

Western Power Distribution

(West Midlands) plc

Use of System Charging Statement

NOTICE OF CHARGES

Effective from 1st April 2017

Version 1.0

Version Control

Version	Date	Description of version and any changes made
1.0	December 2015	Published Finals

PLEASE NOTE

Unmetered Supplies

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

Contents

1. Introduction	5
2. Charge application and definitions	7
Supercustomer billing and payment	7
Supercustomer charges	7
Site-specific billing and payment	9
Site-specific billed charges	9
Time periods for half-hourly metered properties	10
Time periods for pseudo half-hourly unmetered properties	10
Application of capacity charges	10
Chargeable capacity	11
Exceeded capacity	11
Demand exceeded capacity	11
Generation exceeded capacity	12
Standby capacity for additional security on site	12
Minimum capacity levels	12
Application of charges for excess reactive power	13
Demand chargeable reactive power	13
Generation chargeable reactive power	14
Incorrectly allocated charges	14
Generation charges for pre-2005 Designated EHV Properties	15
Provision of billing data	16
Out of area Use of System Charges	17
Licensed Distribution Network Operator charges	17
Licence exempt distribution networks	17
Full Settlement metering	18
Difference metering	18
3. Schedule of charges for use of the Distribution System	20
4. Schedule of Line Loss Factors	21
Role of Line Loss Factors in the supply of electricity	21
Calculation of line loss factors	21
Publication of Line loss factors	22
5. Notes for Designated EHV Properties	23
EDCM FCP network group costs	23
Charges for new Designated EHV Properties	23
Charges for amended Designated EHV Properties	23
Demand Side management	23
6. Electricity distribution rebates	25
7. Accounting and administration services	25
8. Charges for electrical plant provided ancillary to the grant of use of system	25

Contents

Appendix 1 - Glossary	26
Appendix 2 - Guidance notes	32
Background	32
Meter point administration	32
Your charges	34
Reducing your charges	34
Reactive power and reactive power charges	35
Site-specific EDCM charges	35
Annex 1 - Schedule of charges for use of the distribution system by LV and HV Designated Properties	38
Annex 2 - Schedule of charges for use of the distribution system by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users)	40
Annex 3 - Schedule of charges for use of the distribution system by preserved/additional LLF classes	48
Annex 4 - Charges applied to LDNOs with LV and HV end-users	49
Annex 5 - Schedule of line loss factors	57
Annex 6 - Addendum to charging statement detailing charges for new Designated EHV Properties	59

1. Introduction

- 1.1. This statement tells you about our charges and the reasons behind them. It has been prepared to be consistent with Standard Licence Condition 14 of our Electricity Distribution Licence. The main purpose of this statement is to provide our schedule of charges¹ for the use of our Distribution System and to provide the schedule of adjustment factors² 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 Common Distribution Charging Methodology (CDCM) for Low Voltage and High Voltage (LV and HV) Designated Properties and the Extra-High Voltage (EHV) Distribution Charging Methodology (EDCM) for Designated EHV Properties.
- 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 premise is provided in the guidance notes in Appendix 2.
- 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.

¹ Charges can be positive or negative.

² Also known as Loss Adjustment Factors or Line Loss Factors

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 statement or statements relevant to the period 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 and Connections
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: 0845 724 0240, lines are open 08:00 to 18:00 Monday to Friday

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, and aggregated Half-Hourly (HH) metered premises. The 'Site-specific' approach is used for HH metered or pseudo HH unmetered premises.
- 2.3. Typically NHH metered are domestic and small businesses; HH metered are larger businesses; and unmetered premises are normally streetlights.

Supercustomer billing and payment

- 2.4. Supercustomer billing and payment applies to Metering Points registered as NHH metered, NHH unmetered, and aggregated HH metered. The Supercustomer approach makes use of aggregated data obtained from Suppliers using the 'Non Half Hourly 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 a Meter Point Administration Number (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 Regimes (TPRs) assigned to the Standard Settlement Configuration (SSC). All LLFCs are assigned at our sole discretion.

Supercustomer charges

- 2.7. Supercustomer charges include the following components:
 - a fixed charge - pence/MPAN/day. There will be only one fixed charge applied to each MPAN; and
 - unit charges, pence/kWh. More than one unit charge may apply depending on the type of tariff for which the MPAN is registered.

- 2.8. The relevant charge structure set out in Annex 1 will be allocated to users who supply electricity to a Customer whose Metering System is:
- Measurement Class A or B, and settled on Profile Classes (PC) 1 through to 8; or Measurement Class F or G;
- 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 2001³ and where operated in accordance with Balancing and Settlement Code (BSC) procedure 520⁴.
- 2.11. Measurement Class F and G charges apply to Exit/Entry Points where HH aggregated metering data is used for Settlement.
- 2.12. Identification of the appropriate charge can be made by cross-reference to the LLFC.
- 2.13. Valid Settlement PC / Standard Settlement Configuration (SSC) / Meter Timeswitch Code (MTC) combinations for LLFCs where the Metering System is Measurement Class A and B are detailed in Market Domain Data (MDD).
- 2.14. 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.
- 2.15. To determine the appropriate charge rate for each SSC/TPR a lookup table is provided in the spreadsheet that accompanies this statement⁵.
- 2.16. The time periods for unit charges where the Metering System is Measurement Class F and G are set out in the table 'Time Bands for Half Hourly Metered Properties' in Annex 1.
- 2.17. The 'Domestic Off-Peak' and 'Small Non-Domestic Off-Peak' charges are additional to either an unrestricted or a two-rate charge.

³ The Electricity (Unmetered Supply) Regulations 2001 available from <http://www.legislation.gov.uk/uksi/2001/3263/made>

⁴ Balancing and Settlement Code Procedures on unmetered supplies are available from <http://www.elexon.co.uk/pages/bscps.aspx>

⁵ MIDE - Schedule of charges and other tables - 2016.xlsx

Site-specific billing and payment

- 2.18. Site-specific billing and payment applies to Measurement Class C, D and E Metering Points settled as HH metered. The site-specific billing and payment approach to Use of System (UoS) billing makes use of HH metering data at premise level received through Settlement.
- 2.19. 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.
- 2.20. The charges are applied on the basis of the LLFCs assigned to the MPAN (or the Meter System Identifier (MSID) for Central Volume Allocation (CVA) sites), and the units consumed within the time periods specified in this statement.
- 2.21. All LLFCs are assigned at our sole discretion. Where an incorrectly applied LLFC is identified, we may at our sole discretion apply the correct LLFC and/or charges.

Site-specific billed charges

- 2.22. Site-specific billed charges may include the following components:
- a fixed charge pence/MPAN/day or pence/MSID/day;
 - a capacity charge, pence/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/kVAh, for each unit in excess of the reactive charge threshold.
- 2.23. Users who wish to supply electricity to Customers whose Metering System is Measurement Class C, D or E or CVA will be allocated the relevant charge structure dependent upon the voltage and location of the Metering Point.
- 2.24. Measurement Class C, E or CVA charges apply to Exit/Entry Points where HH metering, or an equivalent meter, is used for Settlement purposes.

- 2.25. Measurement Class D charges apply to Exit Points deemed to be suitable as Unmetered Supplies as permitted in the Electricity (Unmetered Supply) Regulations 2001⁶ and where operated in accordance with BSC procedure 520⁷.
- 2.26. Fixed charges are generally levied on a pence per MPAN/MSID 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.
- 2.27. LV and HV Designated Properties will be charged in accordance with the CDCM and allocated the relevant charge structure set out in Annex 1.
- 2.28. Designated EHV Properties will be charged in accordance with the EDCM and allocated the relevant charge structure set out in Annex 2.
- 2.29. 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.

Time periods for half-hourly metered properties

- 2.30. 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.
- 2.31. 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

- 2.32. The time periods for the application of unit charges to connections 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

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

⁶ The Electricity (Unmetered Supply) Regulations 2001 available from <http://www.legislation.gov.uk/uksi/2001/3263/made>

⁷ Balancing and Settlement Code Procedures on unmetered supplies and available from <http://www.elexon.co.uk/pages/bscps.aspx>

Chargeable capacity

- 2.34. The chargeable capacity is, for each billing period, the MIC/MEC, as detailed below.
- 2.35. 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.
- 2.36. Reductions to the MIC/MEC may only be permitted once in a 12 month period. Where MIC/MEC is reduced, the new lower level will be agreed with reference to the level of the Customer's maximum demand. The new MIC/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.
- 2.37. 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 premise's connection. A customer can seek to agree or vary the MIC and/or MEC by contacting us using the contact details in section 1.

Exceeded capacity

- 2.38. 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 month 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)

- 2.39. 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.
- 2.40. 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)

- 2.41. 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.
- 2.42. 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

- 2.43. Where standby capacity charges are applied, the charge will be set at the same rate as that applied to normal MIC. Where, at the customer's request, for additional security of supplies requiring sterilisation of capacity from two different sources of supply, we reserve the right to charge for the capacity held at each source.

Minimum capacity levels

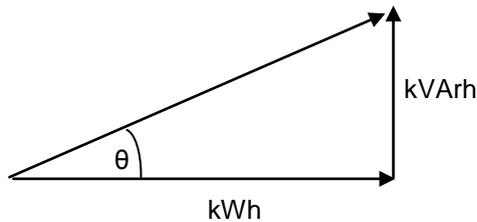
- 2.44. There is no minimum capacity threshold.

Application of charges for excess reactive power

2.45. When an individual HH metered MPAN's reactive power (measured in kVArh) at LV and HV Designated Properties exceeds 33% of 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.

2.46. Power Factor is calculated as follows:

$\text{Cos } \theta = \text{Power Factor}$



2.47. 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)

2.48. 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.

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

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

Generation chargeable reactive power

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

Where:

AE = Active Export (kWh)

RI = Reactive Import (kVArh)

RE = Reactive Export (kVArh)

- 2.51. 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.
- 2.52. 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.

