Northern Powergrid (Northeast) Ltd

Use of System Charging Statement

Notice of Charges

Effective from

1 April 2019

Version 0.3

Northern Powergrid (Northeast) Ltd Registered Office: Lloyds Court, 78 Grey Street, Newcastle upon Tyne, NE1 6AF
Registered in England and Wales no. 2906593

Version Control

Version	Date	Description of version and any changes made
0.1	20 Dec 2017	This statement is based on version 0.1 of the common template developed during 2017.
0.1	06 Apr 2018	The form of this statement was approved by Ofgem on 29 March 2018. No changes to previous version.
0.2	07 Jan 2019	This statement has been revised to update Annex 5 based on the 2018 losses submission.
0.3	11 Feb 2019	This statement has been revised to update Annex 1 to include an amendment to charges to recover a claim for a last resort supply payment (LRSP) received from Octopus Energy Limited in January 2019. Details of the LRSP have also been provided in section 9 of this statement.
0.3	29 Mar 2019	The form of this statement was approved by Ofgem on 28 March 2019. No changes to previous version.

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

Contents

1. Introduction

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

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

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

- Common Distribution Charging Methodology (CDCM); for Low Voltage and High Voltage (LV and HV) Designated Properties as per DCUSA Schedule 16; and
- Extra-High Voltage Distribution Charging Methodology (EDCM); for Designated Extra-High Voltage (EHV) Properties as per DCUSA Schedule 18.

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 a premise 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.

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

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

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

http://www.northernpowergrid.com/document-library/charges

Validity period

1.8. This charging statement is valid for services provided from the effective from date stated on the front of this 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:

http://www.northernpowergrid.com/document-library/charges

Contact details

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

Commercial Manager - Charges
Northern Powergrid
Manor House
Station Road
New Penshaw
Houghton-le-Spring
DH4 7LA
e-mail:- UoS.Charges@northernpowergrid.com

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

Connection Record Maintenance
Northern Powergrid
Manor House
Station Road
New Penshaw
Houghton-le-Spring
DH4 7LA
e-mail:- connection.records@northernpowergrid.com

2. Charge application and definitions

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

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

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

Supercustomer billing and payment

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

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

2.6. The charges are applied on the basis of the LLFC assigned to the MPAN, and the units consumed within the time periods specified in this statement. All LLFCs are assigned at our sole discretion based on the tariff application rules set out in the appropriate charging methodology or elsewhere in this statement. Please refer to the section 'Incorrectly allocated charges' if you believe the allocated LLFC or tariff is incorrect.

Supercustomer charges

2.7. Supercustomer charges include the following components:

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

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

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

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

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

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

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

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

2.15. Where an MPAN has an invalid Settlement combination, the 'Domestic Unrestricted' fixed and unit charge will be applied as default until the invalid combination is corrected. Where there are multiple SSC/Time Pattern Regime (TPR) combinations, the default 'Domestic Unrestricted' fixed and unit charge will be applied for each invalid SSC/TPR combination.

2.16. 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 look-up table is provided in the spreadsheet that accompanies this statement[6].

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

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

[4] The Electricity (Unmetered Supply) Regulations 2001 available from http://www.legislation.gov.uk/uksi/2001/3263/made
[5] Balancing and Settlement Code Procedures on unmetered supplies are available from https://www.elexon.co.uk/bsc-related-documents/related-documents/bscps/
[6] Northern Powergrid (Northeast) – 2019-20 Schedule of Charges and other tables

Site-specific billing and payment

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

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

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

2.22. All LLFCs are assigned at our sole discretion based on the tariff application rules set out in the appropriate charging methodology or elsewhere in this statement. Please refer to section 'Incorrectly Allocated Charges' if you believe the allocated LLFC or tariff is incorrect.

Site-specific billed charges

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

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

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

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

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

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

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

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

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

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

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

Time periods for half-hourly metered properties

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

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

Time periods for pseudo half-hourly unmetered properties

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

Application of capacity charges

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

Chargeable capacity

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

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

2.39. Reductions to the MIC and/or MEC may only be permitted once in a 12 month period. Where the MIC and/or MEC is reduced, the new lower level will be agreed with reference to the level of the Customer's maximum demand. The new MIC and/or MEC will be applied from the start of the next billing period after the date that the request was received. It should be noted that, where a new lower level is agreed, the original capacity may not be available in the future without the need for network reinforcement and associated charges.

