree to the change request.

2.63. Where we agree that the current LLFC/charge should be changed, then we will allocate the appropriate set of charges for the connection. Any adjustment will be applied from the date of the request back to the date of the incorrect allocation or; up to the maximum period specified by the Limitation Act (1980) in England and Wales, which covers a six year period, whichever is the shorter.

2.64. Any credit or additional charge will be issued to the relevant Supplier(s) effective during the period of the change.

2.65. Should we reject the request a justification will be provided to the requesting party. We shall not unreasonably withhold or delay any decision on a request to change the charges applied and would expect to confirm our position on the request within three months of the date of request.

Generation charges for pre-2005 designated EHV properties

2.66. Designated EHV Properties that were connected to the Distribution System under a pre-2005 connection charging policy are eligible for exemption from UoS charges for generation unless one of the following criteria has been met:

- 25 years have passed since their first energisation/connection date (i.e. Designated EHV Properties with Connection Agreements dated prior to 1st April 2005, and for which 25 years has passed since their first energisation/connection date will receive use of system charges for generation from the next charging year following the expiry of their 25 years exemption, (starting 1st April), or
- the person responsible for the Designated EHV Property has provided notice to us that they wish to opt in to UoS charges for generation.

If a notice to opt in has been provided there will be no further opportunity to opt out.

2.67. Furthermore, if an exempt Customer makes an alteration to its export requirement then the Customer may be eligible to be charged for the additional capacity required or energy imported or exported. For example, where a generator increases its export capacity the incremental increase in export capacity will attract UoS charges as with other non-exempt generators.

Provision of billing data

2.68. Where HH metering data is required for UoS charging and this is not provided in accordance with the BSC or DCUSA, such metering data shall be provided to

us by the User of the system in respect of each calendar month within five working days of the end of that calendar month.

2.69. The metering data shall identify the amount of energy conveyed across the Metering System in each half hour of each day and shall separately identify active and reactive import and export. Metering data provided to us shall be consistent with that received through the metering equipment installed.

2.70. Metering data shall be provided in an electronic format specified by us from time to time and, in the absence of such specification, metering data shall be provided in a comma-separated text file in the format of Master Registration Agreement (MRA) data flow D0036[8] (as agreed with us). The data shall be emailed to wpdduos@westernpower.co.uk.

2.71. We require details of reactive power imported or exported to be provided for all Measurement Class C and E sites. It is also required for CVA sites and Exempt Distribution Network boundaries with difference metering. We reserve the right to levy a charge on Users who fail to provide such reactive data.

Out of area use of system charges

2.72. We do not operate networks outside our Distribution Services Area.

Licensed distribution network operator charges

2.73. Licensed Distribution Network Operator (LDNO) charges are applied to LDNOs who operate Embedded Networks within our Distribution Services Area.

2.74. The charge structure for LV and HV Designated Properties embedded in networks operated by LDNOs will mirror the structure of the 'All-the-way' charge and is dependent upon the voltage of connection of each embedded network to the host DNO's network. The relevant charge structures are set out in Annex 4.

2.75. We do not apply a default tariff for invalid combinations.

- For all two rate NHH MPANs night is defined as 00.30 to 07.30 hours.

2.76. The charge structure for Designated EHV Properties embedded in networks operated by LDNOs will be calculated individually using the EDCM. The relevant charge structures are set out in Annex 2.

[8] MRA Data Transfer Catalogue available from https://dtc.mrasco.com/

2.77. For Nested Networks the relevant charging principles set out in DCUSA Schedule 21 will apply.

Licence exempt distribution networks

2.78. The Electricity and Gas (Internal Market) Regulations 2011[9] introduced new obligations on owners of licence exempt distribution networks (sometimes called private networks) including a duty to facilitate access to electricity and gas suppliers for Customers within those networks.

2.79. When Customers (both domestic and commercial) are located within a licence exempt distribution network and require the ability to choose their own Supplier this is called 'third party access'. These embedded Customers will require an MPAN so that they can have their electricity supplied by a Supplier of their choice.

2.80. Licence exempt distribution networks owners can provide third party access using either full settlement metering or the difference metering approach.

Full settlement metering

2.81. This is where a licence exempt distribution network is set up so that each embedded installation has an MPAN and Metering System and therefore all Customers purchase electricity from their chosen Supplier. In this case there are no Settlement Metering Systems at the boundary between the licensed Distribution System and the licence exempt distribution network.

2.82. In this approach our UoS charges will be applied to each MPAN.

Difference metering

2.83. This is where one or more, but not all, Customers on a licence exempt distribution network choose their own Supplier for electricity supply to their premises. Under this approach, the Customers requiring third party access on the licence exempt distribution network will have their own MPAN and must have a HH Metering System.

2.84. Unless agreed otherwise, our UoS charges will be applied using Gross or Net Settlement as applicable to the site.

[9] The Electricity and Gas (Internal Market) Regulations 2011 available from http://www.legislation.gov.uk/uksi/2011/2704/contents/made

Gross settlement

2.85. Where one of our MPANs (Prefix 14) is embedded within a licence exempt distribution network connected to our Distribution System, and difference metering is in place for Settlement purposes, and we receive gross measurement data for the boundary MPAN, we will continue to charge the boundary MPAN Supplier for use of our Distribution System. No charges will be levied by us directly to the Customer or Supplier of the embedded MPAN(s) connected within the licence exempt distribution network.

2.86. We require that gross metered data for the boundary of the connection is provided to us. Until a new industry data flow is introduced for the sending of such gross data, gross metered data shall:

- be provided in a text file in the format of the D0036 MRA data flow;
- the text file shall be emailed to wpdduos@westernpower.co.uk;
- the title of the email should also contain the phrase "gross data for difference metered private network" and contain the metering reference specified by us in place of the Settlement MPAN; and
- the text filename shall be formed of the metering reference specified by us, followed by a hyphen, and followed by a timestamp in the format YYYYMMDDHHMMSS, and followed by ".txt".

2.87. For the avoidance of doubt, the reduced difference metered measurement data for the boundary connection which is to enter Settlement should continue to be sent using the Settlement MPAN.

Net settlement

2.88. Where one of our MPANs (Prefix 14) is embedded within a licence exempt distribution network connected to one of our Distribution Systems, and difference metering is in place for Settlement purposes, and we do **not** receive gross measurement data for the boundary MPAN, we will charge the boundary MPAN Supplier based on the net measurement for use of our Distribution System. Charges will also be levied directly to the Supplier of the embedded MPAN(s) connected within the licence exempt distribution network based on the actual data received.

3. Schedule of charges for use of the distribution system

3.1. Tables listing the charges for use of our Distribution System are published in annexes to this document.

3.2. These charges are also listed in a spreadsheet which is published with this statement and can be downloaded from www.westernpower.co.uk.

3.3. Annex 1 contains the charges applied to LV and HV Designated Properties.

3.4. Annex 2 contains the charges applied to our Designated EHV Properties and charges applied to LDNOs for Designated EHV Properties connected within their embedded Distribution System.

3.5. Annex 3 contains details of any preserved and additional charges that are valid at this time. Preserved charges are mapped to an appropriate charge and are closed to new Customers.

3.6. Annex 4 contains the charges applied to LDNOs in respect of LV and HV Designated Properties connected in their embedded Distribution System.

4. Schedule of line loss factors

Role of line loss factors in the supply of electricity

4.1. Electricity entering or exiting our Distribution System is adjusted to take account of energy that is lost[10] as it is distributed through the network. This adjustment does not affect distribution charges but is used in energy settlement to take metered consumption to a notional Grid Supply Point so that Suppliers' purchases take account of the energy lost on the Distribution System.

4.2. We are responsible for calculating the Line Loss Factors[11] (LLFs) and providing these to Elexon. Elexon is the company that manages the BSC.

4.3. LLFs are used to adjust the Metering System volumes to take account of losses on the Distribution System.

Calculation of line loss factors

4.4. LLFs are calculated in accordance with BSC procedure 128. BSCP128 sets out the procedure and principles with which our LLF methodology must comply. It also defines the procedure and timetable by which LLFs are reviewed and submitted.

4.5. LLFs are calculated for a set number of time periods during the year using either a generic or site-specific method. The generic method is used for sites connected at LV or HV and the site-specific method is used for sites connected at EHV or where a request for site-specific LLFs has been agreed. Generic LLFs will be applied as a default to all new EHV sites until sufficient data is available for a site-specific calculation.

4.6. The definition of EHV used for LLF purposes differs from the definition used for defining Designated EHV Properties in the EDCM. The definition used for LLF purposes can be found in our LLF methodology.

4.7. The Elexon website[12] contains more information on LLFs.

[10] Energy can be lost for technical and non-technical reasons and losses normally occur by heat dissipation through power flowing in conductors and transformers. Losses can also reduce if a customer's action reduces power flowing in the distribution network. This might happen when a customer generates electricity and the produced energy is consumed locally.

[11] Also referred to as Loss Adjustment Factors.

[12] The following page has links to BSCP128 and to our LLF methodology: http://www.elexon.co.uk/reference/technical-operations/losses/

Publication of line loss factors

4.8. The LLFs used in Settlement are published on the Elexon Portal[13]. The website contains the LLFs in standard industry data formats and in a summary form. A user guide with details on registering and using the portal is also available.

4.9. BSCP128 sets out the timetable by which LLFs are submitted and audited. The submission and audit occurs between September and December in the year prior to the LLFs becoming effective. Only after the completion of the audit at the end of December and BSC approval are the final LLFs published.

4.10. At the time that this charging statement is first published, Annex 5 will be intentionally left blank, as this statement is published a complete year before the LLFs have been calculated and audited. Once the final BSCP128 Audit Report has been received, we will issue an updated version of Annex 5 containing the audited LLF values.

4.11. When using the tables in Annex 5, reference should be made to the LLFC allocated to the MPAN to find the appropriate values.

[13] The Elexon Portal can be accessed from www.elexonportal.co.uk

5. Notes for Designated EHV Properties

EDCM FCP network group costs

5.1. A table is provided in the accompanying spreadsheet which shows the underlying Forward Cost Pricing (FCP) network group costs used to calculate the current EDCM charges. This spreadsheet is available to download from our website.

5.2. These are illustrative of the modelled costs at the time that this statement was published. A new connection will result in changes to current network utilisations, which will then form the basis of future prices. The charge determined in this statement will not necessarily be the charge in subsequent years because of the interaction between new and existing network connections and any other changes made to our Distribution System which may affect charges.

Charges for new Designated EHV Properties

5.3. Charges for any new Designated EHV Properties calculated after publication of the current statement will be published on our website in an addendum to that statement as and when necessary. The addendum will include charge information of the type found in Annex 2, and LLFs as found in Annex 5.

5.4. The form of the addendum is detailed in Annex 6 to this statement.

5.5. The addendum will also be sent to all relevant DCUSA parties (i.e. the registered Supplier) and where requested the Customer.

5.6. The new Designated EHV Properties' charges will be added to Annex 2 in the next full statement released.

Charges for amended Designated EHV Properties

5.7. Where an existing Designated EHV Property is modified and energised in the charging year, we may revise the EDCM charges for the modified Designated EHV Property. If revised charges are appropriate, an addendum will be sent to all relevant parties and published as a revised 'Schedule of Charges and other tables' spreadsheet on our website. The modified Designated EHV Property charges will be added to Annex 2 in the next full statement released.

Demand-side management

5.8. Our Demand Side Management approach is as follows:

- All EDCM Customers may apply to enter into a Demand Side Management Contract
- We may at our sole discretion approach specific Customers, aggregators or Suppliers to provide a range of Demand Side responses in specific locations based on network needs. These agreements may be for pre or post fault arrangements. It is at our sole discretion whether to offer post-fault Demand Side Management agreements.
- Payments accrued by a Customer who enters into a Demand Side Management agreement will be reflected in their Distribution Use of System Charges to their Supplier. Payments may be subject to reduction if the Customer fails to deliver demand reductions in accordance with the agreement
- The minimum demand reduction capacity a Customer can offer is 25% of its Maximum Import Capacity.

5.9. Requests for Demand Side Management agreements should be sent to the Income and Connections Manager at the address shown in paragraph 1.11.