Incorrectly allocated charges

- 2.54. It is our responsibility to apply the correct charges to each MPAN/MSID. The allocation of charges is based on the voltage of connection and metering information. We are responsible for deciding the voltage of connection while the Supplier determines and provides the metering information.
- 2.55. Generally the voltage of connection is determined by where the metering is located and where responsibility for the electrical equipment transfers from us to the connected Customer. This is normally established when the MPAN/MSID is created and will include information about whether the MPAN/MSID is for import or export purposes. Where an MPAN/MSID is used for export purposes, the type of generation (intermittent or non-intermittent) will also be determined.
- 2.56. The Supplier provides us with metering information which enables us to allocate charges where there is more than one charge per voltage level. This metering data is likely to change over time if, for example, a Supplier changes from a two rate meter to a single rate meter. When this happens we will change the allocation of charges accordingly.

- 2.57. Where it has been identified that a LLFC/charge is likely to be incorrectly allocated due to the wrong voltage of connection, incorrect import/export details, or an incorrectly noted metering location, then a correction request should be made to us. Requests from persons other than the current Supplier must be accompanied by a Letter of Authority from the Customer. The existing Supplier must also acknowledge that they are aware that a correction request has been made. Any request must be supported by an explanation of why it is believed that the current charge is wrongly applied, along with supporting information including, where appropriate, photographs of metering positions or system diagrams. Any request to correct the current LLFC/charge which also includes a request to backdate the correction must include justification as to why it is considered appropriate to backdate the change.
- 2.58. If it has been identified that a charge has been incorrectly allocated due to the metering data, then a correction request should be made to the Supplier.
- 2.59. Where we agree that an MPAN/MSID has been assigned to the wrong voltage level then we will correct it by allocating the correct set of charges for that voltage level. Any adjustment for incorrectly applied charges will be as follows:
- Any credit or additional charge will be issued to the Suppliers who were effective during the period of the change.
 - The correction 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.
- 2.60. Should we reject the request, a justification will be provided to the requesting Party.
- 2.61. We shall not unreasonably withhold or delay any agreement to correct the charges applied and would expect to reach agreement within three months from the date of request.

Generation charges for pre-2005 Designated EHV Properties

- 2.62. 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 have 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.

2.63. 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

2.64. Where HH metering data is required for UoS charging and this is not provided in accordance with the BSC or the Distribution Connection and Use of System Agreement (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.

2.65. The metering data shall identify the amount consumed and/or produced 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.

2.66. 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 (as agreed with us). The data shall be emailed to wpdduos@westernpower.co.uk.

2.67. 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

2.68. We do not operate networks outside our Distribution Service Area.

Licensed Distribution Network Operator charges

2.69. Licenced Distribution Network Operator (LDNO) charges are applied to LDNOs who operate Embedded Networks within our Distribution Service Area.

2.70. 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 same charge elements will apply as those that match the LDNO's end Customer charges. The relevant charge structures are set out in Annex 4.

2.71. 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.

2.72. 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.

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

Licence exempt distribution networks

2.74. The Electricity and Gas (Internal Market) Regulations 2011 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.

2.75. 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.

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

Full Settlement metering

2.77. 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 exempt distribution network.

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

Difference metering

2.79. 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 premise. Under this approach the Customers requiring third party access on the exempt distribution network will have their own MPAN and must have a HH Metering System.

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

Gross Settlement

2.81. 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.

2.82. 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”;
- the text file and the title of the email shall contain the metering reference specified by us in place of the Settlement MPAN, i.e. a dummy

alphanumeric reference to enable the relating of the gross metered data to a given boundary 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”.

2.83. 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

2.84. Where one of our MPANs (Prefix 14) is embedded within an 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 the distribution of electricity for UoS are published in the 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 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 lost⁸ 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 for the energy lost on the Distribution System.
- 4.2. We are responsible for calculating the Line Loss Factors⁹ (LLFs) and providing these to Elexon. Elexon are the company that manages the BSC. This code covers the governance and rules for the balancing and Settlement arrangements.
- 4.3. LLFs are used to adjust the Metering System volumes to take account of losses on the distribution network.

Calculation of line loss factors

- 4.4. LLFs are calculated in accordance with BSC Procedure 128. It sets out the procedure and principles by 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 Designated EHV Properties in the EDCM. The definition used for LLF purposes can be found in our LLF methodology.

⁸ 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.

⁹ Also referred to as Loss Adjustment Factors.

- 4.7. The Elexon website (<http://www.elexon.co.uk/reference/technical-operations/losses/>) contains more information on LLFs. This page also has links to BSCP128 and to our LLF methodology.

Publication of Line loss factors

- 4.8. The LLFs used in Settlement are published on the Elexon portal website, www.elexonportal.co.uk. 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. The 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. Illustrative LLFs based on the latest LLFs are provided in Annex 5 of this statement. These illustrative LLFs are provided with reference to the metered voltage or associated LLFC for generic LLFs and by reference to the LLFCs for site specific LLFs. Each LLF is applicable to a defined time period.

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 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 in an addendum to that statement as and when necessary.
- 5.4. The form of the addendum is detailed in Annex 6 to this statement.
- 5.5. The addendum will be sent to relevant DCUSA parties and published as a revised 'Schedule of Charges and Other Tables' spreadsheet on our website. The addendum will include charge information which under enduring circumstances would be found in Annex 2, and Line Loss Factors which would normally be found in Annex 5.
- 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 relevant DCUSA 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 revision 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 invoices remain unpaid on the due date and are not subject to a valid dispute, 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 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.
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 whom 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.

Term	Definition																																																												
Distributor IDs	<p>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.</p> <table border="1" data-bbox="644 405 1382 1406"> <thead> <tr> <th>ID</th> <th>Name</th> <th>Operator</th> </tr> </thead> <tbody> <tr><td>10</td><td>Eastern</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</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 Eastern</td><td>UK Power Networks</td></tr> <tr><td>20</td><td>Southern Electric</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>GTC</td><td>Independent Power Networks</td></tr> <tr><td>25</td><td>ESP Electricity</td><td>ESP Electricity</td></tr> <tr><td>26</td><td>Energetics</td><td>Energetics Electricity Ltd</td></tr> <tr><td>27</td><td>GTC</td><td>The Electricity Network Company Ltd</td></tr> <tr><td>29</td><td>Harlaxton Energy Networks</td><td>Harlaxton Energy Networks</td></tr> </tbody> </table>	ID	Name	Operator	10	Eastern	UK Power Networks	11	East Midlands	Western Power Distribution	12	London	UK Power Networks	13	Merseyside and North Wales	Scottish Power	14	Midlands	Western Power Distribution	15	Northern	Northern Powergrid	16	North Western	Electricity North West	17	Scottish Hydro Electric	Scottish Hydro Electric Power Distribution plc	18	South Scotland	Scottish Power	19	South Eastern	UK Power Networks	20	Southern Electric	Southern Electric Power Distribution plc	21	South Wales	Western Power Distribution	22	South Western	Western Power Distribution	23	Yorkshire	Northern Powergrid	24	GTC	Independent Power Networks	25	ESP Electricity	ESP Electricity	26	Energetics	Energetics Electricity Ltd	27	GTC	The Electricity Network Company Ltd	29	Harlaxton Energy Networks	Harlaxton Energy Networks
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Distribution Connection and Use of System Agreement (DCUSA)	<p>The DCUSA is a multi-party contract between the licensed Electricity Distributors, Suppliers, generators, and Offshore Transmission Owners of Great Britain.</p> <p>It is a requirement that all licensed Electricity Distributors and Suppliers become parties to the DCUSA.</p>																																																												
Distribution Network Operator (DNO)	<p>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.</p>																																																												
Distribution Services Area	<p>The area specified by the Gas and Electricity Markets Authority within which each DNO must provide specified distribution services.</p>																																																												

Term	Definition
Distribution System	<p>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:</p> <ul style="list-style-type: none"> • Grid Supply Points or generation sets or other Entry Points <p>to the points of delivery to:</p> <ul style="list-style-type: none"> • 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) which 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 network which is embedded within another distribution network.
Embedded Network	An electricity Distribution System operated by an LDNO and embedded within another distribution network.
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.
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.

Term	Definition
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.
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 amperes.
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 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	$= \frac{\text{annual consumption (kWh)}}{\text{maximum demand (kW)} \times \text{hours in year}}$
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.
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.

Term	Definition
Measurement Class	<p>A classification of Metering Systems used in the BSC which indicates how consumption is measured, i.e.:</p> <ul style="list-style-type: none"> • 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; and • Measurement Class E – half-hourly metering equipment below 100kW premises, and from 5 November 2015, with current transformer. • Measurement Class F – half hourly metering equipment at below 100kW premises with current transformer or whole current, and at domestic premises • Measurement Class G – half hourly metering equipment at below 100kW premises with whole current and not at domestic premises
Meter Timeswitch Code (MTC)	<p>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.</p>
Metering Point	<p>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'.</p>
Metering Point Administration Number (MPAN)	<p>A number relating to a Metering Point under the MRA.</p>
Metering System	<p>Particular commissioned metering equipment installed for the purposes of measuring the quantities of exports and/or imports at the Exit Point or Entry Point.</p>
Metering System Identifier (MSID)	<p>MSID is a term used throughout the BSC and its subsidiary documents and has the same meaning as MPAN as used under the MRA.</p>
Master Registration Agreement (MRA)	<p>The MRA is an Agreement that sets out terms for the provision of Metering Point Administration Services (MPAS) Registrations and procedures in relation to the Change of Supplier to any premise/Metering Point.</p>
Nested Networks	<p>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).</p>

Term	Definition
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.
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 ¹⁰ .
Use of System Charges	Charges which are applicable to those parties which use the Distribution System.
User	Someone who has a use of system agreement with the DNO e.g. a Supplier, generator or other DNO.