2.40. In the absence of an agreement, the chargeable capacity, save for error or omission, will be based on the last MIC and/or MEC previously agreed by us for the relevant premise's connection. A Customer can seek to agree or vary the MIC and/or MEC by contacting us using the contact details in section 1.

Exceeded capacity

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

Demand exceeded capacity

$$\text{Demand Exceeded Capacity} = \max\left(2 \times \sqrt{AI^2 + \max(RI, RE)^2} - MIC,\ 0\right)$$

Where:

AI = Active import (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

MIC = Maximum import capacity (kVA)

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

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

Generation exceeded capacity

$$\text{Generation Exceeded Capacity} = \max\left(2 \times \sqrt{AE^2 + \max(RI, RE)^2} - MEC, 0\right)$$

Where:

AE = Active export (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

MEC = Maximum export capacity (kVA)

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

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

Standby capacity for additional security on site

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

Minimum capacity levels

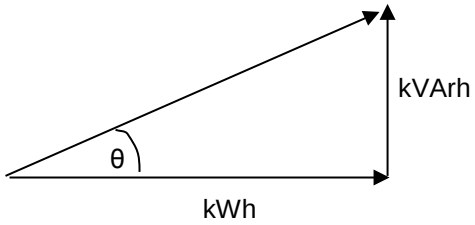
2.47. There is no minimum capacity threshold.

Application of charges for excess reactive power

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

2.49. Power Factor is calculated as follows:

Cos θ = Power Factor



2.50. The chargeable reactive power is calculated as follows:

Demand chargeable reactive power

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

Where:

AI = Active import (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

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

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

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

Generation chargeable reactive power

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

Where:

AE = Active export (kWh)

RI = Reactive import (kVArh)

RE = Reactive export (kVArh)

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

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

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

Incorrectly allocated charges

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

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

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

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

2.61. Where it has been identified that a charge may have been incorrectly allocated due to the wrong 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.

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

2.63. Where we agree that the current 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; whichever is the shorter.

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

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

Generation charges for pre-2005 Designated EHV Properties

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

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

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

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

Provision of billing data

2.68. Where HH metering data is required for UoS charging and this is not provided in accordance with the BSC or the DCUSA through settlement processes, such metering data shall be provided by the User of the system in respect of each calendar month within five working days of the end of that calendar month.

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

2.70. Metering data shall be provided in an electronic format specified by us from time to time, and in the absence of such specification, metering data shall be provided in a comma-separated text file in the format of Master Registration Agreement (MRA) data flow D0036[7] (as agreed with us). The data shall be e-mailed to:

Duos.billing@northernpowergrid.com

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

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

Licensed distribution network operator charges

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

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

2.75. Where a NHH metered MPAN has an invalid settlement combination, the 'LDNO HV: Domestic Unrestricted' fixed and unit charge will be applied as default until the invalid combination is corrected. Where there are multiple SSC/TPR combinations, the default 'LDNO HV: Domestic Unrestricted' fixed and unit charge will be applied for each invalid SSC/TPR combination.

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

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

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

Licence exempt distribution networks

2.78. The Electricity and Gas (Internal Market) Regulations 2011[8] introduced new obligations on owners of licence exempt distribution networks (sometimes called private networks) including a duty to facilitate access to electricity and gas suppliers for Customers within those networks.

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

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

Full settlement metering

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

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

Difference metering

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

Gross settlement

2.84. Where one of our MPANs (prefix 15) is embedded within a licence exempt distribution network connected to our Distribution System, and a dispensation for 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.

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

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

- be provided in a text file in the format of the D0036 MRA data flow;
- the text file shall be emailed to Duos.billing@northernpowergrid.com;
- 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;
- 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".