6. Electricity distribution rebates

6.1. We have neither given nor announced any DUoS rebates to Users in the 12 months preceding the date of publication of this version of the statement.

7. Accounting and administration services

7.1. We reserve the right to impose payment default remedies. The remedies are as set out in DCUSA where applicable or else as detailed in the following paragraph.

7.2. If any invoices that are not subject to a valid dispute remain unpaid on the due date, late payment interest (calculated at base rate plus 8%) and administration charges may be imposed.

7.3. Our administration charges are detailed in the following table. These charges are set at a level which is in line with the Late Payment of Commercial Debts Act;

Size of Unpaid Debt	Late Payment Fee
Up to £999.99	£40.00
£1,000 to £9,999.99	£70.00
£10,000 or more	£100.00

8. Charges for electrical plant provided ancillary to the grant of use of system

8.1. None

Appendix 1 - Glossary

1.1. The following definitions, which can extend to grammatical variations and cognate expressions, are included to aid understanding:

Term	Definition
All-the-way Charge	A charge that is applicable to an end user rather than an LDNO. An end user in this context is a Supplier/User who has a registered MPAN or MSID and is using the Distribution System to transport energy on behalf of a Customer.
Balancing and Settlement Code (BSC)	The BSC contains the governance arrangements for electricity balancing and settlement in Great Britain. An overview document is available from www.elexon.co.uk/ELEXON Documents/trading_arrangements.pdf.
Common Distribution Charging Methodology (CDCM)	The CDCM used for calculating charges to Designated Properties as required by standard licence condition 13A of the Electricity Distribution Licence.
Connection Agreement	An agreement between an LDNO and a Customer which provides that that Customer has the right for its connected installation to be and remain directly or indirectly connected to that LDNO's Distribution System
Central Volume Allocation (CVA)	As defined in the BSC.
Customer	A person to whom a User proposes to supply, or for the time being supplies, electricity through an exit point, or from who, a User or any relevant exempt supplier, is entitled to recover charges, compensation or an account of profits in respect of electricity supplied through an exit point; Or A person from whom a User purchases, or proposes to purchase, electricity, at an entry point (who may from time to time be supplied with electricity as a Customer of that User (or another electricity supplier) through an exit point).
Designated EHV Properties	As defined in standard condition 13B of the Electricity Distribution Licence.
Designated Properties	As defined in standard condition 13A of the Electricity Distribution Licence.
Distribution Connection and Use of System Agreement (DCUSA)	The DCUSA is a multi-party contract between the licensed electricity distributors, suppliers, generators and Offshore Transmission Owners of Great Britain. It is a requirement that all licensed electricity distributors and suppliers become parties to the DCUSA.

<table>
<tr><th>Term</th><th>Definition</th></tr>
<tr><td>Distributor IDs</td><td>These are unique IDs that can be used, with reference to the MPAN, to identify your LDNO. The charges for other network operators can be found on their website.
<table>
<tr><th>ID</th><th>Distribution Service Area</th><th>Company</th></tr>
<tr><td>10</td><td>East of England</td><td>UK Power Networks</td></tr>
<tr><td>11</td><td>East Midlands</td><td>Western Power Distribution</td></tr>
<tr><td>12</td><td>London</td><td>UK Power Networks</td></tr>
<tr><td>13</td><td>Merseyside and North Wales</td><td>Scottish Power</td></tr>
<tr><td>14</td><td>Midlands</td><td>Western Power Distribution</td></tr>
<tr><td>15</td><td>Northern</td><td>Northern Powergrid</td></tr>
<tr><td>16</td><td>North Western</td><td>Electricity North West</td></tr>
<tr><td>17</td><td>Scottish Hydro Electric (and embedded networks in other areas)</td><td>Scottish Hydro Electric Power Distribution plc</td></tr>
<tr><td>18</td><td>South Scotland</td><td>Scottish Power</td></tr>
<tr><td>19</td><td>South East England</td><td>UK Power Networks</td></tr>
<tr><td>20</td><td>Southern Electric (and embedded networks in other areas)</td><td>Southern Electric Power Distribution plc</td></tr>
<tr><td>21</td><td>South Wales</td><td>Western Power Distribution</td></tr>
<tr><td>22</td><td>South Western</td><td>Western Power Distribution</td></tr>
<tr><td>23</td><td>Yorkshire</td><td>Northern Powergrid</td></tr>
<tr><td>24</td><td>All</td><td>Independent Power Networks</td></tr>
<tr><td>25</td><td>All</td><td>ESP Electricity</td></tr>
<tr><td>26</td><td>All</td><td>Energetics Electricity Ltd</td></tr>
<tr><td>27</td><td>All</td><td>The Electricity Network Company Ltd</td></tr>
<tr><td>29</td><td>All</td><td>Harlaxton Energy Networks</td></tr>
<tr><td>30</td><td>All</td><td>Peel Electricity Networks Ltd</td></tr>
<tr><td>31</td><td>All</td><td>UK Power Distribution Ltd</td></tr>
</table></td></tr>
<tr><td>Distribution Network Operator (DNO)</td><td>An electricity distributor that operates one of the 14 distribution services areas and in whose Electricity Distribution Licence the requirements of Section B of the standard conditions of that licence have effect.</td></tr>
</table>

Term	Definition
Distribution Services Area	The area specified by the Gas and Electricity Markets Authority within which each DNO must provide specified distribution services.
Distribution System	The system consisting (wholly or mainly) of electric lines owned or operated by an authorised distributor that is used for the distribution of electricity from: • Grid Supply Points or generation sets or other entry points to the points of delivery to: • Customers or Users or any transmission licensee in its capacity as operator of that licensee's transmission system or the Great Britain (GB) transmission system and includes any remote transmission assets (owned by a transmission licensee within England and Wales) that are operated by that authorised distributor and any electrical plant, electricity meters, and metering equipment owned or operated by it in connection with the distribution of electricity, but does not include any part of the GB transmission system.
EHV Distribution Charging Methodology (EDCM)	The EDCM used for calculating charges to Designated EHV Properties as required by standard licence condition 13B of the Electricity Distribution Licence.
Electricity Distribution Licence	The Electricity Distribution Licence granted or treated as granted pursuant to section 6(1) of the Electricity Act 1989.
Electricity Distributor	Any person who is authorised by an Electricity Distribution Licence to distribute electricity.
Embedded LDNO	This refers to an LDNO operating a Distribution System which is embedded within another Distribution System.
Embedded Network	An electricity Distribution System operated by an LDNO and embedded within another Distribution System.
Engineering Recommendation P2/6	A document of the Energy Networks Association, which defines planning standards for security of supply and is referred to in Standard Licence Condition 24 of our Electricity Distribution Licence.
Entry Point	A boundary point at which electricity is exported on to a Distribution System from a connected installation or from another Distribution System, not forming part of the total system (boundary point and total system having the meaning given to those terms in the BSC).
Exit Point	A point of connection at which a supply of electricity may flow from the Distribution System to the Customer's installation or User's installation or the Distribution System of another person.

Term	Definition
Extra High Voltage (EHV)	Nominal voltages of 22kV and above.
Gas and Electricity Markets Authority (GEMA)	As established by the Utilities Act 2000.
Grid Supply Point (GSP)	A metered connection between the National Grid Electricity Transmission system and the licensee's distribution system at which electricity flows to or from the Distribution System.
GSP group	A distinct electrical system that is supplied from one or more GSPs for which total supply into the GSP group can be determined for each half hour.
High Voltage (HV)	Nominal voltages of at least 1kV and less than 22kV.
Intermittent Generation	Defined in DCUSA Schedule 16 as a generation plant where the energy source of the prime mover cannot be made available on demand, in accordance to the definitions in Engineering Recommendation P2/6.
Invalid Settlement Combination	A Settlement combination that is not recognised as a valid combination in market domain data - see https://www.elexonportal.co.uk/MDDVIEWER.
kVA	Kilovolt ampere.
kVArh	Kilovolt ampere reactive hour.
kW	Kilowatt.
kWh	Kilowatt hour (equivalent to one "unit" of electricity).
Licensed Distribution Network Operator (LDNO)	The holder of a licence in respect of electricity distribution activities in Great Britain.
Line Loss Factor (LLF)	The factor that is used in Settlement to adjust the metering system volumes to take account of losses on the distribution system.
Line Loss Factor Class (LLFC)	An identifier assigned to an SVA metering system which is used to assign the LLF and use of system charges.
Load Factor	$= \frac{annual\ consumption\ (kWh)}{maximum\ demand\ (kW) \times hours\ in\ year}$
Low Voltage (LV)	Nominal voltages below 1kV.
Market Domain Data (MDD)	MDD is a central repository of reference data available to all Users involved in Settlement. It is essential to the operation of SVA trading arrangements.

Term	Definition
Maximum Export Capacity (MEC)	The MEC of apparent power expressed in kVA that has been agreed can flow through the entry point to the Distribution System from the Customer's installation as specified in the connection agreement.
Maximum Import Capacity (MIC)	The MIC of apparent power expressed in kVA that has been agreed can flow through the exit point from the Distribution System to the Customer's installation as specified in the connection agreement.
Measurement Class	A classification of Metering Systems used in the BSC which indicates how consumption is measured, i.e.: • Measurement Class A – non-half hourly metering equipment; • Measurement Class B – non-half hourly unmetered supplies; • Measurement Class C – half hourly metering equipment at or above 100kW premises; • Measurement Class D – half hourly unmetered supplies; • Measurement Class E – half hourly metering equipment below 100kW premises with CT; • Measurement Class F – half hourly metering equipment at below 100kW premises with CT or whole current, and at domestic premises; and • Measurement Class G – half hourly metering equipment at below 100kW premises with whole current and not at domestic premises.
Meter Timeswitch Code (MTC)	MTCs are three digit codes allowing suppliers to identify the metering installed in Customers' premises. They indicate whether the meter is single or multi-rate, pre-payment or credit, or whether it is 'related' to another meter. Further information can be found in MDD.
Metering Point	The point at which electricity that is exported to or imported from the licensee's Distribution System is measured, is deemed to be measured, or is intended to be measured and which is registered pursuant to the provisions of the MRA. For the purposes of this statement, GSPs are not 'Metering Points'.
Metering Point Administration Number (MPAN)	A number relating to a Metering Point under the MRA.
Metering System	Particular commissioned metering equipment installed for the purposes of measuring the quantities of exports and/or imports at the exit point or entry point.
Metering System Identifier (MSID)	MSID is a term used throughout the BSC and its subsidiary documents and has the same meaning as MPAN as used under the MRA.

Term	Definition
Master Registration Agreement (MRA)	The Master Registration Agreement (MRA) provides a governance mechanism to manage the processes established between electricity suppliers and distribution companies to enable electricity suppliers to transfer customers. It includes terms for the provision of Metering Point Administration Services (MPAS) Registrations.
Nested Networks	This refers to a situation where there is more than one level of Embedded Network and therefore nested Distribution Systems between LDNOs (e.g. host DNO→primary nested DNO→ secondary nested DNO→customer).
Non-Intermittent Generation	Defined in DCUSA Schedule 16 as a generation plant where the energy source of the prime mover can be made available on demand, in accordance to the definitions in Engineering Recommendation P2/6.
Ofgem	Office of Gas and Electricity Markets – Ofgem is governed by GEMA and is responsible for the regulation of the distribution companies.
Profile Class (PC)	A categorisation applied to NHH MPANs and used in settlement to group customers with similar consumption patterns to enable the calculation of consumption profiles.
Settlement	The determination and settlement of amounts payable in respect of charges (including reconciling charges) in accordance with the BSC.
Settlement Class (SC)	The combination of Profile Class, Line Loss Factor Class, Time Pattern Regime and Standard Settlement Configuration, by Supplier within a GSP group and used for Settlement.
Standard Settlement Configuration (SSC)	A standard metering configuration relating to a specific combination of Time Pattern Regimes.
Supercustomer	The method of billing Users for use of system on an aggregated basis, grouping together consumption and standing charges for all similar NHH metered Customers or aggregated HH metered Customers.
Supercustomer DUoS Report	A report of profiled data by Settlement Class providing counts of MPANs and units consumed.
Supplier	An organisation with a supply licence responsible for electricity supplied to and/or exported from a metering point.
Supplier Volume Allocation (SVA)	As defined in the BSC.
Time Pattern Regime (TPR)	The pattern of switching behaviour through time that one or more meter registers follow.