¹⁰ Balancing and Settlement Code Procedures are available from <http://www.elexon.co.uk/pages/bscps.aspx>

Appendix 2 - Guidance notes¹¹

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 which 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 property, your Supplier may receive a credit for energy which 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 and identifying whether there may be opportunities to change the way you use the Distribution System.

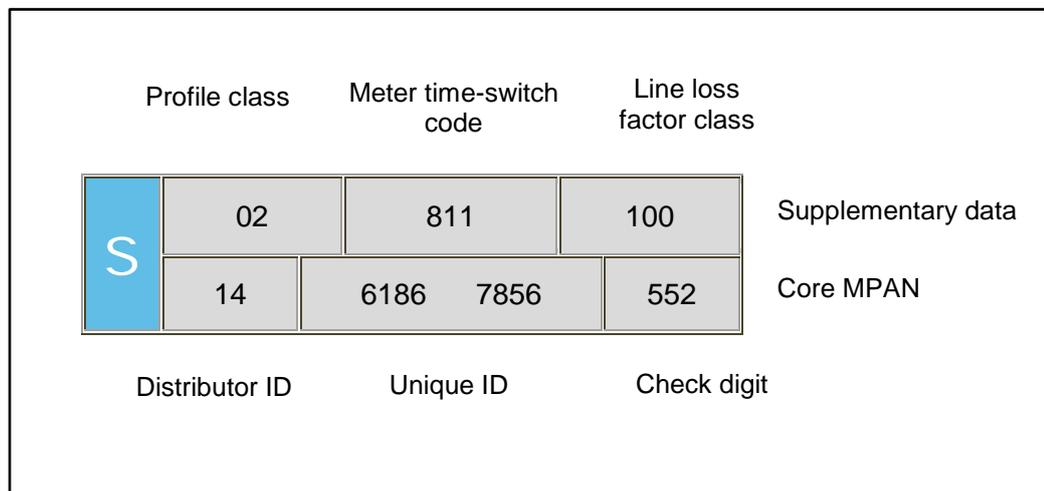
Meter point administration

- 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 a MPAN for catering).
- 1.6. The full MPAN is a 21 digit number, preceded by an 'S'. 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 premise.

¹¹ 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 (LLFC) to identify the distribution charges for your premise. 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 and 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 Extra High Voltage Property, then the charges will be found in Annex 2. In a few instances the charges may be contained in Annex 3. 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 devices. 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 when demand use is likely to be cheaper outside peak periods and generation credits more beneficial. However the ability to 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 which 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 property's electrical installation has been followed in order to maintain a power factor between 0.95 and unity at the Metering Point.
- 1.18. Reactive Power (kVAh) 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. Many advantages can be achieved by correcting poor power factor. These include reduced energy bills through lower reactive charges; lower capacity charges; 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 location based charging methodology (referred to as EDCM) for higher voltage network Users. Distributors use two approved approaches: Long Run Incremental Cost Pricing

(LRIC) and Forward Cost Pricing (FCP). We use the FCP. The EDCM will apply to Customers connected at Extra High Voltage (EHV), or connected at High Voltage (HV) and metered at a higher voltage transformation substation.

- 1.23. EDCM charges 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 payment.
- 1.24. The charges under the EDCM comprise of the following individual components:
- a) **Fixed charge** - This charge recovers our 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 recovers the relevant FCP cost, the National Grid Electricity Transmission (NGET) 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 voltage of connection (local) and beyond at all higher voltages (remote) relevant to the Customer's connection. This results in higher costs in more capacity congested parts of the network, reflecting the greater likelihood of future reinforcement in these areas, and 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 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 2017 - 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	Reactive power charge p/kVArh	Excess capacity charge p/kVA/day	Closed LLFCs
Domestic Unrestricted	1	1	2.227			3.90				2, 3
Domestic Two Rate	4	2	2.646	0.069		3.90				5, 6, 30
Domestic Off Peak (related MPAN)	34	2	0.197							
Small Non Domestic Unrestricted	7	3	2.078			5.99				8, 9, 13, 14, 107, 108, 109
Small Non Domestic Two Rate	10	4	2.382	0.065		5.99				11, 12, 110, 111, 112
Small Non Domestic Off Peak (related MPAN)	40	4	0.371							
LV Medium Non-Domestic	21	5-8	1.745	0.046		4.58				20, 22, 25, 26, 27
LV Sub Medium Non-Domestic	19	5-8	1.574	0.038		3.40				
LV Network Domestic	632	0	12.725	0.782	0.058	3.90				
LV Network Non-Domestic Non-CT	633	0	12.799	0.787	0.058	5.99				
LV HH Metered	127, 129	0	11.094	0.669	0.041	7.72	3.44	0.400	3.44	121, 124, 132

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

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	Reactive power charge p/kVArh	Excess capacity charge p/kVA/day	Closed LLFCs
LV Sub HH Metered	128	0	9.814	0.570	0.019	5.95	4.48	0.337	4.48	
HV HH Metered	365, 367	0	7.156	0.392	0.007	59.01	4.73	0.224	4.73	
NHH UMS category A	95	8	1.971							
NHH UMS category B	96	1	2.540							
NHH UMS category C	97	1	4.120							
NHH UMS category D	98	1	1.393							
LV UMS (Pseudo HH Metered)	99	0	38.723	1.244	0.621					
LV Generation NHH or Aggregate HH	625	8 & 0	-0.566							
LV Sub Generation NHH	570	8	-0.483							
LV Generation Intermittent	571	0	-0.566					0.242		
LV Generation Non-Intermittent	573	0	-4.772	-0.364	-0.046			0.242		
LV Sub Generation Intermittent	572	0	-0.483					0.207		
LV Sub Generation Non-Intermittent	574	0	-4.070	-0.313	-0.038			0.207		
HV Generation Intermittent	575	0	-0.244			28.45		0.167		
HV Generation Non-Intermittent	577	0	-2.068	-0.167	-0.013	28.45		0.167		

