

SP Distribution

Use of System Charging Statement

NOTICE OF CHARGES

Effective from 1st April 2020

Version 0.1

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

Version Control

Version	Date	Description of version and any changes made

A change-marked version of this statement can be provided upon request.

1 ATLANTIC QUAY, ROBERTSON STREET, GLASGOW, G2 8SP

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1. Introduction

- 1.1. This statement tells you about our charges and the reasons behind them. It has been prepared consistent with Standard Licence Condition 14 of our Electricity Distribution Licence. The main purpose of this statement is to provide our schedule of charges¹ for the use of our Distribution System and to provide the schedule of Line Loss 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.
- Within this statement we use terms such as 'Users' and 'Customers' as well as 1.2. other terms which are identified with initial capitalisation. These terms are defined in the glossary.
- 1.3. The charges in this statement are calculated using the following methodologies as per the Distribution Connection and Use of System Agreement (DCUSA)³:
 - Common Distribution Charging Methodology (CDCM); for Low Voltage (LV) and High Voltage (HV) Designated Properties as per DCUSA Schedule 16; and
 - Extra High Voltage (EHV) Distribution Charging Methodology (EDCM); for Designated EHV Properties as per DCUSA Schedule 17.
- 1.4. Separate charges are calculated depending on the characteristics of the connection and whether the use of the Distribution System is for demand or generation purposes. Where a generation connection is seen to support the Distribution System the charges will be negative and the Supplier will receive credits for exported energy.
- 1.5. The application of charges to premises can usually be referenced using the Line Loss Factor Class (LLFC) contained in the charge tables. Further information on how to identify and calculate the charge that will apply for your premises is provided in the guidance notes in Appendix 2.

¹ Charges can be positive or negative.

² Known as adjustment factors in the Distribution Licence and commonly referred to as Loss Adjustment Factors. The schedule of Line Loss Factors will be provided in a revised statement shortly after the Line Loss Factors for the relevant year have been successfully audited by Elexon.

The Distribution and Connection Use of System Agreement (DCUSA) available from

http://www.dcusa.co.uk/SitePages/Documents/DCUSA-Document.aspx

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

viti 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

https://www.scottishpower.com/pages/connections use of system and met

ering services.aspx

Validity period

1.8. This charging statement is valid for services provided from the effective date

stated on the front of the statement and remains valid until updated by a revised

version or superseded by a statement with a later effective date.

1.9. When using this charging statement, care should be taken to ensure that the

relevant statement or statements covering the period that is of interest are

used.

1.10. Notice of any revision to the statement will be provided to Users of our

Distribution System. The latest statements can be downloaded from

https://www.scottishpower.com/pages/connections use of system and meteri

ng services.aspx

Contact details

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

address:

SP Energy Networks, Network Planning & Regulation

Prenton Way

Birkenhead

Merseyside

CH43 3ET

Email: Commercial@spenergynetworks.co.uk

Telephone: 0141 614 1605

1.12. All enquiries regarding connection agreements and changes to maximum

capacities should be addressed to:

SP Energy Networks, Network Planning and Regulation

55 Fullarton Drive

Cambuslang Investment Park

Glasgow

G32 8FA

Email: <u>CAPACITYQ@spenergynetworks.co.uk</u>

1.13. All enquiries regarding connection agreements and increases to maximum capacities should be addressed to:

Scottish Power

SP Energy Networks Networks

Network Connections

320 St Vincent Street

Glasgow

G2 5AD

Tel: 0845 270 0785

Email: gettingconnected@scottishpower.com

1.14. For all other queries please contact our general enquiries telephone number: 0330 10 10 4444

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.

The supercustomer and site-specific billing approaches

- 2.2. We utilise two billing approaches depending on the type of metering data received:
 - (a) The 'Supercustomer' approach for Customers for whom we receive aggregated consumption data through Settlement; and
 - (b) The 'Site-specific' approach for Customers for whom we receive sitespecific consumption data through Settlement.
- 2.3. We receive aggregated consumption data through Settlement for:
 - (a) Domestic and non-domestic Customers for whom Non-Half Hourly (NHH) metering data is used in Settlement (i.e. Customers with MPANs which are registered to Measurement Class A);
 - (b) Customers which are unmetered and are not settled as pseudo Half Hourly(HH) metered (i.e. Customers with MPANs which are registered to Measurement Class B);
 - (c) Domestic Customers for whom HH metering data is used in Settlement(i.e. Customers with MPANs which are registered to Measurement Class F); and
 - (d) Non-domestic Customers for whom HH metering data is used in Settlement and which have whole current (WC) metering (i.e. Customers with MPANs which are registered to Measurement Class G).
- 2.4. We receive site specific consumption data through Settlement for:
 - (a) Non-domestic Customers for whom HH metering data is used in Settlement and which have current transformer (CT) metering (i.e. Customers with MPANs which are registered to measurement class C or E); and
 - (b) Customers which are unmetered and settled as pseudo HH metered (i.e. Customers with MPANs which are registered to measurement class D).

Supercustomer billing and payment

- 2.5. The Supercustomer approach makes use of aggregated data obtained from Suppliers using the 'Aggregated Distribution Use of System (DUoS) Report' data flow.
- 2.6. 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.
- 2.7. The charges are applied on the basis of the LLFC assigned to the MPAN, and the units consumed within the time periods specified in this statement. These time periods are not the same as those indicated by the Time Pattern Regime (TPR) assigned to the Standard Settlement Configuration (SSC). All LLFCs are assigned at our sole discretion, based on the tariff application rules set out in the appropriate charging methodology or elsewhere in this statement. Please refer to the section 'Incorrectly allocated charges' if you believe the allocated LLFC or tariff is incorrect.

Supercustomer charges

- 2.8. Supercustomer charges include the following components:
 - a fixed charge, pence/MPAN/day, there will only be one fixed charge applied to each MPAN; and
 - unit charges, pence/kilowatt-hour (kWh); more than one kWh charge may apply depending on the type of tariff for which the MPAN is registered.
- 2.9. Users who wish to supply electricity to Customers for whom we receive aggregated data through Settlement (see paragraph 2.3) will be allocated the relevant charge structure set out in Annex 1.
- 2.10. Identification of the appropriate charge can be made by cross-reference to the LLFC.
- 2.11. Valid Settlement Profile Class (PC)/Standard Settlement Configuration (SSC)/Meter Timeswitch Code (MTC) combinations for LLFCs where the Metering System is Measurement Class A or B are detailed in Market Domain Data (MDD).

- 2.12. Where an MPAN has an invalid Settlement combination, the 'Domestic Unrestricted' fixed and unit charges will be applied as default until the invalid combination is corrected. Where there are multiple SSC/TPR combinations, the default 'Domestic Unrestricted' fixed and unit charges will be applied for each invalid SSC/TPR combination.
- 2.13. The time periods for unit charges where the Metering System is Measurement Class A or B are as specified by the SSC. To determine the appropriate charge rate for each SSC/TPR a lookup table is provided in the spreadsheet that accompanies this statement⁴.
- 2.14. The time periods for unit charges where the Metering System is Measurement Class F or G are set out in the table 'Time Bands for Half Hourly Metered Properties' in Annex 1.
- 2.15. The 'Domestic Off-Peak' and 'Small Non-Domestic Off-Peak' charges are supplementary to either an unrestricted or a two-rate charge.

Site-specific billing and payment

- 2.16. The site-specific billing and payment approach makes use of HH metering data at premises level received through Settlement.
- 2.17. 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.
- 2.18. The charges are applied on the basis of the LLFCs assigned to the MPAN (or the (MSID) for Central Volume Allocation (CVA) sites), and the units consumed within the time periods specified in this statement.
- 2.19. All LLFCs are assigned at our sole discretion, based on the tariff application rules set out in the appropriate charging methodology or elsewhere in this statement. Please refer to the section 'Incorrectly allocated charges' if you believe the allocated LLFC or tariff is incorrect. Where an incorrectly applied LLFC is identified, we may at our sole discretion apply the correct LLFC and/or charges.

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⁴ SPD - Schedule of charges and other tables - 2020_21 V.0.1

Site-specific billed charges

- 2.20. Site-specific billed charges may include the following components:
 - a fixed charge, pence/MPAN/day or pence/MSID/day;
 - a capacity charge, pence/kilovolt-ampere (kVA)/day, for Maximum Import Capacity (MIC) and/or Maximum Export Capacity (MEC);
 - an excess capacity charge, pence/kVA/day, if a site exceeds its MIC and/or MEC;
 - unit charges, pence/kWh, more than one unit charge may be applied; and
 - an excess reactive power charge, pence/kilovolt-ampere reactive hour (kVArh), for each unit in excess of the reactive charge threshold.
- 2.21. Users who wish to supply electricity to Customers for whom we receive site-specific data through Settlement (see paragraph 2.4) will be allocated the relevant charge structure dependent upon the voltage and location of the Metering Point.
- 2.22. Fixed charges are generally levied on a pence per MPAN/MSID per day basis. Where two or more HH MPANs/MSIDs are located at the same point of connection (as identified in the Connection Agreement), with the same LLFC, and registered to the same Supplier, only one daily fixed charge will be applied.
- 2.23. LV and HV Designated Properties will be charged in accordance with the CDCM and allocated the relevant charge structure set out in Annex 1.
- 2.24. For LV and HV Designated Properties that utilise a combination of Intermittent and Non-Intermittent generation technologies metered through a single MPAN/MSID, we will allocate the tariff based on the dominant technology. The dominant technology will have a higher combined installed capacity as evidenced in ratings contained in the Connection Agreement.
- 2.25. Designated EHV Properties will be charged in accordance with the EDCM and allocated the relevant charge structure set out in Annex 2.
- 2.26. Where LV and HV Designated Properties or Designated EHV Properties have more than one point of connection (as identified in the Connection Agreement) then separate charges will be applied to each point of connection.