Term	Definition
Unmetered Supplies	Exit points deemed to be suitable as unmetered supplies as permitted in the Electricity (Unmetered Supply) Regulations 2001 and where operated in accordance with BSC procedure 520[14].
Use of System Charges	Charges which are applicable to those parties which use the Distribution System.
User	Someone that has a use of system agreement with the DNO e.g. a supplier, generator or other LDNO.

[14] Balancing and Settlement Code Procedures are available from http://www.elexon.co.uk/pages/bscps.aspx

Appendix 2 - Guidance notes[15]

Background

1.1. The electricity bill from your Supplier contains an element of charge to cover electricity distribution costs. This distribution charge covers the cost of operating and maintaining a safe and reliable Distribution System that forms the 'wires' that transport electricity between the national transmission system and end users such as homes and businesses. Our Distribution System includes overhead lines, underground cables, substations and transformers.

1.2. In most cases your Supplier is invoiced for the distribution charge and this is normally part of your total bill. In some cases, for example business users, the Supplier may pass through the distribution charge as an identifiable line item on the electricity bill.

1.3. Where electricity is generated at a premises your Supplier may receive a credit for energy that is exported on to the Distribution System. These credits are intended to reflect that the exported generation may reduce the need for traditional demand led reinforcement of the Distribution System.

1.4. Understanding your distribution charges could help you reduce your costs and increase your credits. This is achieved by understanding the components of the charge to help you identify whether there may be opportunities to change the way you use the Distribution System.

Meter point administration

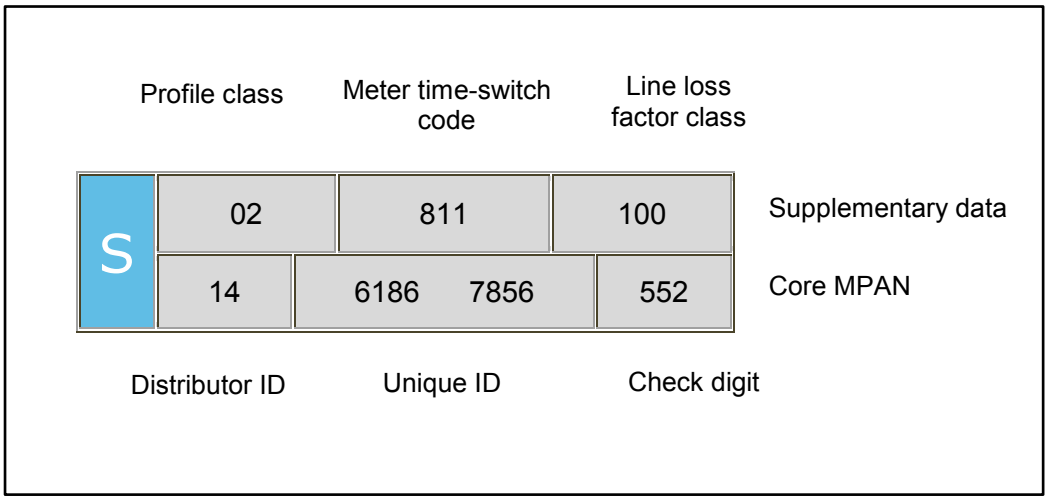
1.5. We are responsible for managing the electricity supply points that are connected to our Distribution System. Typically, every supply point is identified by a Meter Point Administration Number (MPAN). A few supply points may have more than one MPAN depending on the metering configuration (e.g. a school which may have an MPAN for the main supply and an MPAN for catering).

1.6. The full MPAN is a 21 digit number, preceded by an 'S' and includes supplementary data. The MPAN applicable to a supply point is found on the electricity bill from your Supplier. This number enables you to establish who your electricity distributor is, details of the characteristics of the supply and importantly the distribution charges that are applicable to your premises.

[15] These guidance notes are provided for additional information and do not form part of the application of charges.

1.7. The 21-digit number is normally presented in two sections as shown in the following diagram. The top section is supplementary data which gives information about the characteristics of supply, while the bottom 'core' is the unique identifier.

Full MPAN diagram



1.8. Generally, you will only need to know the Distributor ID and line loss factor class to identify the distribution charges for your premises. However, there are some premises where charges are specific to that site. In these instances, the charges are identified by the core MPAN. Our Distributor ID is 14. Other Distributor IDs can be referenced in the glossary.

1.9. Additionally it can be useful to understand the profile class provided in the supplementary data. The profile class will be a number between 00 and 08. The following list provides details of the allocation of profile classes to types of customers:

- '01' – Domestic customers with unrestricted supply
- '02' – Domestic customers with restricted load, for example off-peak heating
- '03' – Non-domestic customers with unrestricted supply
- '04' – Non-domestic customers with restricted load, for example off-peak heating
- '05' – Non-domestic maximum demand customers with a Load Factor of less than 20%
- '06' – Non-domestic maximum demand customers with a Load Factor between 20% and 30%

- ‘07’ – Non-domestic maximum demand customers with a Load Factor between 30% and 40%
- ‘08’ – Non-domestic maximum demand customers with a Load Factor over 40% or non-half hourly metered generation customers
- ‘00’ – Half-hourly metered demand and generation customers

1.10. Unmetered Supplies will be allocated to profile class 01, 08 or 00 depending on the type of load or the measurement method of the load.

1.11. The allocation of the profile class will affect your charges. If you feel that you have been allocated the wrong profile class, please contact your Supplier as they are responsible for this.

Your charges

1.12. All distribution charges that relate to our Distributor ID 14 are provided in this statement.

1.13. You can identify your charges by referencing your line loss factor class, from Annex 1. If the MPAN is for a Designated EHV Property, then the charges will be found in Annex 2. In a few instances, the charges may be contained in Annex 3 or Annex 6. When identifying charges in Annex 2, please note that some line loss factor classes have more than one charge. In this instance you will need to select the correct charge by cross referencing with the core MPAN provided in the table.

1.14. Once you have identified which charge structure applies to your MPAN then you will be able to calculate an estimate of your distribution charge using the calculator provided in the spreadsheet ‘Schedule of charges and other tables’ found in the sheet called ‘Charge Calculator’. This spreadsheet can be downloaded from www.westernpower.co.uk.

Reducing your charges

1.15. The most effective way to reduce your energy charges is to reduce your consumption by switching off or using more energy efficient appliances. However, there are also other potential opportunities to reduce your distribution charges; for example, it may be beneficial to shift demand or generation to a better time period. Demand use is likely to be cheaper outside peak periods and generation credits more beneficial, although the ability to directly benefit will be linked to the structure of your supply charges.

1.16. The calculator mentioned above provides the opportunity to establish a forecast of the change in distribution charges that could be achieved if you are able to change any of the consumption related inputs.

Reactive power and reactive power charges

1.17. Reactive power is a separately charged component of connections that are half hourly metered. Reactive power charges are generally avoidable if 'best practice' design of the properties' electrical installation has been provided in order to maintain a power factor between 0.95 and unity at the Metering Point.

1.18. Reactive Power (kVArh) is the difference between working power (active power measured in kW) and total power consumed (apparent power measured in kVA). Essentially it is a measure of how efficiently electrical power is transported through an electrical installation or a Distribution System.

1.19. Power flowing with a power factor of unity results in the most efficient loading of the Distribution System. Power flowing with a power factor of less than 0.95 results in much higher losses in the Distribution System, a need to potentially provide higher capacity electrical equipment and consequently a higher bill for you the consumer. A comparatively small improvement in power factor can bring about a significant reduction in losses since losses are proportional to the square of the current.

1.20. Different types of electrical equipment require some 'reactive power' in addition to 'active power' in order to work effectively. Electric motors, transformers and fluorescent lighting, for example, may produce poor power factors due to the nature of their inductive load. However, if good design practice is applied then the poor power factor of appliances can be corrected as near as possible to source. Alternatively, poor power factor can be corrected centrally near to the meter.

1.21. There are many advantages that can be achieved by correcting poor power factor. These include: reduced energy bills through lower reactive charges, lower capacity charges and reduced power consumption and reduced voltage drop in long cable runs.

Site-specific EDCM charges

1.22. A site classified as a Designated EHV Property is subject to a locational-based charging methodology (referred to as EDCM) for higher voltage network users. Distributors use one of two approved approaches: Long Run Incremental Cost

(LRIC) or Forward Cost Pricing (FCP); we use the FCP. The EDCM will apply to Customers connected at Extra High Voltage or connected at High Voltage and metered at a high voltage substation.

1.23. EDCM charges and credits are site-specific, reflecting the degree to which the local and higher voltage networks have the capacity to serve more demand or generation without the need to upgrade the electricity infrastructure. The charges also reflect the networks specifically used to deliver the electricity to the site as well as the usage at the site. Generators with non-intermittent output and deemed to be providing beneficial support to our networks may qualify to receive credit.

1.24. The charges under the EDCM comprise of the following individual components:

a) **Fixed charge (pence/MPAN/day)** - This charge recovers operational costs associated with those connection assets that are provided for the 'sole' use by the customer. The value of these assets is used as a basis to derive the charge.

b) **Capacity charge (pence/kVA/day)** - This charge comprises the relevant FCP cost component, the National Grid Electricity Transmission cost and other regulated costs.

Capacity charges are levied on the MIC, MEC, and any exceeded capacity. You may wish to review your MIC or MEC periodically to ensure it remains appropriate for your needs as you may be paying for more capacity than you require. If you wish to make changes contact us via the details in paragraph 1.12

The FCP cost is locational and reflects our assessment of future network reinforcement necessary at the voltage of connection (local) and beyond at all higher voltages (remote) relevant to the customer's connection. This results in the allocation of higher costs in more capacity congested parts of the network reflecting the greater likelihood of future reinforcement in these areas, and the allocation of lower costs in less congested parts of the network. The local FCP cost is included in the capacity charge.

Our regulated costs include direct and indirect operational costs and a residual amount to ensure recovery of our regulated allowed revenue. The capacity charge recovers these costs using the customer usage profile and the relevant

assets being used to transport electricity between the source substation and customer's Metering Point.

c) **Super-red unit charge (pence/kWh)** - This charge recovers the remote FCP component. The charge is positive for import and negative for export which means you can reduce your charges either by minimising consumption or increasing export at those times. The charge is applied on consumption during the Super-red time period as detailed in Annex 2.

1.25. Future charge rates may be affected by consumption during the Super-red period, therefore reducing consumption in the Super-red time period may be beneficial.

1.26. **Reactive Power** - The EDCM does not include a separate charge component for any reactive power flows (kVAr) for either demand or generation. However, the EDCM charges do reflect the effect on the network of the customer's power factor, for example unit charges can increase if your site power factor is poor (lower than 0.95). Improving your site's power factor will also reduce the maximum demand (kVA) for the same power consumed in kW thus providing scope to reduce your agreed capacity requirements.