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 2017 - 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 Excess capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export Excess capacity charge (p/kVA/day)
636	636	1470000533244	933	933	1470000533253	Troughton Farm PV	0.000	1.64	1.64	1.64	0.000	682.05	0.05	0.05
702	702	1423197100003	703	703	1430000005417	Tyseley Waste	0.000	31.75	1.26	1.26	-0.564	339.66	0.05	0.05
704	704	1423674500009				Takao Europe	0.000	283.44	2.34	2.34	0.000	0.00	0.00	0.00
705	705	1470000097947	750	750	1470000097965	Four Ashes Incinerator	0.000	130.81	0.98	0.98	0.000	664.45	0.05	0.05
706	706	1470000077913	751	751	1470000077950	Witches Farm Solar	2.464	12.19	1.35	1.35	0.000	430.87	0.05	0.05
707	707	1430000001342 1430000001351	708	708	1430000001360 1430000001370	Uni of Birmingham	0.000	3072.73	3.44	3.44	0.000	0.00	0.00	0.00
709	709	1426644200003				Severn Trent Water (Wyelands)	0.000	3783.77	1.35	1.35	0.000	0.00	0.00	0.00
710	710	1425993500002	732	732	1424993500000	Wolverhampton Waste Services	0.000	179.15	1.26	1.26	0.000	0.00	0.00	0.00
711	711	1421696500001 1430000000906	733	733	1430000000915 1430000000924	Stoke CHP	0.000	138.66	1.82	1.82	0.000	0.00	0.00	0.00
712	712	1428483000001 1429586500003				WBB Minerals	0.000	447.05	1.66	1.66	0.000	0.00	0.00	0.00
713	713	1422804000005				Cauldon Cement	0.000	327.34	2.75	2.75	0.000	0.00	0.00	0.00
714	714	1412791203000				Abson Gas Compressor Station	0.000	40.02	1.06	1.06	0.000	0.00	0.00	0.00
715	715	1422108000000				Ervin Amasteel	0.000	2601.27	2.11	2.11	0.000	0.00	0.00	0.00
716	716	1426793500003	734	734	1425793500001	Harford Waste Services	0.000	16.65	1.28	1.28	0.000	0.00	0.00	0.00
717	717	1422664500000 1425861000001	735	735	1430000033051 1430000033060	NR Kidsgrove	0.000	13288.96	2.64	2.64	0.000	0.00	0.00	0.00
718	718	1421664500008 1426342000002	736	736	1430000033098 1430000033103	NR Stafford	0.000	3839.93	3.46	3.46	0.000	0.00	0.00	0.00
719	719	1423124100000 1428564500005	741	741	1430000033070 1430000044090	NR Washwood Heath	0.598	4154.13	2.09	2.09	0.000	0.00	0.00	0.00
720	720	1420286500000	737	737	1430000033121	NR Winson Green	0.000	1881.87	3.83	3.83	0.000	0.00	0.00	0.00
721	721	1423566000006	738	738	1430000033089	NR Smethwick	0.000	10122.95	0.93	0.93	0.000	0.00	0.00	0.00
722	722	1424136000004	739	739	1430000033112	NR Willenhall	0.000	2793.31	1.19	1.19	0.000	0.00	0.00	0.00
723	723	1460002083346	748	748	1460002083355	Northwick STOR	0.000	0.00	0.95	0.95	0.000	0.00	0.05	0.05
724	724	1430000027786 1430000027795 1430000027800 1430000027810 1430000027829 1430000027838 1430000027847 1430000027856				Inco Alloys	0.000	406.19	5.47	5.47	0.000	0.00	0.00	0.00
725	725	1460002258662	749	749	1460002258671	Swancote	0.968	229.01	0.96	0.96	-0.891	317.92	0.05	0.05
726	726	1460002256025	752	752	1460002256034	Spring Hill Solar generation	0.000	0.00	1.23	1.23	0.000	0.00	0.05	0.05
727	727	1460001869731 1460001869750				NG Worrington Gas Compressor	0.000	2198.18	2.65	2.65	0.000	0.00	0.00	0.00
728	728	1470000086156	753	753	1470000086147	Greenfrog STOR generation	0.000	0.00	0.95	0.95	0.000	0.00	0.05	0.05
729	729	1470000223432	754	754	1470000223441	Union Road	0.000	425.45	1.36	1.36	0.000	1489.09	0.05	0.05
730	730	1423464500000 1429264500000	731	731	1421464500007 1422464500009	Quatt	2.651	85.92	6.14	6.14	0.000	0.00	0.00	0.00
740	740	1425886500002	746	746	1426886500004	Knypersley	0.557	0.23	4.26	4.26	-0.461	40.42	0.05	0.05
742	742	1429414500005				Simplex	0.000	101.55	8.47	8.47	0.000	0.00	0.00	0.00
743	743	1470000174885				Northwick STOR sub supply	0.000	0.00	2.89	2.89	0.000	0.00	0.00	0.00
744	744	1428882200005				Star Aluminium	0.940	2085.86	1.96	1.96	0.000	0.00	0.00	0.00
747	747	1422949000004				Goodyear	0.000	3208.23	2.20	2.20	0.000	0.00	0.00	0.00
770	770	1470000190520	755	755	1470000190530	Battlefield Incinerator	0.853	76.30	1.33	1.33	-1.166	528.67	0.05	0.05
771	771	1470000275547	756	756	1470000275556	Says Court Farm PV	0.000	0.72	7.06	7.06	0.000	539.26	0.05	0.05
772	772	1470000283681 1470000444133	757	757	1470000283690 1470000444142	Hayford Farm Solar Park	0.852	3.74	1.56	1.56	0.000	560.35	0.05	0.05
773	773	1470000303901	758	758	1470000303910	Rotherdale Solar Farm	0.000	0.00	1.20	1.20	0.000	0.00	0.05	0.05
774	774	1470000406449	759	759	1470000406430	Lower Newton Solar Farm	0.000	4.30	2.32	2.32	0.000	774.19	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 Excess capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export Excess capacity charge (p/kVA/day)
775	775	1470000416794	760	760	1470000416800	Wrockwardine Solar Farm	0.854	0.00	2.51	2.51	0.000	0.00	0.05	0.05
776	776	1470000425530	761	761	1470000425549	Condoover Solar Farm	0.857	20.04	2.32	2.32	0.000	2505.14	0.05	0.05
777	777	1470000426125	762	762	1470000426134	Tower Hill Farm PV	0.000	1.64	2.32	2.32	0.000	739.69	0.05	0.05
778	778	1470000429766	763	763	1470000429775	Hill House Farm Solar	0.000	2.72	2.53	2.53	0.000	2207.99	0.05	0.05
779	779	1470000430089	764	764	1470000430103	Pitchford Farm Solar	0.857	15.21	2.32	2.32	0.000	2281.27	0.05	0.05
780	780	1470000437749	765	765	1470000437758	Sundorne Solar Park	0.850	8.37	2.51	2.51	0.000	284.63	0.05	0.05
781	781	1470000473756	766	766	1470000473765	Hartlebury EFW	2.409	732.44	1.80	1.80	-2.525	4577.73	0.05	0.05
782	782	1470000478727	767	767	1470000478736	Upper Huntingford PV	0.000	0.58	2.53	2.53	0.000	249.05	0.05	0.05
783	783	1470000479190	768	768	1470000479206	Ring O Bells Solar	0.000	5.19	2.32	2.32	0.000	518.88	0.05	0.05
784	784	1470000501641	769	769	1470000501650	Hall Farm PV Awre	0.000	2.10	2.32	2.32	0.000	701.20	0.05	0.05
785	785	1470000174928	805	805	1470000174900	5 Mile Drive Solar Park	0.000	0.00	1.21	1.21	0.000	0.00	0.05	0.05
794	794	1470000535881	815	815	1470000535890	Wickhamford PV	0.000	1.76	2.32	2.32	0.000	856.49	0.05	0.05
795	795	1470000540543	816	816	1470000540552	Yorkley Wood Farm PV	0.000	3.38	2.32	2.32	0.000	337.73	0.05	0.05
796	796	1470000542319	817	817	1470000542328	Awbridge Farm Diesel Gen	0.000	52.49	1.72	1.72	0.000	1615.07	0.05	0.05
797	797	1470000542833	818	818	1470000542842	Bristol Rd Glos STOR	0.000	13.80	1.21	1.21	0.000	613.18	0.05	0.05
798	798	1470000542790	819	819	1470000542806	Actrees Farm PV	0.000	12.44	2.53	2.53	0.000	2798.61	0.05	0.05
799	799	1470000548418	820	820	1470000548427	Sheriffhales Farm PV	0.857	27.83	2.51	2.51	0.000	3812.36	0.05	0.05
7177	7177	7177	7070E	7070	7070	Heartlands Power Ltd / Fort Dunlop	0.000	5.37	1.40	1.40	0.000	0.00	0.00	0.00
			745	745	143000021836	Redditch Gas Turbine	0.000	0.00	0.00	0.00	0.000	0.00	0.00	0.00
2226	2226	2226				Cellarhead Barlaston (Meaford) Interconnector	0.000	0.00	2.62	2.62	0.000	0.00	0.00	0.00
0234	0234	0234				Cellarhead Whitfield Interconnector	0.000	0.00	3.03	3.03	0.000	0.00	0.00	0.00
New Import 1	New Import 1	New Import 1	New Export 1	New Export 1	New Export 1	Defford Solar Farm	0.000	28.40	1.79	1.79	0.000	5821.40	0.05	0.05
New Import 2	New Import 2	New Import 2	New Export 2	New Export 2	New Export 2	Fryers Road Waste Generation option 2	0.000	592.80	1.72	1.72	0.000	3082.54	0.05	0.05
New Import 3	New Import 3	New Import 3	New Export 3	New Export 3	New Export 3	Giffords Way	0.000	539.44	1.72	1.72	0.000	1618.31	0.05	0.05
New Import 4	New Import 4	New Import 4	New Export 4	New Export 4	New Export 4	Green Fm Latteridge PV	0.000	1.01	2.32	2.32	0.000	808.93	0.05	0.05
New Import 5	New Import 5	New Import 5	New Export 5	New Export 5	New Export 5	Gretton Solar Farm	0.000	3.15	2.32	2.32	0.000	3148.51	0.05	0.05
New Import 6	New Import 6	New Import 6	New Export 6	New Export 6	New Export 6	Hayes Farm Solar Farm	0.000	11.94	1.79	1.79	0.000	1790.66	0.05	0.05
New Import 7	New Import 7	New Import 7	New Export 7	New Export 7	New Export 7	High Trees Farm Solar Farm	0.857	2.47	2.51	2.51	0.000	394.58	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	2.447	0.70	2.32	2.32	0.000	587.74	0.05	0.05
New Import 9	New Import 9	New Import 9	New Export 9	New Export 9	New Export 9	Lower Fields Solar Farm	0.000	1.04	1.79	1.79	0.000	506.45	0.05	0.05
New Import 10	New Import 10	New Import 10	New Export 10	New Export 10	New Export 10	Nibley Mill Solar Farm	0.000	1.41	2.32	2.32	0.000	1265.93	0.05	0.05
New Import 11	New Import 11	New Import 11	New Export 11	New Export 11	New Export 11	Old Hill Solar Park	0.000	4.84	2.32	2.32	0.000	290.53	0.05	0.05
New Import 12	New Import 12	New Import 12				Pontrilas Sawmill	0.000	52.96	3.22	3.22	0.000	0.00	0.00	0.00
New Import 13	New Import 13	New Import 13	New Export 13	New Export 13	New Export 13	Radbrooke Pastures PV	0.000	0.00	1.79	1.79	0.000	0.00	0.05	0.05
New Import 14	New Import 14	New Import 14	New Export 14	New Export 14	New Export 14	Roden Solar Farm	0.858	0.00	2.42	2.42	0.000	0.00	0.05	0.05
New Import 15	New Import 15	New Import 15	New Export 15	New Export 15	New Export 15	Sunny Acres Solar Farm	0.000	0.00	2.32	2.32	0.000	0.00	0.05	0.05
New Import 16	New Import 16	New Import 16	New Export 16	New Export 16	New Export 16	Upper Solar Farm, Near Manor Farm	0.000	3.47	2.53	2.53	0.000	291.90	0.05	0.05
New Import 17	New Import 17	New Import 17	New Export 17	New Export 17	New Export 17	Upper Meadowly Solar Farm	0.857	12.67	2.51	2.51	0.000	2112.28	0.05	0.05
801	801	1470000552432	821	821	1470000552441	Upper Wick Solar Farm	0.000	1.05	2.53	2.53	0.000	294.32	0.05	0.05
New Import 18	New Import 18	New Import 18	New Export 18	New Export 18	New Export 18	Wednesbury Power	0.000	50.90	1.21	1.21	0.000	2314.62	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.