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

Time periods

- 2.28. 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.
- 2.29. 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.
- 2.30. The time periods for the application of unit charges to Unmetered Supply Exit Points that are pseudo HH metered are detailed in Annex 1. We have not issued a notice to change the time bands.

Application of capacity charges

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

Chargeable capacity

- 2.32. The chargeable capacity is, for each billing period, the MIC/MEC, as detailed below.
- 2.33. 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.
- 2.34. Reductions to the MIC/MEC may only be permitted once in a 12 month period. Where the MIC/MEC is reduced the new lower level will be agreed with reference to the level of the Customer's maximum import and/or export demand respectively. 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.
- 2.35. In the absence of an agreement, the chargeable capacity, save for error or omission, will be based on the last MIC/MEC that we have previously agreed

for the relevant premises' connection. A Customer can seek to agree or vary the MIC/MEC by contacting us using the contact details in section 1.12.

Exceeded capacity

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

Demand exceeded capacity

Demandexceeded 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)

- 2.37. Only reactive import and reactive export values occurring at times of active import are used in the calculation. For sites which are importing and exporting in the same half hour, i.e. where active import is not equal to zero and active export is not equal to zero, use zero for reactive import and reactive export when calculating capacity taken.
- 2.38. This calculation is completed for every half hour and the maximum value from the billing period is applied.

Generation exceeded capacity

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)

- 2.39. Only reactive import and reactive export values occurring at times of active export are used in the calculation. For sites which are importing and exporting in the same half hour, i.e. where active import is not equal to zero and active export is not equal to zero, use zero for reactive import and reactive export when calculating capacity taken.
- 2.40. 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

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

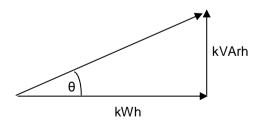
Minimum capacity levels

2.42. There is no minimum capacity threshold.

Application of charges for excess reactive power

- 2.43. When an individual HH metered MPAN's reactive power (measured in kVArh) at LV and HV Designated Properties exceeds 33% of its total active power (measured in kWh) in any given half hour, excess reactive power charges will apply. This threshold is equivalent to an average power factor of 0.95 during that half hour. Any reactive units in excess of the 33% threshold are charged at the rate appropriate to the particular charge.
- 2.44. Power Factor is calculated as follows:

 $Cos \theta = Power Factor$



2.45. The chargeable reactive power is calculated as follows:

Demand chargeable reactive power

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

Where:

AI = Active import (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

- 2.46. Only reactive import and reactive export values occurring at times of active import are used in the calculation. For sites which are importing and exporting in the same half hour i.e. where active import is not equal to zero and active export is not equal to zero, no calculation for that half hour is made and the result for that half hour would be zero.
- 2.47. The square root calculation will be to two decimal places.
- 2.48. This calculation is completed for every half hour and the values summated over the billing period.

Generation chargeable reactive power

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

Where:

AE = Active export (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

- 2.49. Only reactive import and reactive export values occurring at times of active export are used in the calculation. For sites which are importing and exporting in the same half hour i.e. where active import is not equal to zero and active export is not equal to zero, no calculation for that half hour is made and the result for that half hour would be zero.
- 2.50. The square root calculation will be to two decimal places.
- 2.51. This calculation is completed for every half hour and the values summated over the billing period.

Incorrectly allocated charges

- 2.52. It is our responsibility to apply the correct charges to each MPAN/MSID. The allocation of charges is based on the voltage of connection, import/export details including multiple MPANs, metering information and, for some tariffs, the metering location. Where an MPAN/MSID is used for export purposes in relation to an LV or HV Designated Property, the type of generation (Intermittent or Non-Intermittent) also determines the allocation of charges.
- 2.53. We are responsible for deciding the voltage of connection. Generally, this is determined by where the metering is located and where responsibility for the electrical equipment transfers from us to the connected Customer.
- 2.54. The Supplier determines and provides us with the metering information and data. This enables us to allocate charges where there is more than one charge per voltage level. The metering information and data is likely to change over time if, for example, a Supplier changes from a two rate meter to a single rate meter. When we are notified this has happened we will change the allocation of charges accordingly.
- 2.55. If it has been identified that a charge may have been incorrectly allocated due to the metering information and/or data then a request for investigation should be made to the Supplier.
- 2.56. Where it has been identified that a charge may have been incorrectly allocated due to the voltage of connection, import/export details or metering location then a request to investigate the applicable charges should be made to us. Requests from persons other than the Customer or the current Supplier must be accompanied by a Letter of Authority from the Customer; the current Supplier must also acknowledge that they are aware a request has been made. Any request must be supported by an explanation of why it is believed that the current charge should be changed, along with supporting information including, where appropriate, photographs of metering positions or system diagrams. Any request to change the current charge that also includes a request for backdating must include justification as to why it is considered appropriate to backdate the change.
- 2.57. An administration charge (covering our reasonable costs) may be made if a technical assessment or site visit is required, but we will not apply any charge where we agree to the change request.

- 2.58. Where we agree that the current LLFC/charge should be changed, we will then allocate the appropriate set of charges for the connection. Any adjustment will be applied from the date of the request, back to either 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 from the date of request, and the Prescription and Limitation (Scotland) Act 1973, which covers a five year period from the date of request; whichever is the shorter.
- 2.59. Any credit or additional charge will be issued to the relevant Supplier(s) effective during the period of the change.
- 2.60. Should we reject the request (as per paragraph 2.56) a justification will be provided to the requesting party. We shall not unreasonably withhold or delay any decision on a request to change the charges applied and would expect to confirm our position on the request within three months of the date of request.

Generation charges for pre-2005 designated EHV properties

- 2.61. Designated EHV Properties that were connected to the Distribution System under a pre-2005 connection charging policy are eligible for exemption from Use of System (UoS) charges for generation unless one of the following criteria has been met:
 - 25 years have passed since their first energisation/connection date (i.e. Designated EHV Properties with Connection Agreements dated prior to 1st April 2005, and for which 25 years has passed since their first energisation/connection date will receive UoS 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.

2.62. Furthermore, if an exempt Customer makes an alteration to its export requirement then the Customer may be liable to be charged for the additional capacity required for 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

- 2.63. Where HH metering data is required for UoS charging and this is not provided in accordance with the BSC or DCUSA, such metering data shall be provided to us by the User of the system in respect of each calendar month within five working days of the end of that calendar month.
- 2.64. The metering data shall identify the amount of energy conveyed across the Metering System in each half hour of each day and shall separately identify active and reactive import and export. Metering data provided to us shall be consistent with that received through the metering equipment installed.
- 2.65. 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 D00365 (as agreed with us). The data shall be emailed to UoS ADMINISTRATORS@spenergynetworks.co.uk
- 2.66. 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. In order to estimate missing reactive data, a power factor of 0.95 lag will be applied to the active consumption in any half hour.

Out of area use of system charges

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

Licensed distribution network operator charges

- 2.68. Licensed Distribution Network Operator (LDNO) charges are applied to LDNOs who operate Embedded Networks within our Distribution Services Area.
- 2.69. 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 our Distribution System. The relevant charge structures are set out in Annex 4.
- 2.70. Where a NHH metered MPAN has an invalid Settlement combination, the 'LDNO LV: Domestic Unrestricted' fixed and unit charges will be applied as

⁵ MRA Data Transfer Catalogue available from https://dtc.mrasco.com/

- default until the invalid combination is corrected. Where there are multiple SSC/TPR combinations, the default 'LDNO LV: Domestic Unrestricted' fixed and unit charges will be applied for each invalid SSC/TPR combination.
- 2.71. 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.
- 2.72. For Nested Networks the relevant charging principles set out in DCUSA Schedule 21 will apply.

Licence exempt distribution networks

- 2.73. The Electricity and Gas (Internal Market) Regulations 2011⁶ 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.
- 2.74. 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.
- 2.75. Licence exempt distribution networks owners can provide third party access using either full settlement metering or the difference metering approach.

Full settlement metering

- 2.76. This is where a licence exempt distribution network is set up so that each embedded installation has an MPAN and Metering System and therefore all Customers purchase electricity from their chosen Supplier. In this case there are no Settlement Metering Systems at the boundary between the licensed Distribution System and the licence exempt distribution network.
- 2.77. In this approach our UoS charges will be applied to each MPAN.

Difference metering

2.78. This is where one or more, but not all, Customers on a licence exempt distribution network choose their own Supplier for electricity supply to their premises. Under this approach, the Customers requiring third party access on

⁶ The Electricity and Gas (Internal Market) Regulations 2011 available from http://www.legislation.gov.uk/uksi/2011/2704/contents/made

the licence exempt distribution network will have their own MPAN and must have a HH Metering System.

Gross settlement

- 2.79. Where one of our MPANs prefix 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.
- 2.80. 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 or D0275 MRA data flow;
 - the text file shall be emailed to uosadminsrators@spenergynetworks.co.uk;
 - the title of the email should also contain the phrase "gross data for difference metered private network" and contain the metering reference specified by us in place of the Settlement MPAN; and
 - the text filename shall be formed of the metering reference specified by us followed by a hyphen and followed by a timestamp in the format YYYYMMDDHHMMSS and followed by ".txt".
- 2.81. For the avoidance of doubt, the reduced difference metered measurement data for the boundary connection that is to enter Settlement should continue to be sent using the Settlement MPAN.

3. Schedule of charges for use of the distribution system

- 3.1. Tables listing the charges for use of our Distribution System are published in annexes to this document.
- 3.2. These charges are also listed in a spreadsheet which is published with this statement and can be downloaded from https://www.scottishpower.com/pages/connections use of system and metering services.aspx
- 3.3. Annex 1 contains the charges applied to LV and HV Designated Properties.
- 3.4. Annex 2 contains the charges applied to our Designated EHV Properties and charges applied to LDNOs for Designated EHV Properties connected to their Distribution Systems.
- 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 to their Distribution Systems.
- 3.7. Annex 4 contains the charges applied to LV and HV Designated Properties that are embedded in an Exempt Distribution Network where Net Settlement of metered data is applied.