Annex 1 - Schedule of Charges for use of the Distribution System by LV and HV Designated Properties

Western Power Distribution (West Midlands) plc - Effective from 1 April 2019 - Final LV and HV charges

Time Bands for Half Hourly Metered Properties			
Time periods	Red Time Band	Amber Time Band	Green Time Band
Monday to Friday	16:00 to 19:00	07:30 to 16:00 19:00 to 21:00	00:00 to 07:30 21:00 to 24:00
Weekends			00:00 to 24:00
Notes	All the above times are in UK Clock time		

Time Bands for Half Hourly Unmetered Properties			
	Black Time Band	Yellow Time Band	Green Time Band
Monday to Friday Nov to Feb	16:00 to 19:00	07:30 to 16:00 19:00 to 21:00	00:00 to 07:30 21:00 to 24:00
Monday to Friday Mar to Oct		07:30 to 21:00	00:00 to 07:30 21:00 to 24:00
Weekends			00:00 to 24:00
Notes	All the above times are in UK Clock time		

Tariff name	Open LLFCs	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh	Closed LLFCs
Domestic Unrestricted	1	1	2.196			4.14				2, 3
Domestic Two Rate	4	2	2.405	1.092		4.14				5, 6, 30
Domestic Off Peak (related MPAN)	34	2	1.162							
Small Non Domestic Unrestricted	7	3	2.021			7.50				8, 9, 13, 14, 107, 108, 109
Small Non Domestic Two Rate	10	4	2.192	1.082		7.50				11, 12, 110, 111, 112
Small Non Domestic Off Peak (related MPAN)	40	4	1.228							
LV Medium Non-Domestic	21	5-8	2.144	1.078		19.54				20, 22, 25, 26, 27
LV Sub Medium Non-Domestic	19	5-8	2.046	1.070		23.88				
LV Network Domestic	632		7.500	1.613	1.084	4.14				
LV Network Non-Domestic Non-CT	633		6.852	1.553	1.076	7.50				
LV HH Metered	127, 129		5.282	1.415	1.054	9.26	3.84	7.58	0.168	121, 124, 132
LV Sub HH Metered	128		3.924	1.303	1.031	7.22	4.68	6.74	0.114	
HV HH Metered	365, 367		2.418	1.147	1.016	78.03	4.95	6.77	0.049	
NHH UMS category A	95	8	2.640							
NHH UMS category B	96	1	2.922							
NHH UMS category C	97	1	3.860							
NHH UMS category D	98	1	2.347							
LV UMS (Pseudo HH Metered)	99		23.795	2.315	1.805					
LV Generation NHH or Aggregate HH	625	8 & 0	-0.596							
LV Sub Generation NHH	570	8	-0.503							
LV Generation Intermittent	571		-0.596						0.247	
LV Generation Intermittent no RP charge	141		-0.596							
LV Generation Non-Intermittent	573		-4.733	-0.442	-0.056				0.247	
LV Generation Non-Intermittent no RP charge	142		-4.733	-0.442	-0.056					
LV Sub Generation Intermittent	572		-0.503						0.208	
LV Sub Generation Intermittent no RP charge	143		-0.503							
LV Sub Generation Non-Intermittent	574		-3.996	-0.378	-0.045				0.208	
LV Sub Generation Non-Intermittent no RP charge	144		-3.996	-0.378	-0.045					
HV Generation Intermittent	575		-0.260			32.08			0.169	
HV Generation Intermittent no RP charge	145		-0.260			32.08				
HV Generation Non-Intermittent	577		-2.061	-0.209	-0.017	32.08			0.169	
HV Generation Non-Intermittent no RP charge	146		-2.061	-0.209	-0.017	32.08				

Note: Where a tariff only has a p/kWh unit rate in Unit Charge 1 then this unit rate applies at all times.

Annex 2 - Schedule of Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users).

Western Power Distribution (West Midlands) plc - Effective from 1 April 2019 - Final EDCM charges

Time Periods for Designated EHV Properties	
Time periods	**Super Red Time Band**
Monday to Friday Nov to Feb	16:00 to 19:00
Notes	All the above times are in UK Clock time

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
636	636	1470000533244	933	933	1470000533253	Troughton Farm PV		2.08	0.66	0.66		866.33	0.05	0.05
702	702	1423197100003	703	703	1430000005417	Tyseley Waste		22.60	2.25	2.25				
704	704	1423674500009				Takao Europe		337.79	2.27	2.27				
705	705	1470000097947	750	750	1470000097965	Four Ashes Incinerator		154.00	0.76	0.76		782.20	0.05	0.05
706	706	1470000077913	751	751	1470000077950	Witches Farm Solar	3.224	15.59	2.02	2.02		550.68	0.05	0.05
707	707	1430000001342 1430000001351	708	708	1430000001360 1430000001370	Uni of Birmingham		2005.64	2.76	2.76				
709	709	1426644200003				Severn Trent Water (Wyelands)		4402.23	0.90	0.90				
710	710	1425993500002	732	732	1424993500000	Wolverhampton Waste Services		172.36	1.01	1.01				
711	711	1421696500001 1430000000906	733	733	1430000000915 1430000000924	Stoke CHP		135.19	1.46	1.46				
712	712	1428483000001 1429586500003				WBB Minerals		548.77	1.35	1.35				
713	713	1422804000005				Cauldon Cement		347.76	2.80	2.80				
714	714	1412791203000				Abson Gas Compressor Station		46.33	0.85	0.85				
715	715	1422108000000				Ervin Amasteel		3036.40	0.98	0.98				
716	716	1426793500003	734	734	1425793500001	Hanford Waste Services		16.67	1.05	1.05				
717	717	1422664500000 1425861000001	735	735	1430000033051 1430000033060	NR Kidsgrove		8473.54	1.92	1.92				
718	718	1421664500008 1426342000002	736	736	1430000033098 1430000033103	NR Stafford		2437.85	1.23	1.23				
719	719	1423124100000 1428564500005	741	741	1430000033070 1430000044090	NR Washwood Heath		1429.33	1.22	1.22				
720	720	1420286500000	737	737	1430000033121	NR Winson Green		1194.74	3.25	3.25				
721	721	1423566000006	738	738	1430000033089	NR Smethwick		6525.57	0.75	0.75				
722	722	1424136000004	739	739	1430000033112	NR Willenhall		974.31	1.00	1.00				
723	723	1460002083346	748	748	1460002083355	Northwick AD		2.66	1.81	1.81	-1.533	53.27	0.05	0.05
724	724	1430000027786 1430000027795 1430000027800 1430000027810 1430000027829 1430000027838 1430000027847 1430000027856				Inco Alloys		513.07	5.69	5.69				
725	725	1460002258662	749	749	1460002258671	Swancote	0.810	26.40	1.43	1.43	-1.843	623.12	0.05	0.05
726	726	1460002256025	752	752	1460002256034	Spring Hill Solar generation		0.89	2.07	2.07		88.79	0.05	0.05
727	727	1460001869731 1460001869750				NG Wormington Gas Compressor	1.515	2723.51	2.27	2.27				
728	728	1470000086156	753	753	1470000086147	Greenfrog STOR generation		5.33	1.95	1.95	-1.533	355.86	0.05	0.05
729	729	1470000223432	754	754	1470000223441	Union Road		494.93	1.03	1.03		1732.25	0.05	0.05
730	730	1423464500000 1429264500000	731	731	1421464500007 1422464500009	Quatt	3.589	38.62	4.60	4.60				
740	740	1425886500002	746	746	1426886500004	Knypersley	0.455	0.17	2.44	2.44				
742	742	1429414500005				Simplex	0.180	128.27	5.50	5.50				
743	743	1470000174885				Northwick STOR sub supply		2.13	3.03	3.03				
744	744	1428882200005	915	915	1470000469625	Star Aluminium	2.216		1.70	1.70	-1.843		0.05	0.05
747	747	1422949000004				Goodyear		3923.54	1.33	1.33				
770	770	1470000190520	755	755	1470000190530	Battlefield Incinerator	0.919	92.84	1.49	1.49	-1.843	643.26	0.05	0.05
771	771	1470000275547	756	756	1470000275556	Says Court Farm PV		0.86	3.38	3.38		641.95	0.05	0.05
772	772	1470000283681	757	757	1470000283690	Hayford Fm PV Emdedded 2	0.908	2.39	1.72	1.72		361.38	0.05	0.05
773	773	1470000303901	758	758	1470000303910	Rotherdale Solar Farm			3.47	3.47			0.05	0.05
774	774	1470000406449	759	759	1470000406430	Lower Newton Solar Farm		5.07	1.43	1.43		912.49	0.05	0.05
775	775	1470000416794	760	760	1470000416800	Wrockwardine Solar Farm	0.909		1.66	1.66			0.05	0.05
776	776	1470000425530	761	761	1470000425549	Condover Solar Farm	0.914	23.33	1.94	1.94		2916.07	0.05	0.05
777	777	1470000426125	762	762	1470000426134	Tower Hill Farm PV		1.94	2.45	2.45		872.60	0.05	0.05

Note: The list of MPANs / MSIDs provided may be incomplete; the DNO reserves the right to apply the listed charges to any other MPANs / MSIDs associated with the site.

Annex 2 - Schedule of Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users).