Western Power Distribution (West Midlands) plc - Effective from 1 April 2017 - 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 Excess capacity charge (p/kVA/day)
636	636	1470000533244	Troughton Farm PV		1.64	1.64	1.64
702	702	1423197100003	Tyseley Waste		31.75	1.26	1.26
704	704	1423674500009	Takao Europe		283.44	2.34	2.34
705	705	1470000097947	Four Ashes Incinerator		130.81	0.98	0.98
706	706	1470000077913	Witches Farm Solar	2.464	12.19	1.35	1.35
707	707	1430000001342 1430000001351	Uni of Birmingham		3,072.73	3.44	3.44
709	709	1426644200003	Severn Trent Water (Wyelands)		3,783.77	1.35	1.35
710	710	1425993500002	Wolverhampton Waste Services		179.15	1.26	1.26
711	711	1421696500001 1430000000906	Stoke CHP		138.66	1.82	1.82
712	712	1428483000001 1429586500003	WBB Minerals		447.05	1.66	1.66
713	713	1422804000005	Cauldon Cement		327.34	2.75	2.75
714	714	1412791203000	Abson Gas Compressor Station		40.02	1.06	1.06
715	715	1422108000000	Ervin Amasteel		2,601.27	2.11	2.11
716	716	1426793500003	Hanford Waste Services		16.65	1.28	1.28
717	717	1422664500000 1425861000001	NR Kidsgrove		13,288.96	2.64	2.64
718	718	1421664500008 1426342000002	NR Stafford		3,839.93	3.46	3.46
719	719	1423124100000 1428564500005	NR Washwood Heath	0.598	4,154.13	2.09	2.09
720	720	1420286500000	NR Winson Green		1,881.87	3.83	3.83
721	721	1423566000006	NR Smethwick		10,122.95	0.93	0.93
722	722	1424136000004	NR Willenhall		2,793.31	1.19	1.19
723	723	1460002083346	Northwick STOR			0.95	0.95

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 Excess capacity charge (p/kVA/day)
724	724	1430000027786 1430000027795 1430000027800 1430000027810 1430000027829 1430000027838 1430000027847 1430000027856	Inco Alloys		406.19	5.47	5.47
725	725	1460002258662	Swancote	0.968	229.01	0.96	0.96
726	726	1460002256025	Spring Hill Solar generation			1.23	1.23
727	727	1460001869731 1460001869750	NG Wormington Gas Compressor		2,198.18	2.65	2.65
728	728	1470000086156	Greenfrog STOR generation			0.95	0.95
729	729	1470000223432	Union Road		425.45	1.36	1.36
730	730	1423464500000 1429264500000	Quatt	2.651	85.92	6.14	6.14
740	740	1425886500002	Knypersley	0.557	0.23	4.26	4.26
742	742	1429414500005	Simplex		101.55	8.47	8.47
743	743	1470000174885	Northwick STOR sub supply			2.89	2.89
744	744	1428882200005	Star Aluminium	0.940	2,085.86	1.96	1.96
747	747	1422949000004	Goodyear		3,208.23	2.20	2.20
770	770	1470000190520	Battlefield Incinerator	0.853	76.30	1.33	1.33
771	771	1470000275547	Says Court Farm PV		0.72	7.06	7.06
772	772	1470000283681 1470000444133	Hayford Farm Solar Park	0.852	3.74	1.56	1.56
773	773	1470000303901	Rotherdale Solar Farm			1.20	1.20
774	774	1470000406449	Lower Newton Solar Farm		4.30	2.32	2.32
775	775	1470000416794	Wrockwardine Solar Farm	0.854		2.51	2.51
776	776	1470000425530	Condover Solar Farm	0.857	20.04	2.32	2.32
777	777	1470000426125	Tower Hill Farm PV		1.64	2.32	2.32
778	778	1470000429766	Hill House Farm Solar		2.72	2.53	2.53
779	779	1470000430089	Pitchford Farm Solar	0.857	15.21	2.32	2.32
780	780	1470000437749	Sundorne Solar Park	0.850	8.37	2.51	2.51
781	781	1470000473756	Hartlebury EFW	2.409	732.44	1.80	1.80
782	782	1470000478727	Upper Huntingford PV		0.58	2.53	2.53
783	783	1470000479190	Ring O Bells Solar		5.19	2.32	2.32
784	784	1470000501641	Hall Farm PV Awre		2.10	2.32	2.32

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 Excess capacity charge (p/kVA/day)
785	785	1470000174928	5 Mile Drive Solar Park			1.21	1.21
794	794	1470000535881	Wickhamford PV		1.76	2.32	2.32
795	795	1470000540543	Yorkley Wood Farm PV		3.38	2.32	2.32
796	796	1470000542319	Awbridge Farm Diesel Gen		52.49	1.72	1.72
797	797	1470000542833	Bristol Rd Glos STOR		13.80	1.21	1.21
798	798	1470000542790	Actrees Farm PV		12.44	2.53	2.53
799	799	1470000548418	Sheriffhales Farm PV	0.857	27.83	2.51	2.51
7177	7177	7177	Heartlands Power Ltd / Fort Dunlop		5.37	1.40	1.40
2226	2226	2226	Cellarhead Barlaston (Meaford) Interconnector			2.62	2.62
0234	0234	0234	Cellarhead Whitfield Interconnector			3.03	3.03
New Import 1	New Import 1	New Import 1	Defford Solar Farm		28.40	1.79	1.79
New Import 2	New Import 2	New Import 2	Fryers Road Waste Generation option 2		592.80	1.72	1.72
New Import 3	New Import 3	New Import 3	Giffords Way		539.44	1.72	1.72
New Import 4	New Import 4	New Import 4	Green Fm Latteridge PV		1.01	2.32	2.32
New Import 5	New Import 5	New Import 5	Gretton Solar Farm		3.15	2.32	2.32
New Import 6	New Import 6	New Import 6	Hayes Farm Solar Farm		11.94	1.79	1.79
New Import 7	New Import 7	New Import 7	High Trees Farm Solar Farm	0.857	2.47	2.51	2.51
New Import 8	New Import 8	New Import 8	Little Frome Solar Farm	2.447	0.70	2.32	2.32
New Import 9	New Import 9	New Import 9	Lower Fields Solar Farm		1.04	1.79	1.79
New Import 10	New Import 10	New Import 10	Nibley Mill Solar Farm		1.41	2.32	2.32
New Import 11	New Import 11	New Import 11	Old Hill Solar Park		4.84	2.32	2.32
New Import 12	New Import 12	New Import 12	Pontrilas Sawmill		52.96	3.22	3.22
New Import 13	New Import 13	New Import 13	Radbroke Pastures PV			1.79	1.79
New Import 14	New Import 14	New Import 14	Roden Solar Farm	0.858		2.42	2.42
New Import 15	New Import 15	New Import 15	Sunny Acres Solar Farm			2.32	2.32
New Import 16	New Import 16	New Import 16	Upper Solar Farm, Near Manor Farm		3.47	2.53	2.53
New Import 17	New Import 17	New Import 17	Upper Meadowly Solar Farm	0.857	12.67	2.51	2.51
801	801	1470000552432	Upper Wick Solar Farm		1.05	2.53	2.53
New Import 18	New Import 18	New Import 18	Wednesbury Power		50.90	1.21	1.21

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.

Western Power Distribution (West Midlands) plc - Effective from 1 April 2017 - 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 Excess capacity charge (p/kVA/day)
933	933	1470000533253	Troughton Farm PV		682.05	0.05	0.05
703	703	1430000005417	Tyseley Waste	-0.564	339.66	0.05	0.05
750	750	1470000097965	Four Ashes Incinerator		664.45	0.05	0.05
751	751	1470000077950	Witches Farm Solar		430.87	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 STOR			0.05	0.05
749	749	1460002258671	Swancote	-0.891	317.92	0.05	0.05
752	752	1460002256034	Spring Hill Solar generation			0.05	0.05
753	753	1470000086147	Greenfrog STOR generation			0.05	0.05
754	754	1470000223441	Union Road		1,489.09	0.05	0.05
731	731	1421464500007 1422464500009	Quatt				
746	746	1426886500004	Knypersley	-0.461	40.42	0.05	0.05
755	755	1470000190530	Battlefield Incinerator	-1.166	528.67	0.05	0.05
756	756	1470000275556	Says Court Farm PV		539.26	0.05	0.05
757	757	1470000283690 1470000444142	Hayford Farm Solar Park		560.35	0.05	0.05
758	758	1470000303910	Rotherdale Solar Farm			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 Excess capacity charge (p/kVA/day)
759	759	1470000406430	Lower Newton Solar Farm		774.19	0.05	0.05
760	760	1470000416800	Wrockwardine Solar Farm			0.05	0.05
761	761	1470000425549	Condover Solar Farm		2,505.14	0.05	0.05
762	762	1470000426134	Tower Hill Farm PV		739.69	0.05	0.05
763	763	1470000429775	Hill House Farm Solar		2,207.99	0.05	0.05
764	764	1470000430103	Pitchford Farm Solar		2,281.27	0.05	0.05
765	765	1470000437758	Sundorne Solar Park		284.63	0.05	0.05
766	766	1470000473765	Hartlebury EFW	-2.525	4,577.73	0.05	0.05
767	767	1470000478736	Upper Huntingford PV		249.05	0.05	0.05
768	768	1470000479206	Ring O Bells Solar		518.88	0.05	0.05
769	769	1470000501650	Hall Farm PV Awre		701.20	0.05	0.05
805	805	1470000174900	5 Mile Drive Solar Park			0.05	0.05
815	815	1470000535890	Wickhamford PV		856.49	0.05	0.05
816	816	1470000540552	Yorkley Wood Farm PV		337.73	0.05	0.05
817	817	1470000542328	Awbridge Farm Diesel Gen		1,615.07	0.05	0.05
818	818	1470000542842	Bristol Rd Glos STOR		613.18	0.05	0.05
819	819	1470000542806	Actrees Farm PV		2,798.61	0.05	0.05
820	820	1470000548427	Sheriffhales Farm PV		3,812.36	0.05	0.05
7070E	7070	7070	Heartlands Power Ltd / Fort Dunlop				
745	745	1430000021836	Redditch Gas Turbine				
New Export 1	New Export 1	New Export 1	Defford Solar Farm		5,821.40	0.05	0.05
New Export 2	New Export 2	New Export 2	Fryers Road Waste Generation option 2		3,082.54	0.05	0.05
New Export 3	New Export 3	New Export 3	Giffords Way		1,618.31	0.05	0.05
New Export 4	New Export 4	New Export 4	Green Fm Latteridge PV		808.93	0.05	0.05
New Export 5	New Export 5	New Export 5	Gretton Solar Farm		3,148.51	0.05	0.05
New Export 6	New Export 6	New Export 6	Hayes Farm Solar Farm		1,790.66	0.05	0.05
New Export 7	New Export 7	New Export 7	High Trees Farm Solar Farm		394.58	0.05	0.05
New Export 8	New Export 8	New Export 8	Little Frome Solar Farm		587.74	0.05	0.05
New Export 9	New Export 9	New Export 9	Lower Fields Solar Farm		506.45	0.05	0.05
New Export 10	New Export 10	New Export 10	Nibley Mill Solar Farm		1,265.93	0.05	0.05
New Export 11	New Export 11	New Export 11	Old Hill Solar Park		290.53	0.05	0.05
New Export 13	New Export 13	New Export 13	Radbrooke Pastures PV			0.05	0.05
New Export 14	New Export 14	New Export 14	Roden Solar Farm			0.05	0.05
New Export 15	New Export 15	New Export 15	Sunny Acres Solar Farm			0.05	0.05
New Export 16	New Export 16	New Export 16	Upper Solar Farm, Near Manor Farm		291.90	0.05	0.05
New Export 17	New Export 17	New Export 17	Upper Meadowly Solar Farm		2,112.28	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 Excess capacity charge (p/kVA/day)
821	821	1470000552441	Upper Wick Solar Farm		294.32	0.05	0.05
New Export 18	New Export 18	New Export 18	Wednesbury Power		2,314.62	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.