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 lost⁷ as it is distributed through the network. This adjustment does not affect distribution charges but is used in energy settlement to take metered consumption to a notional Grid Supply Point so that Suppliers' purchases take account of the energy lost on the Distribution System.
- 4.2. We are responsible for calculating the Line Loss Factors (LLFs) and providing these to Elexon. Elexon is the company that manages the BSC.
- 4.3. LLFs are used to adjust the Metering System volumes to take account of losses on the Distribution System.

Calculation of line loss factors

- 4.4. LLFs are calculated in accordance with BSCP128 which sets out the procedure and principles with which our LLF methodology must comply. It also defines the procedure and timetable by which LLFs are reviewed and submitted.
- 4.5. LLFs are calculated for a set number of time periods during the year using either a generic or site-specific method. The generic method is used for sites connected at LV or HV and the site-specific method is used for sites connected at EHV or where a request for site-specific LLFs has been agreed. Generic LLFs will be applied as a default to all new EHV sites until sufficient data is available for a site-specific calculation.
- 4.6. The definition of EHV used for LLF purposes differs from the definition used for defining Designated EHV Properties in the EDCM. The definition used for LLF purposes can be found in our LLF methodology.
- 4.7. The Elexon website⁸ contains more information on LLFs.

⁷ 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.

⁸ The following page has links to BSCP128 and to our LLF methodology: http://www.elexon.co.uk/reference/technical-operations/losses/

Publication of line loss factors

- 4.8. The LLFs used in Settlement are published on the Elexon Portal⁹. The website contains the LLFs in standard industry data formats and in a summary form. A user guide with details on registering and using the portal is also available.
- 4.9. BSCP128 sets out the timetable by which LLFs are submitted and audited. The submission and audit occurs between September and December in the year prior to the LLFs becoming effective. Only after the completion of the audit at the end of December and BSC approval are the final LLFs published.
- 4.10. As this statement is published a complete year before the LLFs for the charging year have been produced, Annex 5 is intentionally left blank. This statement will be reissued with Annex 5 populated once the LLFs have been calculated and audited. This should typically be more than three months prior to the statement coming into force.
- 4.11. When using the tables in Annex 5, reference should be made to the LLFC allocated to the MPAN to find the appropriate values.

⁹ The Elexon Portal can be accessed from www.elexonportal.co.uk

5. Notes for Designated EHV Properties

EDCM network group costs

- 5.1. A table is provided in the accompanying spreadsheet which shows the underlying Forward Cost Pricing (FCP) network group costs used to calculate the current EDCM charges. This spreadsheet "SPD Schedule of Charges and Other Tables.xlsx" is available to download from our website.
- 5.2. These are illustrative of the modelled costs at the time that this statement was published. A new connection will result in changes to current network utilisations, which will then form the basis of future prices. The charge determined in this statement will not necessarily be the charge in subsequent years because of the interaction between new and existing network connections and any other changes made to our Distribution System which may affect charges.

Charges for new Designated EHV Properties

- 5.3. Charges for any new Designated EHV Properties calculated after publication of the current statement will be published on our website in an addendum to that statement as and when necessary. The addendum will include charge information of the type found in Annex 2, and LLFs as found in Annex 5.
- 5.4. The form of the addendum is detailed in Annex 6 to this statement.
- 5.5. The new Designated EHV Properties' charges will be added to Annex 2 in the next full statement released.

Charges for amended Designated EHV Properties

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

Demand-side management

5.7. New or existing Designated EHV Property Customers may wish to offer part of their MIC to be interruptible by us (for active network management purposes other than normal planned or unplanned outages) in order to benefit from any reduced UoS charges calculated using the EDCM.

- 5.8. Several options exist in which we may agree for some or the entire MIC to be interruptible. Under the EDCM the applicable demand capacity costs would be based on the MIC minus the capacity subject to interruption.
- 5.9. If you are interested in making part or all of your MIC interruptible as an integral irrevocable feature of a new connection or modification to an existing connection you should in the first instance contact our connections function;

• By email to: gettingconnected@scottishpower.com

• By telephone: 0845 270 0785

• By address :

G2 5AD

Scottish Power
SP Energy Networks Networks
Network Connections
320 St Vincent Street
Glasgow

6. Electricity distribution rebates

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

7. Accounting and administration services

- 7.1. We reserve the right to impose payment default remedies. The remedies are as set out in DCUSA where applicable or else as detailed in the following paragraph.
- 7.2. If any invoices that are not subject to a valid dispute remain unpaid on the due date, late payment interest (calculated at base rate plus 8%) and administration charges may be imposed.
- 7.3. Our administration charges are detailed in the following table. These charges are set at a level which is in line with the Late Payment of Commercial Debts Act;

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

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

8.1. "None"

Appendix 1 - Glossary

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

Term	Definition
All-the-way Charge	A charge that is applicable to an end user rather than an LDNO. An end user in this context is a Supplier/User who has a registered MPAN or MSID and is using the Distribution System to transport energy on behalf of a Customer.
Balancing and Settlement Code (BSC)	The BSC contains the governance arrangements for electricity balancing and settlement in Great Britain. An overview document is available from www.elexon.co.uk/ELEXON Documents/trading_arrangements.pdf .
Balancing and Settlement Code Procedure (BSCP)	A document of that title, as established or adopted and from time to time modified by the Panel in accordance with The Code, setting out procedures to be complied with (by Parties, Party Agents, BSC Agents, BSCCo, the Panel and others) in, and other matters relating to, the implementation of The Code;
Common Distribution Charging Methodology (CDCM)	The CDCM used for calculating charges to Designated Properties as required by standard licence condition 13A of the Electricity Distribution Licence.
Connection Agreement	An agreement between an LDNO and a Customer which provides that that Customer has the right for its connected installation to be and remain directly or indirectly connected to that LDNO's Distribution System
Central Volume Allocation (CVA)	As defined in the BSC.
	A person to whom a User proposes to supply, or for the time being supplies, electricity through an exit point, or from who, a User or any relevant exempt supplier, is entitled to recover charges, compensation or an account of profits in respect of electricity supplied through an exit point;
Customer	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.

Term	Definition
Designated Properties	As defined in standard condition 13A of the Electricity Distribution Licence.
Distribution Connection and Use of System Agreement	The DCUSA is a multi-party contract between the licensed electricity distributors, suppliers, generators and Offshore Transmission Owners of Great Britain.
(DCUSA)	It is a requirement that all licensed electricity distributors and suppliers become parties to the DCUSA.

Term	Defin	ition	
	MPAI	e are unique IDs that can be un N, to identify your LDNO. The ators can be found on their we	charges for other network
	ID	Distribution Service Area	Company
	10	East of England	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 (and embedded networks in other areas)	Scottish Hydro Electric Power Distribution plc
	18	South Scotland	Scottish Power
	19	South East England	UK Power Networks
	20	Southern Electric (and embedded networks in other areas)	Southern Electric Power Distribution plc
Distributor IDs	21	South Wales	Western Power Distribution
Distributor 123	22	South Western	Western Power Distribution
	23	Yorkshire	Northern Powergrid
	24	All	Independent Power Networks
	25	All	ESP Electricity
	26	All	Energetics Electricity Ltd
	27	All	The Electricity Network Company Ltd
	29	All	Harlaxton Energy Networks
	30	All	Peel Electricity Networks Ltd
	31	All	UK Power Distribution Ltd
	32	All	Energy Assets Networks Limited
	33	All	Eclipse Power Networks Ltd
	34	All	Murphy Power Distribution Ltd
	35	All	Fulcrum Electricity Assets Ltd
	36	All	Vattenfall Networks Ltd

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

Term	Definition	
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.	
GSP group	A distinct electrical system that is supplied from one or more GSPs for which total supply into the GSP group can be determined for each half hour.	
High Voltage (HV)	Nominal voltages of at least 1kV and less than 22kV.	
Intermittent Generation	Defined in DCUSA Schedule 16 as a generation plant where the energy source of the prime mover cannot be made available on demand, in accordance with the definitions in Engineering Recommendation P2/6.	
Invalid Settlement Combination	A Settlement combination that is not recognised as a valid combination in market domain data - see https://www.elexonportal.co.uk/MDDVIEWER .	
kVA	Kilovolt ampere.	
kVArh	Kilovolt ampere reactive hour.	
kW	Kilowatt.	
kWh	Kilowatt hour (equivalent to one "unit" of electricity).	
Licensed Distribution Network Operator (LDNO)	The holder of a Licence to distribute electricity.	
Line Loss Factor (LLF)	The factor that is used in Settlement to adjust the metering system volumes to take account of losses on the distribution system.	
Line Loss Factor Class (LLFC)	An identifier assigned to an SVA metering system which is used to assign the LLF and use of system charges.	
Load Factor	$= \frac{annual\ consumption\ (kWh)}{maximum\ demand\ (kW) \times hours\ in\ year}$	
Low Voltage (LV)	Nominal voltages below 1kV.	

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

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

Term	Definition
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 that has a use of system agreement with the DNO e.g. a supplier, generator or other LDNO.

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 that forms the 'wires' that transport electricity between the national transmission system and end users such as homes and businesses. Our Distribution System includes overhead lines, underground cables, as well as substations and transformers.
- 1.2. In most cases, your Supplier is invoiced for the distribution charge and this is normally part of your total bill. In some cases, for example business users, the Supplier may pass through the distribution charge as an identifiable line item on the electricity bill.
- 1.3. Where electricity is generated at a premises your Supplier may receive a credit for energy that is exported on to the Distribution System. These credits are intended to reflect that the exported generation may reduce the need for traditional demand led reinforcement of the Distribution System.
- 1.4. Understanding your distribution charges could help you reduce your costs and increase your credits. This is achieved by understanding the components of the charge to help you identify whether there may be opportunities to change the way you use the Distribution System.