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
778	778	1470000429766	763	763	1470000429775	Hill House Farm Solar		3.17	3.38	3.38		2572.23	0.05	0.05
779	779	1470000430089	764	764	1470000430103	Pitchford Farm Solar	0.899	17.71	2.06	2.06		2656.96	0.05	0.05
780	780	1470000437749	765	765	1470000437758	Sundorne Solar Park	0.892	10.35	1.49	1.49		351.96	0.05	0.05
781	781	1470000473756	766	766	1470000473765	Hartlebury EFW	3.235	395.49	1.31	1.31	-3.289	2471.78	0.05	0.05
782	782	1470000478727	767	767	1470000478736	Upper Huntingford PV		1.84	1.14	1.14		303.54	0.05	0.05
783	783	1470000479190	768	768	1470000479206	Ring O Bells Solar		6.17	1.25	1.25		616.88	0.05	0.05
784	784	1470000501641	769	769	1470000501650	Hall Farm PV Awre		2.65	1.81	1.81		884.63	0.05	0.05
785	785	1470000174928	805	805	1470000174900	5 Mile Drive Solar Park		0.89	2.05	2.05		59.13	0.05	0.05
786	786	1470000671023	806	806	1470000671032	Green Frog STOR Extension		7.99	1.81	1.81	-1.533	75.82	0.05	0.05
794	794	1470000535881	815	815	1470000535890	Wickhamford PV	1.471	1.58	2.73	2.73		765.72	0.05	0.05
795	795	1470000540543	816	816	1470000540552	Yorkley Wood Farm PV		4.07	1.07	1.07		407.20	0.05	0.05
796	796	1470000542319	817	817	1470000542328	Awbridge Farm Diesel Gen		61.28	0.94	0.94		1885.40	0.05	0.05
797	797	1470000542833	818	818	1470000542842	Bristol Rd Glos STOR		0.93	3.38	3.38		741.25	0.05	0.05
798	798	1470000542790	819	819	1470000542806	Actrees Farm PV		14.47	2.04	2.04		3255.83	0.05	0.05
799	799	1470000548418	820	820	1470000548427	Sheriffhales Farm PV	0.909	32.33	1.74	1.74		4429.24	0.05	0.05
800	800	1499999999999	7070	7070	7070	Heartlands Power Ltd / Fort Dunlop		5.86	0.69	0.69				
801	801	1470000552432	821	821	1470000552441	Upper Wick Solar Farm		4.22	1.02	1.02		354.11	0.05	0.05
866	866	1470000597061	824	824	1470000597070	Astley Solar Farm	3.118	7.50	0.90	0.90		417.01	0.05	0.05
867	867	1470000444133	825	825	1470000444142	Hayford Fm PV Emdedded 1	0.908	2.04	1.72	1.72		303.57	0.05	0.05
868	868	1470000621946	826	826	1470000621955	Sheriffhales CIC PV	0.911	2.95	1.75	1.75		289.20	0.05	0.05
869	869	1470000630996	827	827	1470000631002	Wolverhampton Power STOR		39.65	0.94	0.94		1112.86	0.05	0.05
870	870	1470000641872	828	828	1470000641881	Moneystone Quarry PV		26.10	0.92	0.92		686.56	0.05	0.05
871	871	1470000641890	829	829	1470000744930	Heywood Grange Farm PV		12.79	1.06	1.06		668.28	0.05	0.05
872	872	1470000668883	830	830	1470000668892	Garreg Lwyd Wind Farm	3.168	313.73	1.74	1.74		29956.90	0.05	0.05
873	873	1470000711049	831	831	1470000711058	Henley Solar Farm PV	3.194	3.61	0.73	0.73		288.54	0.05	0.05
875	875	1470000723569	833	833	1470000723578	High Point Solar PV	3.145	9.04	1.44	1.44		283.11	0.05	0.05
876	876	1470000732304	834	834	1470000732313	Staunch Standby STOR		3.10	0.94	0.94		619.95	0.05	0.05
877	877	1470000733274	835	835	1470000733283	ISIS House STOR		7.79	2.02	2.02	-1.533	1557.07	0.05	0.05
878	878	1470000744940	836	836	1470000744959	Heywood Grange Bttry		159.88	1.00	1.00	-0.269	159.88	0.05	0.05
879	879	1470000745039	837	837	1470000745048	Upper Meadowly Farm PV	0.898	14.77	2.08	2.08		2461.36	0.05	0.05
2226	2226	2226				Cellarhead Barlaston (Meaford) Interconnector			2.28	2.28				
7337	7337	7337	7338	7338	7338	Sudmeadow Rd STOR		34.03	0.94	0.94		947.35	0.05	0.05
0324	0324	0324				Cellarhead Whitfield Interconnector			2.20	2.20				
			745	745	1430000021836	Redditch Gas Turbine								
New Import 1	New Import 1	New Import 1	New Export 1	New Export 1	New Export 1	Chatterley Whitfield		0.29	1.27	1.27	-0.471	360.34	0.05	0.05
New Import 2	New Import 2	New Import 2	New Export 2	New Export 2	New Export 2	Defford Solar Farm		30.42	2.26	2.26		6236.40	0.05	0.05
New Import 3	New Import 3	New Import 3	New Export 3	New Export 3	New Export 3	Rock Farm	3.194	278.43	0.81	0.81	-3.289	278.43	0.05	0.05
New Import 4	New Import 4	New Import 4	New Export 4	New Export 4	New Export 4	Stanboro Lane		740.74	0.68	0.68		1232.10	0.05	0.05
New Import 5	New Import 5	New Import 5	New Export 5	New Export 5	New Export 5	Feckenham Farm		256.38	2.02	2.02	-1.533	672.12	0.05	0.05
New Import 6	New Import 6	New Import 6	New Export 6	New Export 6	New Export 6	Fryers Road Waste Generation option 2		710.22	0.81	0.81		3693.13	0.05	0.05
New Import 7	New Import 7	New Import 7	New Export 7	New Export 7	New Export 7	Javelin Park		808.58	0.81	0.81		4447.17	0.05	0.05
New Import 8	New Import 8	New Import 8	New Export 8	New Export 8	New Export 8	Little Frome Solar Farm	3.145	0.76	2.38	2.38		639.27	0.05	0.05
New Import 9	New Import 9	New Import 9	New Export 9	New Export 9	New Export 9	Larks Lane Bristol		290.91	1.08	1.08		6674.79	0.05	0.05
New Import 10	New Import 10	New Import 10	New Export 10	New Export 10	New Export 10	Longney Estate		6.96	1.08	1.08		5919.97	0.05	0.05
New Import 11	New Import 11	New Import 11	New Export 11	New Export 11	New Export 11	Lower Fields Solar Farm		1.24	2.26	2.26		600.61	0.05	0.05
New Import 12	New Import 12	New Import 12	New Export 12	New Export 12	New Export 12	Outclough Farm		3.55	1.78	1.78		709.12	0.05	0.05
New Import 13	New Import 13	New Import 13				Pontrilas Sawmill	4.770	66.90	6.22	6.22				
New Import 14	New Import 14	New Import 14	New Export 14	New Export 14	New Export 14	Radbrooke Pastures PV		1.21	2.26	2.26		1211.54	0.05	0.05
New Import 15	New Import 15	New Import 15	New Export 15	New Export 15	New Export 15	Wednesbury Power		59.47	0.94	0.94		2704.81	0.05	0.05
New Import 16	New Import 16	New Import 16	New Export 16	New Export 16	New Export 16	Giffords Way		646.23	0.81	0.81		1938.68	0.05	0.05
New Import 17	New Import 17	New Import 17	New Export 17	New Export 17	New Export 17	Iron Acton Battery Storage		911.35	0.43	0.43		911.35	0.05	0.05
New Import 18	New Import 18	New Import 18	New Export 18	New Export 18	New Export 18	Bloxwich ESS		2680.62	0.68	0.68		2680.62	0.05	0.05
New Import 19	New Import 19	New Import 19	New Export 19	New Export 19	New Export 19	Pensnett ESS		2379.53	0.68	0.68		2379.53	0.05	0.05
New Import 20	New Import 20	New Import 20	New Export 20	New Export 20	New Export 20	ARENKO PD 47-49//65 Burntwood ESS		3484.22	0.68	0.68		3484.22	0.05	0.05
New Import 21	New Import 21	New Import 21	New Export 21	New Export 21	New Export 21	Meaford Power Station		43.54	0.52	0.52		2133.65	0.05	0.05
New Import 22	New Import 22	New Import 22	New Export 22	New Export 22	New Export 22	Awbridge Solar Farm,Trysull			1.44	1.44			0.05	0.05
New Import 23	New Import 23	New Import 23	New Export 23	New Export 23	New Export 23	Woodhall Solar Farm, Wichenford, Worcester	3.145		2.38	2.38			0.05	0.05
New Import 24	New Import 24	New Import 24	New Export 24	New Export 24	New Export 24	Bones Lane		51.47	0.94	0.94		5790.29	0.05	0.05
New Import 25	New Import 25	New Import 25	New Export 25	New Export 25	New Export 25	The Hem	0.883	9.47	1.57	1.57	-1.843	1894.46	0.05	0.05
New Import 26	New Import 26	New Import 26	New Export 26	New Export 26	New Export 26	Sandwell Power		73.19	0.94	0.94		2294.01	0.05	0.05
New Import 27	New Import 27	New Import 27	New Export 27	New Export 27	New Export 27	Langley Generation		544.30	0.68	0.68		544.30	0.05	0.05
New Import 28	New Import 28	New Import 28	New Export 28	New Export 28	New Export 28	Water Orton		107.14	0.76	0.76		7321.34	0.05	0.05
New Import 29	New Import 29	New Import 29	New Export 29	New Export 29	New Export 29	Worlds End Farm		79.41	1.08	1.08		2382.41	0.05	0.05
New Import 30	New Import 30	New Import 30	New Export 30	New Export 30	New Export 30	Offerton Farm		1314.33	3.00	3.00	-3.289	1314.33	0.05	0.05
New Import 31	New Import 31	New Import 31	New Export 31	New Export 31	New Export 31	Ryeford Ebley Road		152.53	0.81	0.81		305.07	0.05	0.05
New Import 32	New Import 32	New Import 32	New Export 32	New Export 32	New Export 32	Clay Pit Hill		6.76	0.94	0.94		592.84	0.05	0.05
New Import 33	New Import 33	New Import 33	New Export 33	New Export 33	New Export 33	The Old Airfield		48.69	0.81	0.81		243.45	0.05	0.05
New Import 34	New Import 34	New Import 34	New Export 34	New Export 34	New Export 34	Land off A46, Evesham		288.20	1.89	1.89	-1.533	288.20	0.05	0.05

Note: The list of MPANs / MSIDs provided may be incomplete; the DNO reserves the right to apply the listed charges to any other MPANs / MSIDs associated with the site.

Annex 2a - Schedule of Import Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users).

Western Power Distribution (West Midlands) plc - Effective from 1 April 2019 - Final EDCM import charges

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)
636	636	1470000533244	Troughton Farm PV		2.08	0.66	0.66
702	702	1423197100003	Tyseley Waste		22.60	2.25	2.25
704	704	1423674500009	Takao Europe		337.79	2.27	2.27
705	705	1470000097947	Four Ashes Incinerator		154.00	0.76	0.76
706	706	1470000077913	Witches Farm Solar	3.224	15.59	2.02	2.02
707	707	1430000001342 1430000001351	Uni of Birmingham		2,005.64	2.76	2.76
709	709	1426644200003	Severn Trent Water (Wyelands)		4,402.23	0.90	0.90
710	710	1425993500002	Wolverhampton Waste Services		172.36	1.01	1.01
711	711	1421696500001 1430000000906	Stoke CHP		135.19	1.46	1.46
712	712	1428483000001 1429586500003	WBB Minerals		548.77	1.35	1.35
713	713	1422804000005	Cauldon Cement		347.76	2.80	2.80
714	714	1412791203000	Abson Gas Compressor Station		46.33	0.85	0.85
715	715	1422108000000	Ervin Amasteel		3,036.40	0.98	0.98
716	716	1426793500003	Hanford Waste Services		16.67	1.05	1.05
717	717	1422664500000 1425861000001	NR Kidsgrove		8,473.54	1.92	1.92
718	718	1421664500008 1426342000002	NR Stafford		2,437.85	1.23	1.23
719	719	1423124100000 1428564500005	NR Washwood Heath		1,429.33	1.22	1.22
720	720	1420286500000	NR Winson Green		1,194.74	3.25	3.25
721	721	1423566000006	NR Smethwick		6,525.57	0.75	0.75
722	722	1424136000004	NR Willenhall		974.31	1.00	1.00
723	723	1460002083346	Northwick AD		2.66	1.81	1.81

Note: The list of MPANs / MSIDs provided may be incomplete; the DNO reserves the right to apply the listed charges to any other MPANs / MSIDs associated with the site.

Annex 2a - Schedule of Import Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users).

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)
724	724	1430000027786 1430000027795 1430000027800 1430000027810 1430000027829 1430000027838 1430000027847 1430000027856	Inco Alloys		513.07	5.69	5.69
725	725	1460002258662	Swancote	0.810	26.40	1.43	1.43
726	726	1460002256025	Spring Hill Solar generation		0.89	2.07	2.07
727	727	1460001869731 1460001869750	NG Wormington Gas Compressor	1.515	2,723.51	2.27	2.27
728	728	1470000086156	Greenfrog STOR generation		5.33	1.95	1.95
729	729	1470000223432	Union Road		494.93	1.03	1.03
730	730	1423464500000 1429264500000	Quatt	3.589	38.62	4.60	4.60
740	740	1425886500002	Knypersley	0.455	0.17	2.44	2.44
742	742	1429414500005	Simplex	0.180	128.27	5.50	5.50
743	743	1470000174885	Northwick STOR sub supply		2.13	3.03	3.03
744	744	1428882200005	Star Aluminium	2.216		1.70	1.70
747	747	1422949000004	Goodyear		3,923.54	1.33	1.33
770	770	1470000190520	Battlefield Incinerator	0.919	92.84	1.49	1.49
771	771	1470000275547	Says Court Farm PV		0.86	3.38	3.38
772	772	1470000283681	Hayford Fm PV Emdedded 2	0.908	2.39	1.72	1.72
773	773	1470000303901	Rotherdale Solar Farm			3.47	3.47
774	774	1470000406449	Lower Newton Solar Farm		5.07	1.43	1.43
775	775	1470000416794	Wrockwardine Solar Farm	0.909		1.66	1.66
776	776	1470000425530	Condover Solar Farm	0.914	23.33	1.94	1.94
777	777	1470000426125	Tower Hill Farm PV		1.94	2.45	2.45
778	778	1470000429766	Hill House Farm Solar		3.17	3.38	3.38
779	779	1470000430089	Pitchford Farm Solar	0.899	17.71	2.06	2.06
780	780	1470000437749	Sundorne Solar Park	0.892	10.35	1.49	1.49
781	781	1470000473756	Hartlebury EFW	3.235	395.49	1.31	1.31
782	782	1470000478727	Upper Huntingford PV		1.84	1.14	1.14
783	783	1470000479190	Ring O Bells Solar		6.17	1.25	1.25
784	784	1470000501641	Hall Farm PV Awre		2.65	1.81	1.81
785	785	1470000174928	5 Mile Drive Solar Park		0.89	2.05	2.05

Note: The list of MPANs / MSIDs provided may be incomplete; the DNO reserves the right to apply the listed charges to any other MPANs / MSIDs associated with the site.

Annex 2a - Schedule of Import Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users).