Western Power Distribution (West Midlands) plc - Effective from 1 April 2017 - 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		1.065	0.007	59.01				
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	Reactive power charge p/kVArh	Excess capacity charge p/kVA/day
		0							
Notes:									

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

Western Power Distribution (West Midlands) plc - Effective from 1 April 2017 - 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	Reactive power charge p/kVAh	Excess capacity charge p/kVA/day
LDNO LV: Domestic Unrestricted	10300	1	1.491			2.61			
LDNO LV: Domestic Two Rate	10301	2	1.771	0.046		2.61			
LDNO LV: Domestic Off Peak (related MPAN)	10302	2	0.132						
LDNO LV: Small Non Domestic Unrestricted	10303	3	1.391			4.01			
LDNO LV: Small Non Domestic Two Rate	10304	4	1.594	0.044		4.01			
LDNO LV: Small Non Domestic Off Peak (related MPAN)	10305	4	0.248						
LDNO LV: LV Medium Non-Domestic	10306	5-8	1.168	0.031		3.07			
LDNO LV: LV Network Domestic	10307	0	8.518	0.523	0.039	2.61			
LDNO LV: LV Network Non-Domestic Non-CT	10308	0	8.567	0.527	0.039	4.01			
LDNO LV: LV HH Metered	10309	0	7.426	0.448	0.027	5.17	2.30	0.268	2.30
LDNO LV: NHH UMS category A	10310	8	1.319						
LDNO LV: NHH UMS category B	10311	1	1.700						
LDNO LV: NHH UMS category C	10312	1	2.758						
LDNO LV: NHH UMS category D	10313	1	0.932						
LDNO LV: LV UMS (Pseudo HH Metered)	10314	0	25.920	0.833	0.416				
LDNO LV: LV Generation NHH or Aggregate HH	10315	8 & 0	-0.566						

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	Reactive power charge p/kVAh	Excess capacity charge p/kVA/day
LDNO LV: LV Generation Intermittent	10316	0	-0.566					0.242	
LDNO LV: LV Generation Non-Intermittent	10317	0	-4.772	-0.364	-0.046			0.242	
LDNO HV: Domestic Unrestricted	10318	1	1.082			1.89			
LDNO HV: Domestic Two Rate	10319	2	1.286	0.034		1.89			
LDNO HV: Domestic Off Peak (related MPAN)	10320	2	0.096						
LDNO HV: Small Non Domestic Unrestricted	10321	3	1.010			2.91			
LDNO HV: Small Non Domestic Two Rate	10322	4	1.157	0.032		2.91			
LDNO HV: Small Non Domestic Off Peak (related MPAN)	10323	4	0.180						
LDNO HV: LV Medium Non-Domestic	10324	5-8	0.848	0.022		2.23			
LDNO HV: LV Network Domestic	10325	0	6.182	0.380	0.028	1.89			
LDNO HV: LV Network Non-Domestic Non-CT	10326	0	6.218	0.382	0.028	2.91			
LDNO HV: LV HH Metered	10327	0	5.390	0.325	0.020	3.75	1.67	0.194	1.67
LDNO HV: LV Sub HH Metered	10328	0	7.279	0.423	0.014	4.41	3.32	0.250	3.32
LDNO HV: HV HH Metered	10329	0	6.077	0.333	0.006	50.11	4.02	0.190	4.02
LDNO HV: NHH UMS category A	10330	8	0.958						
LDNO HV: NHH UMS category B	10331	1	1.234						
LDNO HV: NHH UMS category C	10332	1	2.002						
LDNO HV: NHH UMS category D	10333	1	0.677						
LDNO HV: LV UMS (Pseudo HH Metered)	10334	0	18.813	0.604	0.302				
LDNO HV: LV Generation NHH or Aggregate HH	10335	8 & 0	-0.566						
LDNO HV: LV Sub Generation NHH	10336	8	-0.483						
LDNO HV: LV Generation Intermittent	10337	0	-0.566					0.242	
LDNO HV: LV Generation Non-Intermittent	10338	0	-4.772	-0.364	-0.046			0.242	
LDNO HV: LV Sub Generation Intermittent	10339	0	-0.483					0.207	

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	Reactive power charge p/kVAh	Excess capacity charge p/kVA/day
LDNO HV: LV Sub Generation Non-Intermittent	10340	0	-4.070	-0.313	-0.038			0.207	
LDNO HV: HV Generation Intermittent	10341	0	-0.244					0.167	
LDNO HV: HV Generation Non-Intermittent	10342	0	-2.068	-0.167	-0.013			0.167	
LDNO HVplus: Domestic Unrestricted	10343	1	0.918			1.61			
LDNO HVplus: Domestic Two Rate	10344	2	1.091	0.028		1.61			
LDNO HVplus: Domestic Off Peak (related MPAN)	10345	2	0.081						
LDNO HVplus: Small Non Domestic Unrestricted	10346	3	0.857			2.47			
LDNO HVplus: Small Non Domestic Two Rate	10347	4	0.982	0.027		2.47			
LDNO HVplus: Small Non Domestic Off Peak (related MPAN)	10348	4	0.153						
LDNO HVplus: LV Medium Non-Domestic	10349	5-8	0.719	0.019		1.89			
LDNO HVplus: LV Sub Medium Non-Domestic	10350	5-8	0.981	0.024		2.12			
LDNO HVplus: HV Medium Non-Domestic	10351	5-8	0.757	0.005		41.97			
LDNO HVplus: LV Network Domestic	10352	0	5.245	0.322	0.024	1.61			
LDNO HVplus: LV Network Non-Domestic Non-CT	10353	0	5.276	0.324	0.024	2.47			
LDNO HVplus: LV HH Metered	10354	0	4.573	0.276	0.017	3.18	1.42	0.165	1.42
LDNO HVplus: LV Sub HH Metered	10355	0	6.119	0.355	0.012	3.71	2.79	0.210	2.79
LDNO HVplus: HV HH Metered	10356	0	5.090	0.279	0.005	41.97	3.36	0.159	3.36
LDNO HVplus: NHH UMS category A	10357	8	0.812						
LDNO HVplus: NHH UMS category B	10358	1	1.047						
LDNO HVplus: NHH UMS category C	10359	1	1.698						
LDNO HVplus: NHH UMS category D	10360	1	0.574						
LDNO HVplus: LV UMS (Pseudo HH Metered)	10361	0	15.962	0.513	0.256				
LDNO HVplus: LV Generation NHH or Aggregate HH	10362	8 & 0	-0.353			0.00			
LDNO HVplus: LV Sub Generation NHH	10363	8	-0.344			0.00			

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	Reactive power charge p/kVAh	Excess capacity charge p/kVA/day
LDNO HVplus: LV Generation Intermittent	10364	0	-0.353			0.00		0.151	
LDNO HVplus: LV Generation Non-Intermittent	10365	0	-2.975	-0.227	-0.029	0.00		0.151	
LDNO HVplus: LV Sub Generation Intermittent	10366	0	-0.344			0.00		0.147	
LDNO HVplus: LV Sub Generation Non-Intermittent	10367	0	-2.895	-0.223	-0.027	0.00		0.147	
LDNO HVplus: HV Generation Intermittent	10368	0	-0.244			28.45		0.167	
LDNO HVplus: HV Generation Non-Intermittent	10369	0	-2.068	-0.167	-0.013	28.45		0.167	
LDNO EHV: Domestic Unrestricted	10370	1	0.741			1.30			
LDNO EHV: Domestic Two Rate	10371	2	0.881	0.023		1.30			
LDNO EHV: Domestic Off Peak (related MPAN)	10372	2	0.066						
LDNO EHV: Small Non Domestic Unrestricted	10373	3	0.692			1.99			
LDNO EHV: Small Non Domestic Two Rate	10374	4	0.793	0.022		1.99			
LDNO EHV: Small Non Domestic Off Peak (related MPAN)	10375	4	0.124						
LDNO EHV: LV Medium Non-Domestic	10376	5-8	0.581	0.015		1.52			
LDNO EHV: LV Sub Medium Non-Domestic	10377	5-8	0.793	0.019		1.71			
LDNO EHV: HV Medium Non-Domestic	10378	5-8	0.612	0.004		33.90			
LDNO EHV: LV Network Domestic	10379	0	4.237	0.260	0.019	1.30			
LDNO EHV: LV Network Non-Domestic Non-CT	10380	0	4.261	0.262	0.019	1.99			
LDNO EHV: LV HH Metered	10381	0	3.694	0.223	0.014	2.57	1.15	0.133	1.15
LDNO EHV: LV Sub HH Metered	10382	0	4.943	0.287	0.010	3.00	2.26	0.170	2.26
LDNO EHV: HV HH Metered	10383	0	4.111	0.225	0.004	33.90	2.72	0.129	2.72
LDNO EHV: NHH UMS category A	10384	8	0.656						
LDNO EHV: NHH UMS category B	10385	1	0.846						
LDNO EHV: NHH UMS category C	10386	1	1.372						
LDNO EHV: NHH UMS category D	10387	1	0.464						