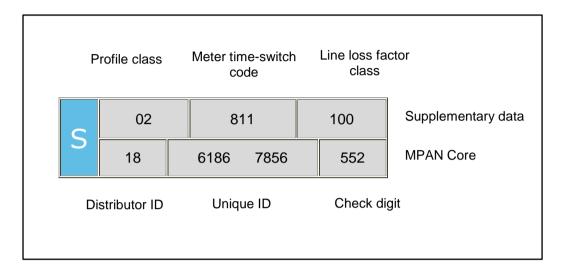
Meter point administration

- 1.5. We are responsible for managing the electricity supply points that are connected to our Distribution System. Typically, every supply point is identified by a Meter Point Administration Number (MPAN). A few supply points may have more than one MPAN depending on the metering configuration (e.g. a school which may have an MPAN for the main supply and an MPAN for catering).
- 1.6. The full MPAN is a 21 digit number, preceded by an 'S' and includes supplementary data. The MPAN applicable to a supply point is found on the electricity bill from your Supplier. This number enables you to establish who your electricity distributor is, details of the characteristics of the supply and importantly the distribution charges that are applicable to your premises.

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 LLFC to identify the distribution charges for your premises. However, there are some premises where charges are specific to that site. In these instances, the charges are identified by the MPAN core. The Distributor ID for SP Distribution is 18. Other Distributor IDs can be referenced in the glossary.
- 1.9. Additionally it can be useful to understand the profile class provided in the supplementary data. The profile class will be a number between 00 and 08. The following list provides details of the allocation of profile classes to types of customers:
 - '01' Domestic customers with unrestricted supply
 - '02' Domestic customers with restricted load, for example off-peak heating
 - '03' Non-domestic customers with unrestricted supply
 - '04' Non-domestic customers with restricted load, for example off-peak heating
 - '05' Non-domestic maximum demand customers with a Load Factor of less than 20%
 - '06' Non-domestic maximum demand customers with a Load Factor between 20% and 30%
 - '07' Non-domestic maximum demand customers with a Load Factor between 30% and 40%

- '08' Non-domestic maximum demand customers with a Load Factor over 40% or non-half hourly metered generation customers
- '00' Half-hourly metered demand and generation customers
- 1.10. Unmetered Supplies will be allocated to profile class 01, 08 or 00 depending on the type of load or the measurement method of the load.
- 1.11. The allocation of the profile class will affect your charges. If you feel that you have been allocated the wrong profile class, please contact your Supplier as they are responsible for this.

Your charges

- 1.12. All distribution charges that relate to our Distributor ID 18 are provided in this statement.
- 1.13. You can identify your charges by referencing your LLFC, from Annex 1. If the MPAN is for a Designated EHV Property, then the charges will be found in Annex 2. In a few instances, the charges may be contained in Annex 3 or Annex 6. When identifying charges in Annex 2, please note that some LLFCs have more than one charge. In this instance you will need to select the correct charge by cross referencing with the MPAN core 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 https://www.scottishpower.com/pages/connections_use_of_system_and_metering_services.aspx

Reducing your charges

- 1.15. The most effective way to reduce your energy charges is to reduce your consumption by switching off or using more energy efficient appliances. However, there are also other potential opportunities to reduce your distribution charges; for example, it may be beneficial to shift demand or generation to a better time period. Demand use is likely to be cheaper outside peak periods and generation credits more beneficial during peak periods, although the ability to directly benefit will be linked to the structure of your supply charges.
- 1.16. The calculator mentioned above provides the opportunity to establish a forecast of the change in distribution charges that could be achieved if you are able to change any of the consumption related inputs.

Reactive power and reactive power charges

- 1.17. Reactive power is a separately charged component of connections that are half hourly metered. Reactive power charges are generally avoidable if 'best practice' design of the properties' electrical installation has been provided in order to maintain a power factor between 0.95 and unity at the Metering Point.
- 1.18. Reactive Power (kVArh) is the difference between working power (active power measured in kW) and total power consumed (apparent power measured in kVA). Essentially it is a measure of how efficiently electrical power is transported through an electrical installation or a Distribution System.
- 1.19. Power flowing with a power factor of unity results in the most efficient loading of the Distribution System. Power flowing with a power factor of less than 0.95 results in much higher losses in the Distribution System, a need to potentially provide higher capacity electrical equipment and consequently a higher bill for you the consumer. A comparatively small improvement in power factor can bring about a significant reduction in losses since losses are proportional to the square of the current.
- 1.20. Different types of electrical equipment require some 'reactive power' in addition to 'active power' in order to work effectively. Electric motors, transformers and fluorescent lighting, for example, may produce poor power factors due to the nature of their inductive load. However, if good design practice is applied then the poor power factor of appliances can be corrected as near as possible to source. Alternatively, poor power factor can be corrected centrally near to the meter.
- 1.21. There are many advantages that can be achieved by correcting poor power factor. These include: reduced energy bills through lower reactive charges, lower capacity charges and reduced power consumption and reduced voltage drop in long cable runs.

Site-specific EDCM charges

1.22. A site classified as a Designated EHV Property is subject to a locational-based charging methodology (referred to as EDCM) for higher voltage network users. Distributors use one of two approved approaches: Long Run Incremental Cost (LRIC) or Forward Cost Pricing (FCP); we use the FCP. The EDCM will apply to Customers connected at Extra High Voltage or connected at High Voltage and metered at a high voltage substation.

- 1.23. EDCM charges and credits are site-specific, reflecting the degree to which the local and higher voltage networks have the capacity to serve more demand or generation without the need to upgrade the electricity infrastructure. The charges also reflect the networks specifically used to deliver the electricity to the site as well as the usage at the site. Generators with non-intermittent output and deemed to be providing beneficial support to our networks may qualify to receive credit.
- 1.24. The charges under the EDCM comprise of the following individual components:
 - a) **Fixed charge (pence/MPAN/day)** This charge recovers operational costs associated with those connection assets that are provided for the 'sole' use of the customer. The value of these assets is used as a basis to derive the charge.
 - b) Capacity charge (pence/kVA/day) This charge comprises the relevant FCP component, the National Grid Electricity Transmission cost and other regulated costs.

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

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

Our regulated costs include direct and indirect operational costs and a residual amount to ensure recovery of our regulated allowed revenue. The capacity charge recovers these costs using the customer usage profile and the relevant assets being used to transport electricity between the source substation and customer's Metering Point.

c) **Super-red unit charge (pence/kWh)** - This charge recovers the remote FCP component. The charge is positive for import and negative for export which means you can either reduce your charges by minimising consumption or increasing

- export at those times. The charge is applied to consumption during the Super-red time period as detailed in Annex 2.
- 1.25. Future charge rates may be affected by consumption during the Super-red period, therefore reducing consumption in the Super-red time period may be beneficial.
- 1.26. Reactive Power The EDCM does not include a separate charge component for any reactive power flows (kVAr) for either demand or generation. However, the EDCM charges do reflect the effect on the network of the customer's power factor, for example unit charges can increase if your site power factor is poor (lower than 0.95). Improving your site's power factor will also reduce the maximum demand (kVA) for the same power consumed in kW thus providing scope to reduce your agreed capacity requirements.

Annex 1 - Schedule of charges for use of the distribution system by LV and HV Designated Properties

SP Distribution - Effective from 1 April 2020 - 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 (Including Bank Holidays) All Year	16.30 - 19.30	08.00 - 16.30 19.30 - 22.30	00.00 - 08.00 22.30 - 00.00							
Saturday and Sunday All Year		16.00 - 20.00	00.00 - 16.00 20.00 - 00.00							
Notes	All the above times a	re in UK Clock time								

Time Bands for Ha	alf Hourly Unn	netered Prope	rties
	Black Time Band	Yellow Time Band	Green Time Band
Monday to Friday (Including Bank Holidays) June to August Inclusive		08.00 - 22.30	00.00 - 08.00 22.30 - 00.00
Monday to Friday (Including Bank Holidays) November to February Inclusive	16.30 - 19.30	08.00 - 16.30 19.30 - 22.30	00.00 - 08.00 22.30 - 00.00
Monday to Friday (Including Bank Holidays) March, April, May and September, October		08.00 - 22.30	00.00 - 08.00 22.30 - 00.00
Saturday and Sunday All year		16.00 - 20.00	00:00-16:00 20:00-00:00
Notes	All the above times a	re in UK Clock time	

Tariff name	Open LLFCs	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh	Closed LLFCs
Domestic Unrestricted	100, 101, 110, 111, 160, 161	1	2.747			4.32				
Domestic Two Rate	114, 115, 118, 119, 120, 121, 162, 163	2	3.235	1.380		4.32				145, 146
Domestic Off Peak (related MPAN)	112, 113, 116, 117, 132, 133, 136, 137, 164, 165, 166	2	1.368							135, 136, 137, 138, 140, 141, 142, 143
Small Non Domestic Unrestricted	201, 204	3	2.617			5.52				207
Small Non Domestic Two Rate	221, 224, 260	3&4	3.158	1.432		5.52				208, 210
Small Non Domestic Off Peak (related MPAN)	225, 240, 241, 301, 302	4	1.750							233, 234, 235, 236, 237
LV Network Domestic	180	-	9.680	2.157	1.311	4.32				
LV Network Non-Domestic Non-CT	280	-	9.219	2.109	1.309	5.52				
LV HH Metered	500, 504	-	7.457	1.902	1.301	21.68	2.34	3.51	0.184	501
LV Sub HH Metered	506, 507	-	5.054	1.618	1.289	7.65	4.28	4.90	0.103	503
HV HH Metered	501, 505		3.952	1.503	1.285	115.87	4.70	5.84	0.068	505
NHH UMS category A	900	1&8	2.365							904, 912, 913
NHH UMS category B	901	1	2.616							905
NHH UMS category C	902	1	3.448							906
NHH UMS category D	903	1	2.183							907
LV UMS (Pseudo HH Metered)	910	-	16.368	2.216	1.701					
LV Generation NHH or Aggregate HH	781, 782, 783, 784, 785	0&8	-0.752			-				
LV Sub Generation NHH	602	8	-0.659			-				
LV Generation Intermittent	603, 608	-	-0.752			-			0.166	
LV Generation Intermittent no RP charge	794	-	-0.752			-				
LV Generation Non-Intermittent	604, 607	-	-5.705	-0.595	-0.020	-			0.166	
LV Generation Non-Intermittent no RP charge	795	-	-5.705	-0.595	-0.020	-				
LV Sub Generation Intermittent	609	-	-0.659			-			0.147	
LV Sub Generation Intermittent no RP charge	796	-	-0.659			-				
LV Sub Generation Non-Intermittent	610	-	-5.029	-0.515	-0.016	-			0.147	
LV Sub Generation Non-Intermittent no RP charge	797	-	-5.029	-0.515	-0.016	-				
HV Generation Intermittent	611, 612	-	-0.403			84.61			0.122	
HV Generation Intermittent no RP charge	798	-	-0.403			84.61				
HV Generation Non-Intermittent	605, 606	-	-3.227	-0.286	-0.006	84.61			0.122	
HV Generation Non-Intermittent no RP charge	799	-	-3.227	-0.286	-0.006	84.61				