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)
786	786	1470000671023	Green Frog STOR Extension		7.99	1.81	1.81
794	794	1470000535881	Wickhamford PV	1.471	1.58	2.73	2.73
795	795	1470000540543	Yorkley Wood Farm PV		4.07	1.07	1.07
796	796	1470000542319	Awbridge Farm Diesel Gen		61.28	0.94	0.94
797	797	1470000542833	Bristol Rd Glos STOR		0.93	3.38	3.38
798	798	1470000542790	Actrees Farm PV		14.47	2.04	2.04
799	799	1470000548418	Sheriffhales Farm PV	0.909	32.33	1.74	1.74
800	800	1499999999999	Heartlands Power Ltd / Fort Dunlop		5.86	0.69	0.69
801	801	1470000552432	Upper Wick Solar Farm		4.22	1.02	1.02
866	866	1470000597061	Astley Solar Farm	3.118	7.50	0.90	0.90
867	867	1470000444133	Hayford Fm PV Emdedded 1	0.908	2.04	1.72	1.72
868	868	1470000621946	Sheriffhales CIC PV	0.911	2.95	1.75	1.75
869	869	1470000630996	Wolverhampton Power STOR		39.65	0.94	0.94
870	870	1470000641872	Moneystone Quarry PV		26.10	0.92	0.92
871	871	1470000641890	Heywood Grange Farm PV		12.79	1.06	1.06
872	872	1470000668883	Garreg Lwyd Wind Farm	3.168	313.73	1.74	1.74
873	873	1470000711049	Henley Solar Farm PV	3.194	3.61	0.73	0.73
875	875	1470000723569	High Point Solar PV	3.145	9.04	1.44	1.44
876	876	1470000732304	Staunch Standby STOR		3.10	0.94	0.94
877	877	1470000733274	ISIS House STOR		7.79	2.02	2.02
878	878	1470000744940	Heywood Grange Bttry		159.88	1.00	1.00
879	879	1470000745039	Upper Meadowly Farm PV	0.898	14.77	2.08	2.08
2226	2226	2226	Cellarhead Barlaston (Meaford) Interconnector			2.28	2.28
7337	7337	7337	Sudmeadow Rd STOR		34.03	0.94	0.94
0324	0324	0324	Cellarhead Whitfield Interconnector			2.20	2.20
New Import 1	New Import 1	New Import 1	Chatterley Whitfield		0.29	1.27	1.27
New Import 2	New Import 2	New Import 2	Defford Solar Farm		30.42	2.26	2.26
New Import 3	New Import 3	New Import 3	Rock Farm	3.194	278.43	0.81	0.81
New Import 4	New Import 4	New Import 4	Stanboro Lane		740.74	0.68	0.68
New Import 5	New Import 5	New Import 5	Feckenham Farm		256.38	2.02	2.02
New Import 6	New Import 6	New Import 6	Fryers Road Waste Generation option 2		710.22	0.81	0.81
New Import 7	New Import 7	New Import 7	Javelin Park		808.58	0.81	0.81
New Import 8	New Import 8	New Import 8	Little Frome Solar Farm	3.145	0.76	2.38	2.38
New Import 9	New Import 9	New Import 9	Larks Lane Bristol		290.91	1.08	1.08
New Import 10	New Import 10	New Import 10	Longney Estate		6.96	1.08	1.08
New Import 11	New Import 11	New Import 11	Lower Fields Solar Farm		1.24	2.26	2.26
New Import 12	New Import 12	New Import 12	Outclough Farm		3.55	1.78	1.78

Note: The list of MPANs / MSIDs provided may be incomplete; the DNO reserves the right to apply the listed charges to any other MPANs / MSIDs associated with the site.

Annex 2a - Schedule of Import Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users).

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)
New Import 13	New Import 13	New Import 13	Pontrilas Sawmill	4.770	66.90	6.22	6.22
New Import 14	New Import 14	New Import 14	Radbrooke Pastures PV		1.21	2.26	2.26
New Import 15	New Import 15	New Import 15	Wednesbury Power		59.47	0.94	0.94
New Import 16	New Import 16	New Import 16	Giffords Way		646.23	0.81	0.81
New Import 17	New Import 17	New Import 17	Iron Acton Battery Storage		911.35	0.43	0.43
New Import 18	New Import 18	New Import 18	Bloxwich ESS		2,680.62	0.68	0.68
New Import 19	New Import 19	New Import 19	Pensnett ESS		2,379.53	0.68	0.68
New Import 20	New Import 20	New Import 20	ARENKO PD 47-49//65 Burntwood ESS		3,484.22	0.68	0.68
New Import 21	New Import 21	New Import 21	Meaford Power Station		43.54	0.52	0.52
New Import 22	New Import 22	New Import 22	Awbridge Solar Farm,Trysull			1.44	1.44
New Import 23	New Import 23	New Import 23	Woodhall Solar Farm, Wichenford, Worcester	3.145		2.38	2.38
New Import 24	New Import 24	New Import 24	Bones Lane		51.47	0.94	0.94
New Import 25	New Import 25	New Import 25	The Hem	0.883	9.47	1.57	1.57
New Import 26	New Import 26	New Import 26	Sandwell Power		73.19	0.94	0.94
New Import 27	New Import 27	New Import 27	Langley Generation		544.30	0.68	0.68
New Import 28	New Import 28	New Import 28	Water Orton		107.14	0.76	0.76
New Import 29	New Import 29	New Import 29	Worlds End Farm		79.41	1.08	1.08
New Import 30	New Import 30	New Import 30	Offerton Farm		1,314.33	3.00	3.00
New Import 31	New Import 31	New Import 31	Ryeford Ebley Road		152.53	0.81	0.81
New Import 32	New Import 32	New Import 32	Clay Pit Hill		6.76	0.94	0.94
New Import 33	New Import 33	New Import 33	The Old Airfield		48.69	0.81	0.81
New Import 34	New Import 34	New Import 34	Land off A46, Evesham		288.20	1.89	1.89

Note: The list of MPANs / MSIDs provided may be incomplete; the DNO reserves the right to apply the listed charges to any other MPANs / MSIDs associated with the site.

Annex 2b - Schedule of Export Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users).

Western Power Distribution (West Midlands) plc - Effective from 1 April 2019 - Final EDCM export charges

Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
933	933	1470000533253	Troughton Farm PV		866.33	0.05	0.05
703	703	1430000005417	Tyseley Waste				
750	750	1470000097965	Four Ashes Incinerator		782.20	0.05	0.05
751	751	1470000077950	Witches Farm Solar		550.68	0.05	0.05
708	708	1430000001360 1430000001370	Uni of Birmingham				
732	732	1424993500000	Wolverhampton Waste Services				
733	733	1430000000915 1430000000924	Stoke CHP				
734	734	1425793500001	Hanford Waste Services				
735	735	1430000033051 1430000033060	NR Kidsgrove				
736	736	1430000033098 1430000033103	NR Stafford				
741	741	1430000033070 1430000044090	NR Washwood Heath				
737	737	1430000033121	NR Winson Green				
738	738	1430000033089	NR Smethwick				
739	739	1430000033112	NR Willenhall				
748	748	1460002083355	Northwick AD	-1.533	53.27	0.05	0.05
749	749	1460002258671	Swancote	-1.843	623.12	0.05	0.05
752	752	1460002256034	Spring Hill Solar generation		88.79	0.05	0.05
753	753	1470000086147	Greenfrog STOR generation	-1.533	355.86	0.05	0.05
754	754	1470000223441	Union Road		1,732.25	0.05	0.05
731	731	1421464500007 1422464500009	Quatt				
746	746	1426886500004	Knypersley				
915	915	1470000469625	Star Aluminium	-1.843		0.05	0.05
755	755	1470000190530	Battlefield Incinerator	-1.843	643.26	0.05	0.05
756	756	1470000275556	Says Court Farm PV		641.95	0.05	0.05
757	757	1470000283690	Hayford Fm PV Emdedded 2		361.38	0.05	0.05
758	758	1470000303910	Rotherdale Solar Farm			0.05	0.05
759	759	1470000406430	Lower Newton Solar Farm		912.49	0.05	0.05
760	760	1470000416800	Wrockwardine Solar Farm			0.05	0.05
761	761	1470000425549	Condover Solar Farm		2,916.07	0.05	0.05

Note: The list of MPANs / MSIDs provided may be incomplete; the DNO reserves the right to apply the listed charges to any other MPANs / MSIDs associated with the site.

Annex 2b - Schedule of Export Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users).

Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
762	762	1470000426134	Tower Hill Farm PV		872.60	0.05	0.05
763	763	1470000429775	Hill House Farm Solar		2,572.23	0.05	0.05
764	764	1470000430103	Pitchford Farm Solar		2,656.96	0.05	0.05
765	765	1470000437758	Sundorne Solar Park		351.96	0.05	0.05
766	766	1470000473765	Hartlebury EFW	-3.289	2,471.78	0.05	0.05
767	767	1470000478736	Upper Huntingford PV		303.54	0.05	0.05
768	768	1470000479206	Ring O Bells Solar		616.88	0.05	0.05
769	769	1470000501650	Hall Farm PV Awre		884.63	0.05	0.05
805	805	1470000174900	5 Mile Drive Solar Park		59.13	0.05	0.05
806	806	1470000671032	Green Frog STOR Extension	-1.533	75.82	0.05	0.05
815	815	1470000535890	Wickhamford PV		765.72	0.05	0.05
816	816	1470000540552	Yorkley Wood Farm PV		407.20	0.05	0.05
817	817	1470000542328	Awbridge Farm Diesel Gen		1,885.40	0.05	0.05
818	818	1470000542842	Bristol Rd Glos STOR		741.25	0.05	0.05
819	819	1470000542806	Actrees Farm PV		3,255.83	0.05	0.05
820	820	1470000548427	Sheriffhales Farm PV		4,429.24	0.05	0.05
7070	7070	7070	Heartlands Power Ltd / Fort Dunlop				
821	821	1470000552441	Upper Wick Solar Farm		354.11	0.05	0.05
824	824	1470000597070	Astley Solar Farm		417.01	0.05	0.05
825	825	1470000444142	Hayford Fm PV Emdedded 1		303.57	0.05	0.05
826	826	1470000621955	Sheriffhales CIC PV		289.20	0.05	0.05
827	827	1470000631002	Wolverhampton Power STOR		1,112.86	0.05	0.05
828	828	1470000641881	Moneystone Quarry PV		686.56	0.05	0.05
829	829	1470000744930	Heywood Grange Farm PV		668.28	0.05	0.05
830	830	1470000668892	Garreg Lwyd Wind Farm		29,956.90	0.05	0.05
831	831	1470000711058	Henley Solar Farm PV		288.54	0.05	0.05
833	833	1470000723578	High Point Solar PV		283.11	0.05	0.05
834	834	1470000732313	Staunch Standby STOR		619.95	0.05	0.05
835	835	1470000733283	ISIS House STOR	-1.533	1,557.07	0.05	0.05
836	836	1470000744959	Heywood Grange Bttry	-0.269	159.88	0.05	0.05
837	837	1470000745048	Upper Meadowly Farm PV		2,461.36	0.05	0.05
7338	7338	7338	Sudmeadow Rd STOR		947.35	0.05	0.05
745	745	1430000021836	Redditch Gas Turbine				
New Export 1	New Export 1	New Export 1	Chatterley Whitfield	-0.471	360.34	0.05	0.05
New Export 2	New Export 2	New Export 2	Defford Solar Farm		6,236.40	0.05	0.05
New Export 3	New Export 3	New Export 3	Rock Farm	-3.289	278.43	0.05	0.05
New Export 4	New Export 4	New Export 4	Stanboro Lane		1,232.10	0.05	0.05
New Export 5	New Export 5	New Export 5	Feckenham Farm	-1.533	672.12	0.05	0.05
New Export 6	New Export 6	New Export 6	Fryers Road Waste Generation option 2		3,693.13	0.05	0.05

Note: The list of MPANs / MSIDs provided may be incomplete; the DNO reserves the right to apply the listed charges to any other MPANs / MSIDs associated with the site.

Annex 2b - Schedule of Export Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users).

Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
New Export 7	New Export 7	New Export 7	Javelin Park		4,447.17	0.05	0.05
New Export 8	New Export 8	New Export 8	Little Frome Solar Farm		639.27	0.05	0.05
New Export 9	New Export 9	New Export 9	Larks Lane Bristol		6,674.79	0.05	0.05
New Export 10	New Export 10	New Export 10	Longney Estate		5,919.97	0.05	0.05
New Export 11	New Export 11	New Export 11	Lower Fields Solar Farm		600.61	0.05	0.05
New Export 12	New Export 12	New Export 12	Outclough Farm		709.12	0.05	0.05
New Export 14	New Export 14	New Export 14	Radbrooke Pastures PV		1,211.54	0.05	0.05
New Export 15	New Export 15	New Export 15	Wednesbury Power		2,704.81	0.05	0.05
New Export 16	New Export 16	New Export 16	Giffords Way		1,938.68	0.05	0.05
New Export 17	New Export 17	New Export 17	Iron Acton Battery Storage		911.35	0.05	0.05
New Export 18	New Export 18	New Export 18	Bloxwich ESS		2,680.62	0.05	0.05
New Export 19	New Export 19	New Export 19	Pensnett ESS		2,379.53	0.05	0.05
New Export 20	New Export 20	New Export 20	ARENKO PD 47-49//65 Burntwood ESS		3,484.22	0.05	0.05
New Export 21	New Export 21	New Export 21	Meaford Power Station		2,133.65	0.05	0.05
New Export 22	New Export 22	New Export 22	Awbridge Solar Farm,Trysull			0.05	0.05
New Export 23	New Export 23	New Export 23	Woodhall Solar Farm, Wichenford, Worcester			0.05	0.05
New Export 24	New Export 24	New Export 24	Bones Lane		5,790.29	0.05	0.05
New Export 25	New Export 25	New Export 25	The Hem	-1.843	1,894.46	0.05	0.05
New Export 26	New Export 26	New Export 26	Sandwell Power		2,294.01	0.05	0.05
New Export 27	New Export 27	New Export 27	Langley Generation		544.30	0.05	0.05
New Export 28	New Export 28	New Export 28	Water Orton		7,321.34	0.05	0.05
New Export 29	New Export 29	New Export 29	Worlds End Farm		2,382.41	0.05	0.05
New Export 30	New Export 30	New Export 30	Offerton Farm	-3.289	1,314.33	0.05	0.05
New Export 31	New Export 31	New Export 31	Ryeford Ebley Road		305.07	0.05	0.05
New Export 32	New Export 32	New Export 32	Clay Pit Hill		592.84	0.05	0.05
New Export 33	New Export 33	New Export 33	The Old Airfield		243.45	0.05	0.05
New Export 34	New Export 34	New Export 34	Land off A46, Evesham	-1.533	288.20	0.05	0.05

Note: The list of MPANs / MSIDs provided may be incomplete; the DNO reserves the right to apply the listed charges to any other MPANs / MSIDs associated with the site.

Annex 3 - Schedule of Chargesfor use of the Distribution System to Preserved/Additional LLFC Classes

Western Power Distribution (West Midlands) plc - Effective from 1 April 2019 - Final LV and HV tariffs									
NHH preserved charges/additional LLFCs									
	Closed LLFCs	PCs	Unit charge 1 (NHH) p/kWh	Unit charge 2 (NHH) p/kWh	Fixed charge p/MPAN/day				
HV Medium Non-Domestic	322, 323	5-8	1.315	1.018	183.19				
Notes:	Refer to main text in LC14 Statement Of Charges								

HH preserved charges/additional LLFCs									
	Closed LLFCs	PCs	Red/black charge (HH) p/kWh	Amber/yellow charge (HH) p/kWh	Green charge (HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
		0							
Notes:									

Annex 4 - Charges applied to LDNOs with HV/LV end users

Western Power Distribution (West Midlands) plc - Effective from 1 April 2019 - Final LDNO tariffs

Time Bands for Half Hourly Metered Properties			
Time periods	**Red Time Band**	**Amber Time Band**	**Green Time Band**
Monday to Friday	16:00 to 19:00	07:30 to 16:00 19:00 to 21:00	00:00 to 07:30 21:00 to 24:00
Weekends			00:00 to 24:00
Notes	All the above times are in UK Clock time		

Time Bands for Half Hourly Unmetered Properties				
		Black Time Band	**Yellow Time Band**	**Green Time Band**
Monday to Friday Nov to Feb		16:00 to 19:00	07:30 to 16:00 19:00 to 21:00	00:00 to 07:30 21:00 to 24:00
Monday to Friday Mar to Oct			07:30 to 21:00	00:00 to 07:30 21:00 to 24:00
Weekends				00:00 to 24:00
Notes		All the above times are in UK Clock time		

Tariff name	Unique billing identifier	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO LV: Domestic Unrestricted	10300	1	1.467			2.77			
LDNO LV: Domestic Two Rate	10301	2	1.607	0.729		2.77			
LDNO LV: Domestic Off Peak (related MPAN)	10302	2	0.776						
LDNO LV: Small Non Domestic Unrestricted	10303	3	1.350			5.01			
LDNO LV: Small Non Domestic Two Rate	10304	4	1.464	0.723		5.01			
LDNO LV: Small Non Domestic Off Peak (related MPAN)	10305	4	0.820						
LDNO LV: LV Medium Non-Domestic	10306	5-8	1.432	0.720		13.05			
LDNO LV: LV Network Domestic	10307		5.010	1.077	0.724	2.77			
LDNO LV: LV Network Non-Domestic Non-CT	10308		4.577	1.037	0.719	5.01			
LDNO LV: LV HH Metered	10309		3.528	0.945	0.704	6.19	2.57	5.06	0.112
LDNO LV: NHH UMS category A	10310	8	1.763						
LDNO LV: NHH UMS category B	10311	1	1.952						
LDNO LV: NHH UMS category C	10312	1	2.578						
LDNO LV: NHH UMS category D	10313	1	1.568						
LDNO LV: LV UMS (Pseudo HH Metered)	10314		15.895	1.546	1.206				
LDNO LV: LV Generation NHH or Aggregate HH	10315	8 & 0	-0.596						
LDNO LV: LV Generation Intermittent	10316		-0.596						0.247
LDNO LV: LV Generation Non-Intermittent	10317		-4.733	-0.442	-0.056				0.247
LDNO HV: Domestic Unrestricted	10318	1	1.077			2.03			
LDNO HV: Domestic Two Rate	10319	2	1.180	0.536		2.03			
LDNO HV: Domestic Off Peak (related MPAN)	10320	2	0.570						
LDNO HV: Small Non Domestic Unrestricted	10321	3	0.991			3.68			
LDNO HV: Small Non Domestic Two Rate	10322	4	1.075	0.531		3.68			
LDNO HV: Small Non Domestic Off Peak (related MPAN)	10323	4	0.602						
LDNO HV: LV Medium Non-Domestic	10324	5-8	1.052	0.529		9.59			
LDNO HV: LV Network Domestic	10325		3.679	0.791	0.532	2.03			
LDNO HV: LV Network Non-Domestic Non-CT	10326		3.361	0.762	0.528	3.68			
LDNO HV: LV HH Metered	10327		2.591	0.694	0.517	4.54	1.88	3.72	0.082
LDNO HV: LV Sub HH Metered	10328		2.950	0.979	0.775	5.43	3.52	5.07	0.086
LDNO HV: HV HH Metered	10329		2.084	0.989	0.876	67.27	4.27	5.84	0.042
LDNO HV: NHH UMS category A	10330	8	1.295						
LDNO HV: NHH UMS category B	10331	1	1.433						
LDNO HV: NHH UMS category C	10332	1	1.894						
LDNO HV: NHH UMS category D	10333	1	1.151						
LDNO HV: LV UMS (Pseudo HH Metered)	10334		11.673	1.136	0.885				
LDNO HV: LV Generation NHH or Aggregate HH	10335	8 & 0	-0.596						
LDNO HV: LV Sub Generation NHH	10336	8	-0.503						
LDNO HV: LV Generation Intermittent	10337		-0.596						0.247
LDNO HV: LV Generation Non-Intermittent	10338		-4.733	-0.442	-0.056				0.247
LDNO HV: LV Sub Generation Intermittent	10339		-0.503						0.208
LDNO HV: LV Sub Generation Non-Intermittent	10340		-3.996	-0.378	-0.045				0.208
LDNO HV: HV Generation Intermittent	10341		-0.260						0.169
LDNO HV: HV Generation Non-Intermittent	10342		-2.061	-0.209	-0.017				0.169
LDNO HVplus: Domestic Unrestricted	10343	1	0.905			1.71			
LDNO HVplus: Domestic Two Rate	10344	2	0.991	0.450		1.71			
LDNO HVplus: Domestic Off Peak (related MPAN)	10345	2	0.479						
LDNO HVplus: Small Non Domestic Unrestricted	10346	3	0.833			3.09			
LDNO HVplus: Small Non Domestic Two Rate	10347	4	0.904	0.446		3.09			
LDNO HVplus: Small Non Domestic Off Peak (related MPAN)	10348	4	0.506						
LDNO HVplus: LV Medium Non-Domestic	10349	5-8	0.884	0.444		8.05			
LDNO HVplus: LV Sub Medium Non-Domestic	10350	5-8	1.276	0.667		14.89			
LDNO HVplus: HV Medium Non-Domestic	10351	5-8	0.935	0.724		130.29			
LDNO HVplus: LV Network Domestic	10352		3.092	0.665	0.447	1.71			
LDNO HVplus: LV Network Non-Domestic Non-CT	10353		2.824	0.640	0.444	3.09			

Note: Where a tariff only has a p/kWh unit rate in Unit Charge 1 then this unit rate applies at all times.

Annex 4 - Charges applied to LDNOs with HV/LV end users

Tariff name	Unique billing identifier	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO HVplus: LV HH Metered	10354		2.177	0.583	0.434	3.82	1.58	3.12	0.069
LDNO HVplus: LV Sub HH Metered	10355		2.447	0.812	0.643	4.50	2.92	4.20	0.071
LDNO HVplus: HV HH Metered	10356		1.720	0.816	0.723	55.50	3.52	4.82	0.035
LDNO HVplus: NHH UMS category A	10357	8	1.088						
LDNO HVplus: NHH UMS category B	10358	1	1.204						
LDNO HVplus: NHH UMS category C	10359	1	1.591						
LDNO HVplus: NHH UMS category D	10360	1	0.967						
LDNO HVplus: LV UMS (Pseudo HH Metered)	10361		9.808	0.954	0.744				
LDNO HVplus: LV Generation NHH or Aggregate HH	10362	8 & 0	-0.372						
LDNO HVplus: LV Sub Generation NHH	10363	8	-0.358						
LDNO HVplus: LV Generation Intermittent	10364		-0.372						0.154
LDNO HVplus: LV Generation Non-Intermittent	10365		-2.951	-0.276	-0.035				0.154
LDNO HVplus: LV Sub Generation Intermittent	10366		-0.358						0.148
LDNO HVplus: LV Sub Generation Non-Intermittent	10367		-2.842	-0.269	-0.032				0.148
LDNO HVplus: HV Generation Intermittent	10368		-0.260			32.08			0.169
LDNO HVplus: HV Generation Non-Intermittent	10369		-2.061	-0.209	-0.017	32.08			0.169
LDNO EHV: Domestic Unrestricted	10370	1	0.731			1.38			
LDNO EHV: Domestic Two Rate	10371	2	0.801	0.364		1.38			
LDNO EHV: Domestic Off Peak (related MPAN)	10372	2	0.387						
LDNO EHV: Small Non Domestic Unrestricted	10373	3	0.673			2.50			
LDNO EHV: Small Non Domestic Two Rate	10374	4	0.730	0.360		2.50			
LDNO EHV: Small Non Domestic Off Peak (related MPAN)	10375	4	0.409						
LDNO EHV: LV Medium Non-Domestic	10376	5-8	0.714	0.359		6.51			
LDNO EHV: LV Sub Medium Non-Domestic	10377	5-8	1.030	0.539		12.03			
LDNO EHV: HV Medium Non-Domestic	10378	5-8	0.755	0.585		105.24			
LDNO EHV: LV Network Domestic	10379		2.497	0.537	0.361	1.38			
LDNO EHV: LV Network Non-Domestic Non-CT	10380		2.281	0.517	0.358	2.50			
LDNO EHV: LV HH Metered	10381		1.759	0.471	0.351	3.08	1.28	2.52	0.056
LDNO EHV: LV Sub HH Metered	10382		1.976	0.656	0.519	3.64	2.36	3.39	0.057
LDNO EHV: HV HH Metered	10383		1.389	0.659	0.584	44.83	2.84	3.89	0.028
LDNO EHV: NHH UMS category A	10384	8	0.879						
LDNO EHV: NHH UMS category B	10385	1	0.973						
LDNO EHV: NHH UMS category C	10386	1	1.285						
LDNO EHV: NHH UMS category D	10387	1	0.781						
LDNO EHV: LV UMS (Pseudo HH Metered)	10388		7.922	0.771	0.601				
LDNO EHV: LV Generation NHH or Aggregate HH	10389	8 & 0	-0.300						
LDNO EHV: LV Sub Generation NHH	10390	8	-0.289						
LDNO EHV: LV Generation Intermittent	10391		-0.300						0.124
LDNO EHV: LV Generation Non-Intermittent	10392		-2.384	-0.223	-0.028				0.124
LDNO EHV: LV Sub Generation Intermittent	10393		-0.289						0.119
LDNO EHV: LV Sub Generation Non-Intermittent	10394		-2.296	-0.217	-0.026				0.119
LDNO EHV: HV Generation Intermittent	10395		-0.210			25.91			0.137
LDNO EHV: HV Generation Non-Intermittent	10396		-1.665	-0.169	-0.014	25.91			0.137
LDNO 132kV/EHV: Domestic Unrestricted	10397	1	0.701			1.32			
LDNO 132kV/EHV: Domestic Two Rate	10398	2	0.767	0.348		1.32			
LDNO 132kV/EHV: Domestic Off Peak (related MPAN)	10399	2	0.371						
LDNO 132kV/EHV: Small Non Domestic Unrestricted	10400	3	0.645			2.39			
LDNO 132kV/EHV: Small Non Domestic Two Rate	10401	4	0.699	0.345		2.39			
LDNO 132kV/EHV: Small Non Domestic Off Peak (related MPAN)	10402	4	0.392						
LDNO 132kV/EHV: LV Medium Non-Domestic	10403	5-8	0.684	0.344		6.23			
LDNO 132kV/EHV: LV Sub Medium Non-Domestic	10404	5-8	0.988	0.516		11.53			
LDNO 132kV/EHV: HV Medium Non-Domestic	10405	5-8	0.724	0.560		100.86			
LDNO 132kV/EHV: LV Network Domestic	10406		2.393	0.515	0.346	1.32			
LDNO 132kV/EHV: LV Network Non-Domestic Non-CT	10407		2.186	0.496	0.343	2.39			
LDNO 132kV/EHV: LV HH Metered	10408		1.685	0.452	0.336	2.95	1.23	2.42	0.054
LDNO 132kV/EHV: LV Sub HH Metered	10409		1.894	0.629	0.498	3.48	2.26	3.25	0.055
LDNO 132kV/EHV: HV HH Metered	10410		1.331	0.632	0.559	42.96	2.73	3.73	0.027
LDNO 132kV/EHV: NHH UMS category A	10411	8	0.842						
LDNO 132kV/EHV: NHH UMS category B	10412	1	0.932						
LDNO 132kV/EHV: NHH UMS category C	10413	1	1.232						
LDNO 132kV/EHV: NHH UMS category D	10414	1	0.749						
LDNO 132kV/EHV: LV UMS (Pseudo HH Metered)	10415		7.593	0.739	0.576				
LDNO 132kV/EHV: LV Generation NHH or Aggregate HH	10416	8 & 0	-0.288						