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	Reactive power charge p/kVAh	Excess capacity charge p/kVA/day
LDNO EHV: LV UMS (Pseudo HH Metered)	10388	0	12.893	0.414	0.207				
LDNO EHV: LV Generation NHH or Aggregate HH	10389	8 & 0	-0.285			0.00			
LDNO EHV: LV Sub Generation NHH	10390	8	-0.277			0.00			
LDNO EHV: LV Generation Intermittent	10391	0	-0.285			0.00		0.122	
LDNO EHV: LV Generation Non-Intermittent	10392	0	-2.403	-0.183	-0.023	0.00		0.122	
LDNO EHV: LV Sub Generation Intermittent	10393	0	-0.277			0.00		0.119	
LDNO EHV: LV Sub Generation Non-Intermittent	10394	0	-2.338	-0.180	-0.022	0.00		0.119	
LDNO EHV: HV Generation Intermittent	10395	0	-0.197			22.98		0.135	
LDNO EHV: HV Generation Non-Intermittent	10396	0	-1.670	-0.135	-0.011	22.98		0.135	
LDNO 132kV/EHV: Domestic Unrestricted	10397	1	0.711			1.24			
LDNO 132kV/EHV: Domestic Two Rate	10398	2	0.844	0.022		1.24			
LDNO 132kV/EHV: Domestic Off Peak (related MPAN)	10399	2	0.063						
LDNO 132kV/EHV: Small Non Domestic Unrestricted	10400	3	0.663			1.91			
LDNO 132kV/EHV: Small Non Domestic Two Rate	10401	4	0.760	0.021		1.91			
LDNO 132kV/EHV: Small Non Domestic Off Peak (related MPAN)	10402	4	0.118						
LDNO 132kV/EHV: LV Medium Non-Domestic	10403	5-8	0.557	0.015		1.46			
LDNO 132kV/EHV: LV Sub Medium Non-Domestic	10404	5-8	0.760	0.018		1.64			
LDNO 132kV/EHV: HV Medium Non-Domestic	10405	5-8	0.586	0.004		32.49			
LDNO 132kV/EHV: LV Network Domestic	10406	0	4.060	0.250	0.019	1.24			
LDNO 132kV/EHV: LV Network Non-Domestic Non-CT	10407	0	4.084	0.251	0.019	1.91			
LDNO 132kV/EHV: LV HH Metered	10408	0	3.540	0.213	0.013	2.46	1.10	0.128	1.10
LDNO 132kV/EHV: LV Sub HH Metered	10409	0	4.737	0.275	0.009	2.87	2.16	0.163	2.16
LDNO 132kV/EHV: HV HH Metered	10410	0	3.940	0.216	0.004	32.49	2.60	0.123	2.60
LDNO 132kV/EHV: NHH UMS category A	10411	8	0.629						

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	Reactive power charge p/kVARh	Excess capacity charge p/kVA/day
LDNO 132kV/EHV: NHH UMS category B	10412	1	0.810						
LDNO 132kV/EHV: NHH UMS category C	10413	1	1.315						
LDNO 132kV/EHV: NHH UMS category D	10414	1	0.444						
LDNO 132kV/EHV: LV UMS (Pseudo HH Metered)	10415	0	12.356	0.397	0.198				
LDNO 132kV/EHV: LV Generation NHH or Aggregate HH	10416	8 & 0	-0.273			0.00			
LDNO 132kV/EHV: LV Sub Generation NHH	10417	8	-0.266			0.00			
LDNO 132kV/EHV: LV Generation Intermittent	10418	0	-0.273			0.00		0.117	
LDNO 132kV/EHV: LV Generation Non-Intermittent	10419	0	-2.303	-0.176	-0.022	0.00		0.117	
LDNO 132kV/EHV: LV Sub Generation Intermittent	10420	0	-0.266			0.00		0.114	
LDNO 132kV/EHV: LV Sub Generation Non-Intermittent	10421	0	-2.241	-0.172	-0.021	0.00		0.114	
LDNO 132kV/EHV: HV Generation Intermittent	10422	0	-0.189			22.02		0.129	
LDNO 132kV/EHV: HV Generation Non-Intermittent	10423	0	-1.601	-0.129	-0.010	22.02		0.129	
LDNO 132kV: Domestic Unrestricted	10424	1	0.465			0.81			
LDNO 132kV: Domestic Two Rate	10425	2	0.553	0.014		0.81			
LDNO 132kV: Domestic Off Peak (related MPAN)	10426	2	0.041						
LDNO 132kV: Small Non Domestic Unrestricted	10427	3	0.434			1.25			
LDNO 132kV: Small Non Domestic Two Rate	10428	4	0.497	0.014		1.25			
LDNO 132kV: Small Non Domestic Off Peak (related MPAN)	10429	4	0.077						
LDNO 132kV: LV Medium Non-Domestic	10430	5-8	0.364	0.010		0.96			
LDNO 132kV: LV Sub Medium Non-Domestic	10431	5-8	0.497	0.012		1.07			
LDNO 132kV: HV Medium Non-Domestic	10432	5-8	0.384	0.003		21.26			
LDNO 132kV: LV Network Domestic	10433	0	2.658	0.163	0.012	0.81			
LDNO 132kV: LV Network Non-Domestic Non-CT	10434	0	2.673	0.164	0.012	1.25			
LDNO 132kV: LV HH Metered	10435	0	2.317	0.140	0.009	1.61	0.72	0.084	0.72

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	Reactive power charge p/kVAh	Excess capacity charge p/kVA/day
LDNO 132kV: LV Sub HH Metered	10436	0	3.100	0.180	0.006	1.88	1.42	0.106	1.42
LDNO 132kV: HV HH Metered	10437	0	2.579	0.141	0.003	21.26	1.70	0.081	1.70
LDNO 132kV: NHH UMS category A	10438	8	0.412						
LDNO 132kV: NHH UMS category B	10439	1	0.530						
LDNO 132kV: NHH UMS category C	10440	1	0.860						
LDNO 132kV: NHH UMS category D	10441	1	0.291						
LDNO 132kV: LV UMS (Pseudo HH Metered)	10442	0	8.087	0.260	0.130				
LDNO 132kV: LV Generation NHH or Aggregate HH	10443	8 & 0	-0.179			0.00			
LDNO 132kV: LV Sub Generation NHH	10444	8	-0.174			0.00			
LDNO 132kV: LV Generation Intermittent	10445	0	-0.179			0.00		0.076	
LDNO 132kV: LV Generation Non-Intermittent	10446	0	-1.507	-0.115	-0.015	0.00		0.076	
LDNO 132kV: LV Sub Generation Intermittent	10447	0	-0.174			0.00		0.075	
LDNO 132kV: LV Sub Generation Non-Intermittent	10448	0	-1.467	-0.113	-0.014	0.00		0.075	
LDNO 132kV: HV Generation Intermittent	10449	0	-0.124			14.41		0.085	
LDNO 132kV: HV Generation Non-Intermittent	10450	0	-1.048	-0.085	-0.007	14.41		0.085	
LDNO 0000: Domestic Unrestricted	10451	1	0.097			0.17			
LDNO 0000: Domestic Two Rate	10452	2	0.115	0.003		0.17			
LDNO 0000: Domestic Off Peak (related MPAN)	10453	2	0.009						
LDNO 0000: Small Non Domestic Unrestricted	10454	3	0.090			0.26			
LDNO 0000: Small Non Domestic Two Rate	10455	4	0.104	0.003		0.26			
LDNO 0000: Small Non Domestic Off Peak (related MPAN)	10456	4	0.016						
LDNO 0000: LV Medium Non-Domestic	10457	5-8	0.076	0.002		0.20			
LDNO 0000: LV Sub Medium Non-Domestic	10458	5-8	0.104	0.002		0.22			
LDNO 0000: HV Medium Non-Domestic	10459	5-8	0.080	0.001		4.43			

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	Reactive power charge p/kVAh	Excess capacity charge p/kVA/day
LDNO 0000: LV Network Domestic	10460	0	0.553	0.034	0.003	0.17			
LDNO 0000: LV Network Non-Domestic Non-CT	10461	0	0.557	0.034	0.003	0.26			
LDNO 0000: LV HH Metered	10462	0	0.482	0.029	0.002	0.34	0.15	0.017	0.15
LDNO 0000: LV Sub HH Metered	10463	0	0.645	0.037	0.001	0.39	0.29	0.022	0.29
LDNO 0000: HV HH Metered	10464	0	0.537	0.029	0.001	4.43	0.35	0.017	0.35
LDNO 0000: NHH UMS category A	10465	8	0.086						
LDNO 0000: NHH UMS category B	10466	1	0.110						
LDNO 0000: NHH UMS category C	10467	1	0.179						
LDNO 0000: NHH UMS category D	10468	1	0.061						
LDNO 0000: LV UMS (Pseudo HH Metered)	10469	0	1.684	0.054	0.027				
LDNO 0000: LV Generation NHH or Aggregate HH	10470	8 & 0	-0.037			0.00			
LDNO 0000: LV Sub Generation NHH	10471	8	-0.036			0.00			
LDNO 0000: LV Generation Intermittent	10472	0	-0.037			0.00		0.016	
LDNO 0000: LV Generation Non-Intermittent	10473	0	-0.314	-0.024	-0.003	0.00		0.016	
LDNO 0000: LV Sub Generation Intermittent	10474	0	-0.036			0.00		0.016	
LDNO 0000: LV Sub Generation Non-Intermittent	10475	0	-0.305	-0.023	-0.003	0.00		0.016	
LDNO 0000: HV Generation Intermittent	10476	0	-0.026			3.00		0.018	
LDNO 0000: HV Generation Non-Intermittent	10477	0	-0.218	-0.018	-0.001	3.00		0.018	