Annex 2 - Schedule of charges for use of the distribution system by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users)

SP Distribution - Effective from 1 April 2020 - Final EDCM charges

Time Periods for Designated EHV Properties								
Time periods Super Red Time Band								
Monday to Friday (Including Bank Holidays) June to August Inclusive								
Monday to Friday (Including Bank Holidays) November to February Inclusive	16:30 - 19:30							
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 v	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
800	800	1800060775972	644	644	1800060775990	Rhodders	-	313.16	0.72	0.72	-	5212.62	0.05	0.05
801	801	1800060004220	MSID 8182	MSID 8182	-	Minsca	-	410.73	-	-	-	-	-	-
802	802	1800060539962	683	683	1800060539971	Bankend Rig	-	128.78	3.91	3.91		4846.82	0.05	0.05
803	803	1800060532708	684	684	1800060532717	Barlockhart Moor	-	157.27	2.41	2.41		8806.27	0.05	0.05
804	804	1800060532726	685	685	1800060532735	Blantyre Muir	-	363.33	0.71	0.71	-	5725.38	0.05	0.05
805	805	1800060587850	693	693	1800060587869	Hunterston WF	-	104.21	1.05	1.05	-	7778.73	0.05	0.05
806	806	1800060532647	688	688	1800060532656	Middleton Farm	-	225.33	2.36	2.36	-	5119.41	0.05	0.05
807	807	1800060532665	689	689	1800060532674	Neilston Community	-	133.05	2.44	2.44		6280.65	0.05	0.05
808	808	1800053653870	681	681	1800053653880	Garlaff Landfill	-	99.07	0.68	0.68		-	-	-
809	809	1800054992968	629	629	1800054992977	Hagshaw Hill Extension	-	704.77	0.71	0.71		17797.77	0.05	0.05
811	811	1800060328035	671	671	1800060328044	Muirhall	-	335.13	2.35	2.35	-	8043.03	0.05	0.05
812	812	1800060372113	672	672	1800060372122	Burnfoot	-	112.64	0.82	0.82	-	7860.11	0.05	0.05
813	813	1800060532498	690	690	1800060532503	Westfield WF	-	59.57	1.06	1.06	-	6997.91	0.05	0.05
814	814	1800060532683	691	691	1800060532692	Barmoor WF	-	197.70	2.47	2.47		18691.99	0.05	0.05
815	815	1800060566984	692	692	1800060566993	Nutberry WF	-	795.83	2.33	2.33		15066.38	0.05	0.05
816	816	1800060652454	695	695	1800060652463	Carcreugh WF	-	308.50	0.74	0.74		6296.97	0.05	0.05
817	817	1800060567668	-	-		Magnox	-	363.24	1.67	1.67	-	-	-	-
818	818	1800060642767	700	700	1800060642776	West Browncastle WF	-	497.78	0.76	0.76	-	28179.18	0.05	0.05
820	820	1800060289486	620	620	1800060289510	Craigengelt	-	148.28	0.86	0.86	-	20253.88	0.05	0.05
821	821	1800054865132	621	621	1800054865141	Greenknowes	-	609.75	0.75	0.75	-	36584.77	0.05	0.05
822	822	1800060683754	703	703	1800060683763	Ewe Hill Dumfries WF	-	465.06	2.42	2.42		20981.05	0.05	0.05
823	823	1800060697223	704	704	1800060697232	Langhope Rig (D) WF	-	41.85	1.44	1.44		1372.57	0.05	0.05
824	824	1800060674253	705	705	1800060674262	Muirhall Extention WF	-	53.65	2.42	2.42	-	3196.95	0.05	0.05
825	825	1800060159192	625	625	1800060159208	Aikengall	-	2878.80	-	-	-	36438.12	0.05	0.05
826	826	1800053646251	626	626	1800053646260	Hagshaw Hill	-	36.45	2.46	2.46	-	-	-	-
827	827	1800053646190	627	627	1800053646206	Gallow Rig	-	127.12	2.35	2.35		-	-	-
828	828	1800053646172	628	628	1800053646181	Polwhat Rig	-	151.20	2.34	2.34		-	-	-
829	829	1800054738267	624	624	1800054738276	Greendykeside	-	52.13	2.42	2.42	-	3658.13	0.05	0.05
830	830	1800053647237	630	630	1800053647246	Dun Law	-	31.69	2.39	2.39	-	-	-	-
831	831	1800053647194	631	631	1800053647200	EPR Scotland Ltd	-	253.33	2.47	2.47	-	-	-	-
832	832	1800053648027	632	632	1800053648036	Bowbeat (Emly Bank)	-	164.16	2.34	2.34	-	-	-	-
833	833	1800053648045	633	633	1800053648054	Bowbeat (Roughsidehill)	-	114.59	2.36	2.36	-	-	-	-
834	834	1800053647380	634	634	1800053647399	Harehill	-	114.18	2.39	2.39	-	-	-	-

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name v	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
835	835	1800053647618	635	635	1800053647627	Shanks & McEwan 3&4		107.06	2.53	2.53	-	-	-	-
836	836	1800053647636	636	636	1800053647645	Shanks & McEwan 5	-	25.13	2.32	2.32	-	-	-	-
837	837	1800053653843	637	637	1800053653852	Crystal Rig	-	585.95	0.69	0.69		-	-	-
838	838	1800053694167	638	638	1800053694440	Haupland Muir (Ardrossan)	-	6.63	0.89	0.89		209.28	0.05	0.05
839	839	1800053950949	639	639	1800053950958	Wetherhill	-	1294.89	-	-		-	-	-
840	840	1800053434271	640	640	1800053883993	Artfield WF	-	817.20	-	-	-	-	-	-
841	841	1800054152982	641	641	1800054152991	Wardlaw Wood		76.45	2.45	2.45		-	-	-
842	842	1800054198365	642	642	1800054198374	Earlsburn		576.68		-		-	-	-
843	843	1800054244570	643	643	1800054244598	Blackhill		1870.12	-	-		22239.30	0.05	0.05
844	844	1800054451603	MSID 8183	MSID 8183	-	Dalswinton	-	425,66	0.76	0.76	-	-	-	-
845	845	1800054498470	645	645	1800054498480	Steven's Croft Biomass	-	4150.31	0.80	0.80	-	-	-	_
850	850	1800060251872	650	650	1800060251881	Longpark	-	757.81	-	-	-	20120.76	0.05	0.05
851	851	1800035140431	-			BOC		7336.51	2.42	2.42		-	-	_
852	852	1800060642702	696	696	1800060642711	Calder Water WF		220.93	0.88	0.88		26936.55	0.05	0.05
853	853	1800035234188	-	-		Babcock Thorn	-	20745.48	2.72	2.72	-	-	-	-
854	854	1800035261359	654	654	1800053946507	Lafarge UK	-	10321.91	4.09	4.09	-	-	-	-
855	855	1800060241304	655	655	1800060241313	Pateshill	-	22.28	2,44	2.44	-	1247.52	0.05	0.05
856	856	1800035239460	-	-		Clydeport	-	28424.63	0.78	0.78	-	-	-	-
858	858	1800035327257	_	_		Tesco	-	926.97	2.73	2.73	-	-	-	_
859	859	1800035320127	697	697	1800060630637	GlaxoSmithKline	-	25592.09	1.89	1.89	-	2428.99	0.05	0.05
860	860	1800060852030	666	666	1800060852049	Gevens Wind Farm	-	22.18	0.71	0.71	-	5033.32	0.05	0.05
861	861	1800035324780	-	-	100000000000000000000000000000000000000	Weir Pumps	-	1672.08	5.11	5.11	-	-	-	-
862	862	1800035317453	-	-		Dupont (UK) Ltd	-	73704.66	3.08	3.08	-	-	-	_
863	863	1800060207438	663	663	1800060207447	North Rhins	-	290.57	2.35	2.35	-	8733.05	0.05	0.05
864	864	1800060709038	698	698	1800060709047	Tod Hills Windfarm	-	73.44	1.59	1.59	-	8069.03	0.05	0.05
865	865	1800060877284	670	670	1800060877293	Hoprigshiels		244.45	2.35	2.35		12864.58	0.05	0.05
866	866	1800051523646	-	-		Calachem		9673.50	11.14	11.14		-		-
867	867	1800035325436	-	-		Norbord	-	19558.43	1.16	1.16	-	-	-	_
868	868	1800060809025	664	664	1800060809034	MuirHall Extension II WF	-	54.62	2.44	2.44	-	4681.45	0.05	0.05
886	886	-	686	686	-	Sneddon Law WF	-	477.56	0.70	0.70	-	28646.90	0.05	0.05
887	887	1800060749661	706	706	1800060749670	Polmadie (Waste energy A)		1148.72	3.07	3.07		4858.96	0.05	0.05
873	873	1800060450481	673	673	1800060450490	Millour Hill		212.12	0.74	0.74		14601.88	0.05	0.05
874	874	1800060441380	674	674	1800060441399	Glenkerie	-	375.65	2.39	2.39		14552.08	0.05	0.05
875	875	1800060450524	675	675	1800060450533	Kelburn (A)	-	173.25	2.42	2.42	-	8654.77	0.05	0.05
876	876	1800060450542	676	676	1800060450551	Kelburn (B)	-	173.25	2.42	2.42	-	8654.77	0.05	0.05
877	877	1800060450506	677	677	1800060450515	Little Raith	-	190.16	0.74	0.74	-	5229.36	0.05	0.05
878	878	1800060445640	678	678	1800060445659	Drone Hill	-	525.61	0.73	0.73	-	25778.45	0.05	0.05
879	879	1800060845812	680	680	1800060845821	Pearie Law Wind Farm	-	301.45	2.41	2.41	-	15622.29	0.05	0.05
880	880	1800060673222	701	701	1800060673231	Earlseat WF	-	155.51	2.40	2.40	-	11798.13	0.05	0.05
881	881	1800060740288	702	702	1800060740297	Dungavel WF	-	519.14	0.75	0.75	-	31044.50	0.05	0.05
882	882	1800060769738	687	687	1800060749237	Burnhead Bathgate WF	-	62.18	2.51	2.51	-	4191.59	0.05	0.05
883	883	1800053647742	636	636	1800053647645	Shanks & McEwan 6	-	72.67	2.32	2.32	-	-	-	-
884	884	1800060683693	679	679	1800060683709	Ardoch & Over Enoch WF	-	565.95	0.93	0.93		11417.97	0.05	0.05
888	888	1800060817230	MSID 8732	MSID 8732	-	Glenchamber	-	109.45	0.86	0.86		14207.27	0.05	0.05
889	889	1800060819273	708	708	1800060819282	Penmansheill	-	232.87	0.78	0.78	-	35174.43	0.05	0.05
891	891	1800060863723	668	668	1800060863732	Tormywheel	-	57.17	2.43	2.43	-	10151.14	0.05	0.05
892	892	1800060872755	669	669	1800060872764	Quixwood Wind Farm	_	294.03	0.76	0.76	-	26525.88	0.05	0.05