Note: Where a tariff only has a p/kWh unit rate in Unit Charge 1 then this unit rate applies at all times.

Annex 4 - Charges applied to LDNOs with HV/LV end users

Tariff name	Unique billing identifier	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO 132kV/EHV: LV Sub Generation NHH	10417	8	-0.277						
LDNO 132kV/EHV: LV Generation Intermittent	10418		-0.288						0.119
LDNO 132kV/EHV: LV Generation Non-Intermittent	10419		-2.284	-0.213	-0.027				0.119
LDNO 132kV/EHV: LV Sub Generation Intermittent	10420		-0.277						0.115
LDNO 132kV/EHV: LV Sub Generation Non-Intermittent	10421		-2.200	-0.208	-0.025				0.115
LDNO 132kV/EHV: HV Generation Intermittent	10422		-0.201			24.83			0.131
LDNO 132kV/EHV: HV Generation Non-Intermittent	10423		-1.595	-0.162	-0.013	24.83			0.131
LDNO 132kV: Domestic Unrestricted	10424	1	0.459			0.86			
LDNO 132kV: Domestic Two Rate	10425	2	0.502	0.228		0.86			
LDNO 132kV: Domestic Off Peak (related MPAN)	10426	2	0.243						
LDNO 132kV: Small Non Domestic Unrestricted	10427	3	0.422			1.57			
LDNO 132kV: Small Non Domestic Two Rate	10428	4	0.458	0.226		1.57			
LDNO 132kV: Small Non Domestic Off Peak (related MPAN)	10429	4	0.256						
LDNO 132kV: LV Medium Non-Domestic	10430	5-8	0.448	0.225		4.08			
LDNO 132kV: LV Sub Medium Non-Domestic	10431	5-8	0.646	0.338		7.54			
LDNO 132kV: HV Medium Non-Domestic	10432	5-8	0.474	0.367		66.01			
LDNO 132kV: LV Network Domestic	10433		1.566	0.337	0.226	0.86			
LDNO 132kV: LV Network Non-Domestic Non-CT	10434		1.431	0.324	0.225	1.57			
LDNO 132kV: LV HH Metered	10435		1.103	0.296	0.220	1.93	0.80	1.58	0.035
LDNO 132kV: LV Sub HH Metered	10436		1.240	0.412	0.326	2.28	1.48	2.13	0.036
LDNO 132kV: HV HH Metered	10437		0.871	0.413	0.366	28.12	1.78	2.44	0.018
LDNO 132kV: NHH UMS category A	10438	8	0.551						
LDNO 132kV: NHH UMS category B	10439	1	0.610						
LDNO 132kV: NHH UMS category C	10440	1	0.806						
LDNO 132kV: NHH UMS category D	10441	1	0.490						
LDNO 132kV: LV UMS (Pseudo HH Metered)	10442		4.969	0.483	0.377				
LDNO 132kV: LV Generation NHH or Aggregate HH	10443	8 & 0	-0.188						
LDNO 132kV: LV Sub Generation NHH	10444	8	-0.181						
LDNO 132kV: LV Generation Intermittent	10445		-0.188						0.078
LDNO 132kV: LV Generation Non-Intermittent	10446		-1.495	-0.140	-0.018				0.078
LDNO 132kV: LV Sub Generation Intermittent	10447		-0.181						0.075
LDNO 132kV: LV Sub Generation Non-Intermittent	10448		-1.440	-0.136	-0.016				0.075
LDNO 132kV: HV Generation Intermittent	10449		-0.132			16.25			0.086
LDNO 132kV: HV Generation Non-Intermittent	10450		-1.044	-0.106	-0.009	16.25			0.086
LDNO 0000: Domestic Unrestricted	10451	1	0.095			0.18			
LDNO 0000: Domestic Two Rate	10452	2	0.105	0.047		0.18			
LDNO 0000: Domestic Off Peak (related MPAN)	10453	2	0.051						
LDNO 0000: Small Non Domestic Unrestricted	10454	3	0.088			0.33			
LDNO 0000: Small Non Domestic Two Rate	10455	4	0.095	0.047		0.33			
LDNO 0000: Small Non Domestic Off Peak (related MPAN)	10456	4	0.053						
LDNO 0000: LV Medium Non-Domestic	10457	5-8	0.093	0.047		0.85			
LDNO 0000: LV Sub Medium Non-Domestic	10458	5-8	0.135	0.070		1.57			
LDNO 0000: HV Medium Non-Domestic	10459	5-8	0.099	0.076		13.74			
LDNO 0000: LV Network Domestic	10460		0.326	0.070	0.047	0.18			
LDNO 0000: LV Network Non-Domestic Non-CT	10461		0.298	0.068	0.047	0.33			
LDNO 0000: LV HH Metered	10462		0.230	0.062	0.046	0.40	0.17	0.33	0.007
LDNO 0000: LV Sub HH Metered	10463		0.258	0.086	0.068	0.47	0.31	0.44	0.007
LDNO 0000: HV HH Metered	10464		0.181	0.086	0.076	5.85	0.37	0.51	0.004
LDNO 0000: NHH UMS category A	10465	8	0.115						
LDNO 0000: NHH UMS category B	10466	1	0.127						
LDNO 0000: NHH UMS category C	10467	1	0.168						
LDNO 0000: NHH UMS category D	10468	1	0.102						
LDNO 0000: LV UMS (Pseudo HH Metered)	10469		1.035	0.101	0.078				
LDNO 0000: LV Generation NHH or Aggregate HH	10470	8 & 0	-0.039						
LDNO 0000: LV Sub Generation NHH	10471	8	-0.038						
LDNO 0000: LV Generation Intermittent	10472		-0.039						0.016
LDNO 0000: LV Generation Non-Intermittent	10473		-0.311	-0.029	-0.004				0.016
LDNO 0000: LV Sub Generation Intermittent	10474		-0.038						0.016
LDNO 0000: LV Sub Generation Non-Intermittent	10475		-0.300	-0.028	-0.003				0.016
LDNO 0000: HV Generation Intermittent	10476		-0.027			3.38			0.018
LDNO 0000: HV Generation Non-Intermittent	10477		-0.217	-0.022	-0.002	3.38			0.018

Note: Where a tariff only has a p/kWh unit rate in Unit Charge 1 then this unit rate applies at all times.

Annex 5 – Schedule of Line Loss Factors

This table has intentionally been left blank. The line loss factors that are approved by the BSC Panel for the applicable year and consequently published on the Elexon website will take precedence and be used in Settlement. This annex will be re-published once these values are available.

Western Power Distribution (West Midlands) plc - Illustrative LLFs for year beginning 1 April 2019				
Time periods	**Period 1**	**Period 2**	**Period 3**	**Period 4**
	Peak	**Winter**	**Night**	**Other**
Monday to Friday Mar to Oct			00:30 – 07:30	07:30 – 00:30
Monday to Friday Nov to Feb	16:00 – 19:00	07:30 – 16:00 19:00 – 20:00	00:30 – 07:30	20:00 – 00:30
Saturday and Sunday All Year			00:30 – 07:30	07:30 – 00:30
Notes	All the above times are in UK Clock time			

Generic demand and generation LLFs					
Metered voltage, respective periods and associated LLFCs					
Metered voltage	**Period 1**	**Period 2**	**Period 3**	**Period 4**	**Associated LLFC**
Low-voltage network					
Low-voltage substation					
High-voltage network					
High-voltage substation					
33kV generic					
33kV generic					
132kV generic					
132kV generic					

EHV site specific LLFs					
Demand					
Site	**Period 1**	**Period 2**	**Period 3**	**Period 4**	**Associated LLFC**
Site 1					
Site 2					
Site 3					
Site 4					
Site 5					

EHV site specific LLFs					
Generation					
Site	**Period 1**	**Period 2**	**Period 3**	**Period 4**	**Associated LLFC**
Site 1					
Site 2					
Site 3					
Site 4					
Site 5					

Annex 6 - New Designated EHV Properties. Addendum to Schedule of Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users).

Western Power Distribution (West Midlands) plc - Effective from 1 April 2019 - Final new designated EHV charges															
Effective from date	Import Unique Identifier	LLFC	Import MPANs/MSIDs	Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
	EDCM import 1			EDCM export 1											
	EDCM import 2			EDCM export 2											
	EDCM import 3			EDCM export 3											
	EDCM import 4			EDCM export 4											
	EDCM import 5			EDCM export 5											
	EDCM import 6			EDCM export 6											
	EDCM import 7			EDCM export 7											
	EDCM import 8			EDCM export 8											
	EDCM import 9			EDCM export 9											
	EDCM import 10			EDCM export 10											

Western Power Distribution (West Midlands) plc - Effective from 1 April 2019 - Final new designated EHV line loss factors															
Effective from date	Import Unique Identifier	LLFC	Import MPANs/MSIDs	Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Import LLF period 1	Import LLF period 2	Import LLF period 3	Import LLF period 4	Export LLF period 1	Export LLF period 2	Export LLF period 3	Export LLF period 4
	EDCM Import 1			EDCM Export 1											
	EDCM Import 2			EDCM Export 2											
	EDCM Import 3			EDCM Export 3											
	EDCM Import 4			EDCM Export 4											
	EDCM Import 5			EDCM Export 5											
	EDCM Import 6			EDCM Export 6											
	EDCM Import 7			EDCM Export 7											
	EDCM Import 8			EDCM Export 8											
	EDCM Import 9			EDCM Export 9											
	EDCM Import 10			EDCM Export 10											

Note: The list of MPANs / MSIDs provided may be incomplete; the DNO reserves the right to apply the listed charges to any other MPANs / MSIDs associated with the site.