Annex 5 – Schedule of Line Loss Factors

Western Power Distribution (West Midlands) plc - Illustrative LLFs for year beginning 1 April 2017				
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	1.087	1.081	1.067	1.072	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 20, 21, 22, 24, 25, 26, 27, 30, 34, 35, 36, 326, 571, 573, 625, 626, 632, 633
Low Voltage Substation	1.070	1.066	1.056	1.060	19, 570, 572, 574
High Voltage Network	1.051	1.047	1.032	1.039	23, 322, 323, 365, 367, 575, 577
High Voltage Substation	1.023	1.022	1.018	1.020	
EHV connected	1.016	1.015	1.012	1.013	
132/EHV connected	1.007	1.007	1.007	1.007	
132/HV connected	1.009	1.009	1.008	1.008	
132kV connected	1.002	1.002	1.002	1.002	

EHV site specific LLFs					
Demand					
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Troughton Farm PV (Import)	1.002	1.002	1.002	1.002	636
Tyseley Waste Import	1.002	1.002	1.002	1.002	702
Takao Europe	1.018	1.018	1.012	1.013	704
Four Ashes Incinerator Import	1.016	1.015	1.012	1.013	705
Witches Farm Solar Import	1.016	1.015	1.012	1.013	706
Uni of Birmingham Import	1.002	1.002	1.002	1.002	707
South Staffs Water Import	1.061	1.062	1.063	1.063	709
Wolverhampton WS Import	1.016	1.015	1.012	1.013	710
Stoke CHP Import	1.007	1.008	1.008	1.008	711
WBB Minerals Import	1.016	1.015	1.012	1.013	712
Cauldon Cement Import	1.024	1.026	1.030	1.029	713
Abson Gas Compressor Import	1.016	1.015	1.032	1.013	714
Ervin Amasteel Import	1.002	1.002	1.002	1.002	715
Hanford Waste Services Import	1.007	1.007	1.012	1.013	716
NR Kidsgrove Import	1.010	1.010	1.009	1.010	717
NR Stafford Import	1.027	1.027	1.026	1.027	718
NR Nechells/Washwood Heath Imp	1.000	1.000	1.000	1.000	719
NR Winson Green Import	1.004	1.004	1.003	1.003	720
NR Smethwick Import	1.000	1.000	1.000	1.000	721
NR Willenhall Import	1.001	1.001	1.001	1.001	722
Northwick Import	1.023	1.022	1.018	1.020	723
Inco Alloys	1.023	1.022	1.018	1.020	724
Swancote Energy Import	1.016	1.015	1.012	1.013	725
Springhill Solar Park Import	1.023	1.022	1.018	1.020	726
NG Gas Wormington	1.023	1.022	1.018	1.020	727
Greenfrog STOR Import	1.023	1.022	1.018	1.020	728
Union Road/EMR Oldbury Import	1.000	1.000	1.000	1.000	729
Quatt Import	1.023	1.022	1.018	1.020	730
Knypersley Import	1.023	1.022	1.018	1.020	740
Simplex Import	1.023	1.022	1.018	1.020	742
Northwick STOR sub supply	1.023	1.022	1.018	1.020	743
Star Aluminium Import	1.023	1.022	1.018	1.020	744
Goodyear	1.006	1.006	1.006	1.006	747
Battlefield Generation Import	1.016	1.015	1.012	1.013	770
Says Farm PV Import	1.016	1.015	1.012	1.013	771
Hayford Solar Farm Import	1.016	1.015	1.012	1.013	772
Rotherdale Farm PV Import	1.016	1.015	1.012	1.013	773
Lower Newton Solar Farm (Imp)	1.016	1.015	1.012	1.013	774
Wrockwardine Solar Farm (Imp)	1.016	1.015	1.012	1.013	775
Conover Solar Farm (Import)	1.016	1.015	1.012	1.013	776
Tower Hill Farm PV (Import)	1.016	1.015	1.012	1.013	777
Hill House Farm Solar (Import)	1.016	1.015	1.012	1.013	778
Pitchford Farm Solar (Import)	1.016	1.015	1.012	1.013	779
Sundorne Solar Park (Import)	1.016	1.015	1.012	1.013	780
Hartlebury EFW (Import)	1.016	1.015	1.012	1.013	781
Upper Huntingford PV (Import)	1.016	1.015	1.012	1.013	782
Ring O Bells Solar (Import)	1.016	1.015	1.012	1.013	783
Hall Farm PV Awre (Import)	1.016	1.015	1.012	1.013	784
Northwick 5 Mile Dr PV Import	1.023	1.022	1.018	1.020	785
Wickhamford PV (Import)	1.016	1.015	1.012	1.013	794
Yorkley Wood Farm PV (Import)	1.016	1.015	1.012	1.013	795
Awbridge Farm Diesel Gen (Imp)	1.016	1.015	1.012	1.013	796
Bristol Rd Glos STOR (Import)	1.016	1.015	1.012	1.013	797

Annex 5 – Schedule of Line Loss Factors

Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Actrees Farm PV (Import)	1.016	1.015	1.012	1.013	798
Sheriffhales Farm PV (Import)	1.016	1.015	1.012	1.013	799
Upper Wick Farm PV (Import)	1.016	1.015	1.012	1.013	801
Havannah Mills	1.051	1.047	1.032	1.039	0039
Cellarhead - Meaford/Barlaston	1.009	1.009	1.009	1.009	2226
Stanner	1.051	1.047	1.032	1.039	2818
Ironbridge Power Station	1.000	1.000	1.000	1.000	4003
Rugeley Power Station	1.000	1.000	1.000	1.000	4018
Fort Dunlop 132kV Export	1.001	1.001	1.002	1.001	7070
Fort Dunlop LV Import	1.087	1.081	1.067	1.072	7177
Cambridge Arms	1.002	1.002	1.002	1.002	7294

EHV sites specific LLFs
Generation

Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Tyseley Waste Export	1.001	1.001	1.001	1.001	703
Uni of Birmingham Export	1.002	1.002	1.002	1.002	708
Quatt Export	1.023	1.022	1.018	1.020	731
Wolverhampton WS Export	0.999	0.999	0.999	0.999	732
Stoke CHP Export	1.006	1.007	1.012	1.007	733
Hanford Waste Services Export	1.007	1.007	1.007	1.007	734
NR Kidsgrove Export	1.009	1.009	1.010	1.009	735
NR Stafford Export	1.026	1.026	1.012	1.026	736
NR Winson Green Export	1.016	1.015	1.012	1.002	737
NR Smethwick Export	1.016	1.015	1.012	1.000	738
NR Willenhall Export	1.000	1.000	1.012	1.000	739
NR Nechells/Washwood Heath Exp	1.000	1.000	1.000	1.000	741
Redditch Gas Turbine Export	1.023	1.022	1.018	1.020	745
Knypersley Export	1.023	1.022	1.018	1.020	746
Northwick Export	1.023	1.022	1.018	1.020	748
Swancote Energy Export	1.053	1.053	1.053	1.053	749
Four Ashes Incinerator Export	0.992	0.993	0.990	0.990	750
Witches Farm Solar Export	1.016	1.073	1.012	1.074	751
Springhill Solar Park Export	1.023	1.022	1.018	1.020	752
Greenfrog STOR Export	1.023	1.022	1.018	1.020	753
Union Road/EMR Oldbury Export	1.016	1.015	1.012	1.013	754
Battlefield Generation Export	1.016	1.015	1.012	1.013	755
Says Farms PV Export	1.016	1.023	1.012	1.022	756
Hayford Solar Farm Export	1.016	1.015	1.012	1.013	757
Rotherdale Farm PV Export	1.016	1.027	1.012	1.027	758
Lower Newton Solar Farm (Exp)	1.016	1.015	1.012	1.013	759
Wrockwardine Solar Farm (Exp)	1.016	1.015	1.012	1.013	760
Condover Solar Farm (Export)	1.016	1.015	1.012	1.013	761
Tower Hill Farm PV (Export)	1.016	1.015	1.012	1.013	762
Hill House Farm Solar (Export)	1.016	1.015	1.012	1.013	763
Pitchford Farm Solar (Export)	1.016	1.015	1.012	1.013	764
Sundorne Solar Park (Export)	1.016	1.015	1.012	1.013	765
Hartlebury EFW (Export)	1.016	1.015	1.012	1.013	766
Upper Huntingford PV (Export)	1.016	1.015	1.012	1.013	767
Ring O Bells Solar (Export)	1.016	1.015	1.012	1.013	768
Hall Farm PV Awre (Export)	1.016	1.015	1.012	1.013	769
Northwick 5 Mile Dr PV Export	1.023	1.022	1.018	1.020	805
Wickhamford PV (Export)	1.016	1.015	1.012	1.013	815
Yorkley Wood Farm PV (Export)	1.016	1.015	1.012	1.013	816
Awbridge Farm Diesel Gen (Exp)	1.016	1.015	1.012	1.013	817
Bristol Rd Glos STOR (Export)	1.016	1.015	1.012	1.013	818
Actrees Farm PV (Export)	1.016	1.015	1.012	1.013	819
Sheriffhales Farm PV (Export)	1.016	1.015	1.012	1.013	820
Upper Wick Farm PV (Export)	1.016	1.015	1.012	1.013	821
Troughton Farm PV (Export)	1.002	1.002	1.002	1.002	933
Havannah Mills	1.051	1.047	1.032	1.039	0039
Cellarhead - Meaford/Barlaston	1.009	1.009	1.009	1.009	2226
Stanner	1.051	1.047	1.032	1.039	2818
Ironbridge Power Station	1.000	1.000	1.000	1.000	4003
Rugeley Power Station	1.000	1.000	1.000	1.000	4018
Fort Dunlop 132kV Export	1.001	1.001	1.002	1.001	7070
Cambridge Arms	1.002	1.002	1.002	1.002	7294

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 2017 - Final new designated EHV charges														
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 Excess capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export Excess 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 2017 - Final new designated EHV line loss factors																
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	Import LLF period 5	Export LLF period 1	Export LLF period 2	Export LLF period 3	Export LLF period 4	Export LLF period 5
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.