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name •	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
MSID 8083	MSID 8083	-	-	-		Dumbarton	-	-	1.68	1.68	-	-	-	-
MSID 8085	MSID 8085	-	-	-		Stirling Road	-	-	1.48	1.48	-	-	-	-
MSID 8334	MSID 8334	-	MSID 8334	MSID 8334	-	Markinch	-	3673.95	0.83	0.83	-	21242.76	0.05	0.05
MSID 8339	MSID 8339	-	MSID 8339	MSID 8339	-	Harehill Extension	-	234.81	2.51	2.51	-	8271.28	0.05	0.05
847	847	-	MSID 8340	MSID 8340	-	Aries	-	124.31	0.85	0.85	-	13018.41	0.05	0.05
MSID 8341	MSID 8341	-	MSID 8341	MSID 8341	-	Andershaw WF	-	188.25	2.62	2.62	-	25687.32	0.05	0.05
MSID 8347	MSID 8347	-	MSID 8347	MSID 8347	-	Assel Valley	-	1971.38	0.71	0.71	-	46644.29	0.05	0.05
MSID 8348	MSID 8348	-	MSID 8348	MSID 8348	-	Auchrobert	-	318.33	0.76	0.76	-	15505.27	0.05	0.05
MSID 8349	MSID 8349	-	MSID 8349	MSID 8349	-	Harbumhead	-	45.06	2.41	2.41	-	10615.75	0.05	0.05
310		1800036579036	-	-		Magco	-	388.33	7.32	7.32	-	-	-	-
311	311	1800035324497	-	-		Stirling University	-	388.33	4.99	4.99	-	-	-	-
312	312	1800035324530	-	-		Glenochil Distillery	-	388.33	8.96	8.96	-	-	-	-
314	314	1800035327674	-	-		Cameron Ironworks	-	388.33	4.65	4.65	-	-	-	-
315		1800035313398	-	-		Shin-Etsu	-	15213.10	3.52	3.52	-	-	-	-
316	316	1800035344100	-	-		United Biscuits		388.33	5.29	5.29		-	-	-
318	318	1800035337584	-	-		Balfours		388.33	1.01	1.01		-	-	-
319		1800035331634	-	-		NB Distillery	-	388.33	2.82	2.82	-	-	-	-
320		1800035340220	-	-		Finnart BP	-	16615.50	2.42	2.42	-	-	-	-
321	321	1800035346589	-	-		Texas Instruments	-	776.66	6.89	6.89	-	-	-	-
322		1800035346817	-	-		Glasgow Airport	-	388.33	11.02	11.02	-	-	-	-
323	323	1800035326848	-	-		BP Dalmeny		11569.93	1.42	1.42		-	-	-
324	324	1800035334227	-	-		Edinburgh Dock North		23591.77	1.77	1.77		-	-	-
326	326	1800053646215	755	755	1800053646224	Bonnington Power Station		3.50	3.29	3.29	-2.417	384.83	0.05	0.05
328	328	1800060586917	750	750	1800060586926	Cathkin Braes Wind Farm		346.03	1.66	1.66		5463.88	0.05	0.05
329	329	1800060397697	-	-		New Glasgow South Hospital	-	10033.59	4.51	4.51	-	-	-	-
330	330	1800060614714	752	752	1800060614741	Torrance WF		82.08	1.81	1.81		7005.67	0.05	0.05
331	331	1800060613543	754	754	1800060613552	Scottish Enterprise (Samsung WTTF)		1567.84	2.43	2.43		3851.66	0.05	0.05
332	332	1800060709010	756	756	1800060709029	Torrance Windfarm Extension		125.60	1.81	1.81		7083.16	0.05	0.05
819	819	1800060632661	699	699	1800060632670	Viridor (Waste energy)		1456.72	2.43	2.43		8728.18	0.05	0.05
TBA 1A	TBA 1A	TBA 1A	TBA 1B	TBA 1B	TBA 1B	Solwaybank	-	108.85	1.07	1.07		14425.80	0.05	0.05
870		1800060963650	710	710	1800060963669	Millerhill EFW	-	1760.42	3.28	3.28	-	6602.20	0.05	0.05
MSID 8359	MSID 8359	MSID 8359	MSID 8360	MSID 8360	MSID 8360	Broxburn ESS	-	1493.73	1.64	1.64	-	1493.73	0.05	0.05
848	848	1800060904910	648	648	1800060904929	Craigannet	-	111.75	3.31	3.31	-	2940.79	0.05	0.05
TBA 2A	TBA 2A	TBA 2A	TBA 2B	TBA 2B	TBA 2B	Redhouse Energy Storage site (ESS)	-	760.70	1.64	1.64	-	802.97	0.05	0.05
313	313	1800053648310	-	-		Longannet Power Station	-	388.33	12.95	12.95	-	-	-	-
334	334	1800035327070	-	-		Edinburgh Airport	-	503.91	6.54	6.54	-	-	-	-

Annex 3 - Schedule of charges for use of the distribution system by preserved/additional LLF classes

	SP Distri	bution	- Effective from	1 April 2020 - Fi	nal LV and H	V tariffs				
			NHH preserved ch	arges/ additional LLFC	is					
	Closed LLFCs	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh	
Domestic Off Peak (related MPAN)	130, 134,135	2	1.368							
Small Non Domestic Unrestricted	200, 202,203, 205	3	2.617			5.52				
Small Non Domestic Two Rate	220, 222	4	3.158	1.432		5.52				
Small Non Domestic Off Peak (related MPAN)	223, 242, 243, 244, 245, 246	3&4	1.750							
LV Medium Non-Domestic	400, 402	5-8	2.500	1.371		26.90				
LV Sub Medium Non-Domestic	404	5-8	2.095	1.340		0.00				
HV Medium Non-Domestic	401	5-8	1.757	1.308		290.49				
NHH UMS category A	904, 908, 909	1&8	2.365							
NHH UMS category B	905	1	2.616							
NHH UMS category C	906	1	3.448							
NHH UMS category D	907	1	2.183							
Notes:	Unit time periods are as specified in the	e SSC.							•	
	SP Distribution uses a default tariff for	r invalid settle	ment combinations these will b	e charged at the Domestic Ur	restricted Rates.					
	The Domestic and Non-Domestic Off P	eak (related N	/IPAN) tariffs are supplementar	v to a standard published tari	ff and therefore only av	vailable under these con	ditions.			
	the Domestic and Non-Domestic Off Peak (related MPAN) tariffs are supplementary to a standard published tariff and therefore only available under these conditions. Suppliers may not normally strainfer a meter point from one preserved tariff; If a supply under a preserved tariff should coase, other than on change of terrancy, the preserved tariff may not normally be restored, Any additional based required to be supplied on the preserved tariff may be the existing supplier, supply capacity.									

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

	SP Dis	stribution - Ef	fective from 1	April 2020 - Fi	nal LDNO tariffs
Time Bands for Ha	alf Hourly Metered Pr	operties			Time Bar
Time periods	Red Time Band	Amber Time Band	Green Time Band		
Monday to Friday (Including Bank Holidays) All Year	16.30 - 19.30	08.00 - 16.30 19.30 - 22.30	00.00 - 08.00 22.30 - 00.00		Monday to Friday (Including Bank Holidays) June to August Inclusive
Saturday and Sunday All Year		16.00 - 20.00	00.00 - 16.00 20.00 - 00.00		Monday to Friday (Including Bank Holidays) November to February In
Notes	All the ab	ove times are in UK	Clock time		Monday to Friday (Including Bank Holidays) March to May, & Septemb

Time Bands for H	lalf Hourly Unn	netered Prope	rties
	Black Time Band	Yellow Time Band	Green Time Band
Monday to Friday (Including Bank Holidays) June to August Inclusive		08.00 - 22.30	00.00 - 08.00 22.30 - 00.00
Monday to Friday (Including Bank Holidays) November to February Inclusive	16.30 - 19.30	08.00 - 16.30 19.30 - 22.30	00.00 - 08.00 22.30 - 00.00
Monday to Friday (Including Bank Holidays) March to May, & September to October, Inclusive		08.00 - 22.30	00.00 - 08.00 22.30 - 00.00
Saturday and Sunday All year		16.00 - 20.00	00:00-16:00 20:00-00:00
Notes	All the above times a	re in UK Clock time	

					Notes		All the above times a		
Tariff name	Unique billing identifier	PCs ·	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO LV: Domestic Unrestricted		1	1.676	-	-	2.64			
LDNO LV: Domestic Two Rate		2	1.974	0.842	-	2.64			-
LDNO LV: Domestic Off Peak (related MPAN)		2	0.835	-	-	-			-
LDNO LV: Small Non Domestic Unrestricted		3	1.597	-	-	3.37			-
LDNO LV: Small Non Domestic Two Rate		4	1.927	0.874	-	3.37	-	-	-
LDNO LV: Small Non Domestic Off Peak (related MPAN)		4	1.068	-	-			-	-
LDNO LV: LV Medium Non-Domestic		5-8	1.525	0.837	-	16.41		-	-
LDNO LV: LV Network Domestic		0	5.907	1.316	0.800	2.64		-	-
LDNO LV: LV Network Non-Domestic Non-CT		0	5.625	1.287	0.799	3.37		-	-
LDNO LV: LV HH Metered		0	4.550	1.161	0.794	13.23	1.43	2.14	0.112
LDNO LV: NHH UMS category A		8	1.443	-		-			-
LDNO LV: NHH UMS category B		1	1.596	-	-				-
LDNO LV: NHH UMS category C		1	2.104	-	-		-	-	-
LDNO LV: NHH UMS category D		1	1.332		-	-	-		
LDNO LV: LV UMS (Pseudo HH Metered)		0	9.988	1.352	1.038			-	-
LDNO LV: LV Generation NHH or Aggregate HH		8&0	-0.752	-		-	-	-	-
LDNO LV: LV Generation Intermittent		0	-0.752	-	-	-			0.166
LDNO LV: LV Generation Non-Intermittent		0	-5.705	-0.595	-0.020	-			0.166
LDNO HV: Domestic Unrestricted		1	1.002	-		1.58			-
LDNO HV: Domestic Two Rate		2	1.180	0.504		1.58			
LDNO HV: Domestic Off Peak (related MPAN)		2	0.499	-	-	-			-
LDNO HV: Small Non Domestic Unrestricted		3	0.955	-	-	2.01			-
LDNO HV: Small Non Domestic Two Rate		4	1.152	0.522	-	2.01			-
LDNO HV: Small Non Domestic Off Peak (related MPAN)		4	0.639	-	_				-
LDNO HV: LV Medium Non-Domestic		5-8	0.912	0.500	-	9.81			-
LDNO HV: LV Network Domestic		0	3,532	0.787	0.478	1.58			_
LDNO HV: LV Network Non-Domestic Non-CT		0	3.364	0.769	0.478	2.01			-
LDNO HV: LV HH Metered		0	2.721	0.694	0.475	7.91	0.85	1.28	0.067
LDNO HV: LV Sub HH Metered		0	3.029	0.970	0.772	4.58	2.56	2.94	0.062
LDNO HV: HV HH Metered		0	2.717	1.033	0.884	79.67	3.23	4.02	0.047
LDNO HV: NHH UMS category A		8	0.863	-		-	-	-	-
LDNO HV: NHH UMS category B		1	0.954	-	_				-
LDNO HV: NHH UMS category C		1	1.258						
LDNO HV: NHH UMS category D		1	0.796						
LDNO HV: LV UMS (Pseudo HH Metered)		0	5.972	0.809	0.621				
LDNO HV: LV Generation NHH or Aggregate HH		8&0	-0.752	-	0.021				-
LDNO HV: LV Sub Generation NHH		8	-0.659						
LDNO HV: LV Generation Intermittent		0	-0.752			-			0.166
LDNO HV: LV Generation Non-Intermittent		0	-5.705	-0.595	-0.020	-			0.166
LDNO HV: LV Sub Generation Intermittent		0	-0.659	-	-	-			0.147
LDNO HV: LV Sub Generation Non-Intermittent		0	-5.029	-0.515	-0.016	-			0.147
LDNO HV: HV Generation Intermittent		0	-0.403	-		-			0.122
LDNO HV: HV Generation Non-Intermittent		0	-3.227	-0.286	-0.006	-			0.122
		_							

LDNO HVplus: Domestic Unrestricted	
LDNO HVplus: Domestic Off Peak (related MPAN) 2 0.324 - - LDNO HVplus: Small Non Domestic Unrestricted 3 0.620 1.31 - LDNO HVplus: Small Non Domestic Two Rate 4 0.748 0.339 1.31 -	
LDNO HVplus: Small Non Domestic Unrestricted 3 0.620 1.31 LDNO HVplus: Small Non Domestic Two Rate 4 0.748 0.339 1.31	
LDNO HVplus: Small Non Domestic Two Rate 4 0.748 0.339 1.31	
LDNO HVplus: Small Non Domestic Off Peak (related MPAN) 4 0.415 -	
LDNO HVplus: LV Medium Non-Domestic 5-8 0.592 0.325 6.37	
LDNO HVplus: LV Sub Medium Non-Domestic 5-8 0.794 0.508 -	
LDNO HVplus: HV Medium Non-Domestic 5-8 0.757 0.563 125.09	
LDNO HVplus: LV Network Domestic - 2.294 0.511 0.311 1.02	
LDNO HVplus: LV Network Non-Domestic Non-CT - 2.185 0.500 0.310 1.31	
LDNO HVplus: LV HH Metered 0 1.767 0.451 0.308 5.14 0.55 0.83	0.044
LDNO HVplus: LV Sub HH Metered 0 1.915 0.613 0.488 2.90 1.62 1.86	0.039
LDNO HVplus: HV HH Metered 0 1.702 0.647 0.553 49.90 2.02 2.51	0.029
LDNO HVplus: NHH UMS category A 8 0.560	
LDNO HVplus: NHH UMS category B 1 0.620	
LDNO HVplus: NHH UMS category C 1 0.817	
LDNO HVplus: NHH UMS category D 1 0.517	
LDNO HVplus: LV UMS (Pseudo HH Metered) 0 3.879 0.525 0.403	
LDNO HVplus: LV Generation NHH or Aggregate HH 8 -0.285 -	
LDNO HVplus: LV Sub Generation NHH 8 -0.284 -	
LDNO HVplus: LV Generation Intermittent 0 -0.285 -	0.063
LDNO HVplus: LV Generation Non-Intermittent 0 -2.162 -0.225 -0.008 -	0.063
LDNO HVplus: LV Sub Generation Intermittent 0 -0.284 -	0.063
LDNO HVplus: LV Sub Generation Non-Intermittent 0 -2.166 -0.222 -0.007 -	0.063
LDNO Hyplus: HV Generation Intermittent 0 -0.403 84.61	0.122
LDNO HVplus: HV Generation Non-Intermittent 0 -3.227 -0.286 -0.006 84.61	0.122
	0.122
LDNO EHV: Domestic Off Peak (related MPAN) 2 0.158 - 0.000	
LDNO EHV: Small Non Domestic Unrestricted 3 0.302 0.64	
LDNO EHV: Small Non Domestic Two Rate 4 0.365 0.165 0.64	
LDNO EHV: Small Non Domestic Off Peak (related MPAN) 4 0.202 -	
LDNO EHV: LV Medium Non-Domestic 5-8 0.289 0.158 3.11	
LDNO EHV: LV Sub Medium Non-Domestic 5-8 0.387 0.247 -	
LDNO EHV: HV Medium Non-Domestic 5-8 0.369 0.274 60.94	
LDNO EHV: LV Network Domestic - 1.118 0.249 0.151 0.50	
LDNO EHV: LV Network Non-Domestic Non-CT - 1.064 0.243 0.151 0.64	
LDNO EHV: LV HH Metered 0 0.861 0.220 0.150 2.50 0.27 0.41	0.021
LDNO EHV: LV Sub HH Metered 0 0.933 0.299 0.238 1.41 0.79 0.90	0.019
LDNO EHV: HV HH Metered 0 0.829 0.315 0.270 24.31 0.99 1.23	0.014
LDNO EHV: NHH UMS category A 8 0.273	
LDNO EHV: NHH UMS category B 1 0.302	
LDNO EHV: NHH UMS category C 1 0.398	
LDNO EHV: NHH UMS category D 1 0.252	
LDNO EHV: LV UMS (Pseudo HH Metered) 0 1.890 0.256 0.196	
LDNO EHV: LV Generation NHH or Aggregate HH 8 -0.139 -	
LDNO EHV: LV Sub Generation NHH 8 -0.138 -	
LDNO EHY: LV Generation Intermittent 0 -0.139 -	0.031
LDNO EHV: LV Generation Non-Intermittent 0 -1.053 -0.110 -0.004 -	0.031
LDNO EHY: LV Sub Generation Intermittent 0 -0.138 -	0.031
LDNO EHV: LV Sub Generation Non-Intermittent 0 -1.055 -0.108 -0.003 -	0.031
LDNO EHV: HV Generation Intermittent 0 -0.196 41.22	0.059
LDNO EHV: HV Generation Non-Intermittent 0 -1.572 -0.139 -0.003 41.22	0.059
LDNO 132kV/EHV: Domestic Unrestricted 1 0.058 0.09	
LDNO 132kV/EHV: Domestic Two Rate 2 0.068 0.029 0.09	
LDNO 132kV/EHV: Domestic Off Peak (related MPAN) 2 0.029 -	
LDNO 132kV/EHV: Small Non Domestic Unrestricted 3 0.055 0.12	
LDNO 132kV/EHV: Small Non Domestic Two Rate 4 0.067 0.030 0.12	

			Unit charge 1	Unit charge 2					
Tariff name	Unique billing	PCs	(NHH) or red/black	(NHH) or amber/yellow	Green charge(HH)	Fixed charge	Capacity charge	Exceeded capacity charge	Reactive power charge
Tallin Halle	identifier		charge (HH)	charge (HH)	p/kWh	p/MPAN/day	p/kVA/day	p/kVA/day	p/kVArh
LDNO 132kV/EHV: Small Non Domestic Off Peak (related MPAN)	V	4	0.037	p/kvvii v	,	-			
LDNO 132kV/EHV: LV Medium Non-Domestic		5-8	0.053	0.029		0.57			
LDNO 132kV/EHV: LV Sub Medium Non-Domestic		5-8	0.071	0.045		0.01			
						-			
LDNO 132kV/EHV: HV Medium Non-Domestic		5-8	0.067	0.050		11.16			
LDNO 132kV/EHV: LV Network Domestic		-	0.205	0.046	0.028	0.09			
LDNO 132kV/EHV: LV Network Non-Domestic Non-CT		-	0.195	0.045	0.028	0.12			
LDNO 132kV/EHV: LV HH Metered		0	0.158	0.040	0.027	0.46	0.05	0.07	0.004
LDNO 132kV/EHV: LV Sub HH Metered		0	0.171	0.055	0.044	0.26	0.14	0.17	0.003
LDNO 132kV/EHV: HV HH Metered		0	0.152	0.058	0.049	4.45	0.18	0.22	0.003
LDNO 132kV/EHV: NHH UMS category A		8	0.050						
LDNO 132kV/EHV: NHH UMS category B		1	0.055						
LDNO 132kV/EHV: NHH UMS category C		1	0.073						
LDNO 132kV/EHV: NHH UMS category D		1	0.046						
LDNO 132kV/EHV: LV UMS (Pseudo HH Metered)		0	0.346	0.047	0.036				
LDNO 132kV/EHV: LV Generation NHH or Aggregate HH		8	-0.025			-			
LDNO 132kV/EHV: LV Sub Generation NHH		8	-0.025			-			
LDNO 132kV/EHV: LV Generation Intermittent		0	-0.025			-			0.006
LDNO 132kV/EHV: LV Generation Non-Intermittent		0	-0.193	-0.020	-0.001	-			0.006
LDNO 132kV/EHV: LV Sub Generation Intermittent		0	-0.025			-			0.006
LDNO 132kV/EHV: LV Sub Generation Non-Intermittent		0	-0.193	-0.020	-0.001	-			0.006
LDNO 132kV/EHV: HV Generation Intermittent		0	-0.036			7.55			0.011
LDNO 132kV/EHV: HV Generation Non-Intermittent		0	-0.288	-0.026	-0.001	7.55			0.011
LDNO 132kV: Domestic Unrestricted		1	-0.200			-			,,,,,
LDNO 132kV: Domestic Two Rate		2	-	-		•			
LDNO 132kV: Domestic Off Peak (related MPAN)		2	-			•			
LDNO 132kV: Small Non Domestic Unrestricted		3	-			-			
LDNO 132kV: Small Non Domestic Two Rate		4	-	-		-			
LDNO 132kV: Small Non Domestic Off Peak (related MPAN)		4	-			•			
LDNO 132kV: LV Medium Non-Domestic		5-8	-	-		-			
LDNO 132kV: LV Sub Medium Non-Domestic		5-8	-	-		-			
LDNO 132kV: HV Medium Non-Domestic		5-8	-	-					
LDNO 132kV: LV Network Domestic		-	_	_					
LDNO 132kV: LV Network Non-Domestic Non-CT		_	_						
LDNO 132kV: LV HH Metered		0	_						
LDNO 132kV: LV Sub HH Metered									
		0		-	-	-	-	-	•
LDNO 132kV: HV HH Metered		0	-	-	•	-	-	-	-
LDNO 132kV: NHH UMS category A		8	-						
LDNO 132kV: NHH UMS category B		1	-						
LDNO 132kV: NHH UMS category C		1	-						
LDNO 132kV: NHH UMS category D		1	-						
LDNO 132kV: LV UMS (Pseudo HH Metered)		0	-	-	-				
LDNO 132kV: LV Generation NHH or Aggregate HH		8	-			-			
LDNO 132kV: LV Sub Generation NHH		8	-			-			
LDNO 132kV: LV Generation Intermittent		0	-						
LDNO 132kV: LV Generation Non-Intermittent		0							
LDNO 132kV: LV Sub Generation Intermittent		0	-			-			
LDNO 132kV: LV Sub Generation Non-Intermittent		0	-	-	•	-			•
LDNO 132kV: HV Generation Intermittent		0	-			-			•
LDNO 132kV: HV Generation Non-Intermittent		0	-	-	-	-			-
LDNO 0000: Domestic Unrestricted		1	-			-			
LDNO 0000: Domestic Two Rate		2	-	-		-			
LDNO 0000: Domestic Off Peak (related MPAN)		2	-						
LDNO 0000: Small Non Domestic Unrestricted		3	-						
LDNO 0000: Small Non Domestic Two Rate		4	-	-		-			
LDNO 0000: Small Non Domestic Off Peak (related MPAN)		4	-						
LDNO 0000: LV Medium Non-Domestic		5-8							
LDNO 0000: LV Sub Medium Non-Domestic		5-8	-	-					
LDNO 0000: HV Medium Non-Domestic		5-8	-	•		-			

Tariff name	Unique billing identifier	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO 0000: LV Network Domestic		-		-	-	-			
LDNO 0000: LV Network Non-Domestic Non-CT		-		-	-	-			
LDNO 0000: LV HH Metered		0		-	-	-	-	-	-
LDNO 0000: LV Sub HH Metered		0		-	-	-	-	-	
LDNO 0000: HV HH Metered		0		-	-	-	-	-	-
LDNO 0000: NHH UMS category A		8	-						
LDNO 0000: NHH UMS category B		1							
LDNO 0000: NHH UMS category C		1							
LDNO 0000: NHH UMS category D		1							
LDNO 0000: LV UMS (Pseudo HH Metered)		0		-	-				
LDNO 0000: LV Generation NHH or Aggregate HH		8	-			-			
LDNO 0000: LV Sub Generation NHH		8				-			
LDNO 0000: LV Generation Intermittent		0				-			•
LDNO 0000: LV Generation Non-Intermittent		0		-	-	-			
LDNO 0000: LV Sub Generation Intermittent		0				-			
LDNO 0000: LV Sub Generation Non-Intermittent		0	-	-	-	-			-
LDNO 0000: HV Generation Intermittent		0				-			
LDNO 0000: HV Generation Non-Intermittent		0		-		-			

Annex 5 - Schedule of line loss factors

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

SP [Distribution - Illustra	ative LLFs for year	beginning 1 April	2020
Time periods	Period 1	Period 2	Period 3	Period 4
Time perious	(Name 1)	(Name 2)	(Name 3)	(Name 4)
Monday to Friday March to October	23:30 – 07:30	07:30 – 23:30		
Monday to Friday November to February	23:30 – 07:30	20:00 – 23:30	07:30 – 16:00 19:00 – 20:00	16:00 – 19:00
Saturday and Sunday All Year	23:30 – 07:30	07:30 – 23:30		
Notes	All the above times are in Uk	Clock time	_	_

	Generic demand and generation LLFs												
	Me	etered voltage, respective p	periods and associated LLF	Cs									
Metered voltage	Period 1	Period 2	Period 4	Associated LLFC									
Low-voltage network					100,101,110,111,112,113,1 14,115,116,117,118,119,12 0,121,130,132,133,134,135, 136,137,160,161,162,163,1 64,165,166,180,200,201,20 2,203,204,205,220,221,222, 223,224,225,240,241,242,2 43,244,245,246,260,280,40 0,402,500,504,603,604,607,608,781,782,783,784,785,7 94,795,900,901,902,903,91								
Low-voltage substation					404,506,507,602,609,610								
High-voltage network					301,302,401,501,505,599,6 00,601,605,606,611,612,61 5,616,617,798,799								
High-voltage substation					310,311,312,313,314,315,3 16,317,318,319,320,321,32 2,323,324,325,326,327,328, 329,330,331,332,333,334,3 35,336,337,338,339,340,75 0,751,752,753,754,755,756, 757,758,759,760,761,762,7 63,764,765,862,866,867								
33kV generic	· ·				·								
33kV generic													
132kV generic													
132kV generic													

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

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

Annex 6 - Charges for New or Amended Designated EHV Properties

to Overview

Note: The last of MPANE/MSDs provided may be incomplete: the DNO reserves the right to apply the listed charges to any other MPANE/MSDs associated with the site. E sites appear in both Mence 2 and Amere, it he charges in Annex 6 take procedence. Where an existing Designated EHV propry is modified and energised in the charging year, we may reacte the EECM charges to the modified Designated EHV Preporty.

Annex 6 - C	nex 6 - Charges for New or Amended Designated EHV Properties														
	SP Distribution - Effective from 1 April 2020 - Final new designated EHV charges														
Effective from date	Import Unique Identifier	LLFC	Import MPANs/MSIDs	Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
	EDCM import 1			EDCM export 1											
	EDCM import 2			EDCM export 2											
	EDCM import 3			EDCM export 3											
	EDCM import 4			EDCM export 4											
	EDCM import 5			EDCM export 5											
	EDCM import 6			EDCM export 6											
	EDCM import 7			EDCM export 7											
	EDCM import 8			EDCM export 8											
	EDCM import 9			EDCM export 9											
	EDCM import 10			EDCM export 10											

	SP Distribution - Effective from 1 April 2020 - Final new designated EHV line loss factors																
Effective from date	Import Unique Identifier	LLFC	Import MPANs/MSIDs	Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Import LLF period 1	Import LLF period 2	Import LLF period 3	Import LLF period 4	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													