2.86. 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:

http://www.northernpowergrid.com/document-library/charges

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

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

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

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

4. Schedule of line loss factors

Role of line loss factors in the supply of electricity

4.1. Electricity entering or exiting our Distribution System is adjusted to take account of energy that is lost[9] 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[10] (LLFs) and providing these to Elexon. Elexon is the company that manages the BSC.

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

Calculation of line loss factors

4.4. LLFs are calculated in accordance with BSC procedure 128. BSCP128 sets out the procedures 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 method or a site-specific method. The generic method is used for sites connected at LV or HV and the site-specific method is used for sites connected at EHV or where a request for site-specific LLFs has been agreed. Generic LLFs will be applied as a default to all new EHV sites until sufficient data is available for a site-specific calculation.

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

4.7. The Elexon website[11] contains more information on LLFs.

Publication of Line loss factors

4.8. The LLFs used in Settlement are published on the Elexon Portal website[12]. 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.

[9] 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.

[10] Also referred to as Loss Adjustment Factors.

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

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

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

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

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

5. Notes for Designated EHV Properties

EDCM nodal costs

5.1. A table is provided in the accompanying spreadsheet which shows the underlying Long Run Incremental Cost (LRIC) nodal costs used to calculate the current EDCM charges. This spreadsheet is available to download from our website:

http://www.northernpowergrid.com/document-library/charges

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 of this statement.

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

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

Charges for amended Designated EHV Properties

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

Demand side management

5.8. For those premises where UoS is charged under the EDCM, some customers may be able to benefit from entering into a Demand Side Management (DSM) agreement with us.

5.9. DSM arrangements are based on a formal commitment by the customer to materially reduce their MIC in certain time periods, as determined by us, for active network management purposes other than normal planned or unplanned outages.

5.10. For new connections, the customer must make an express statement in their application that they have an interest in some, or all, of the import capacity for their intended connection or modified connection being interruptible for active network management purposes.

5.11. Where the customer enters into a DSM agreement by agreeing to reduce their MIC to meet the defined parameters in the agreement, reduced UoS charges will apply. The chargeable capacity will be equal to the MIC minus the capacity that is subject to restrictions under the DSM agreement. The scale of the reduction will vary by site and is linked to the LRIC element of the charge in line with the approved charging methodology.

5.12. Any reduction in UoS charges applicable to the customer will be assessed on a site-specific basis by us. Any customers who wish to enquire whether they can take advantage of DSM should in the first instance contact:

Commercial Manager - Charges
Manor House
Station Road
New Penshaw
Houghton-le-Spring
DH4 7LA
e-mail:- UoS.charges@northernpowergrid.com

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 paragraphs.

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. Northern Powergrid has no charges applicable to this section.

9. Last Resort Supply Payment – February 2019 Update

9.1. In July 2018, Iresa Limited ceased trading. Ofgem subsequently appointed Octopus Energy Limited as the Supplier of Last Resort for Iresa Limited's gas and electricity customers. In taking on Iresa Limited's customers, Octopus Energy Limited also took on some liabilities, including any credit balances which customers of Iresa Limited held at the time of failure.

9.2. On 24 January 2019, Ofgem gave consent for Octopus Energy Limited to make a claim of £13.2m for a Last Resort Supply Payment[13]. Under the standard conditions of the electricity supply licence (condition 9), the Supplier of Last Resort must make any such claim from gas and electricity distributors. Electricity distribution network operators are collectively liable for £7.2m (55%) of the total claim, and on 30 January 2019, we received a claim for £0.4m[14] (i.e. the Specified Amount as defined in standard condition 38 '*Treatment of payment claims for last-resort supply*' of the electricity distribution licence (SLC38)).

9.3. Under SLC38, a distributor receiving a Valid Claim for a Last Resort Supply Payment must increase its UoS charges in the Relevant Regulatory Year (as defined in SLC38), being the next regulatory year if the claim is received more than 60 days prior to the start of that year. As we received a Valid Claim more than 60 days prior to the start of 2019/20, we must increase UoS charges in 2019/20 to recover the Specified Amount.

9.4. Ofgem has directed that the 15 months' notice required of a change to UoS charges for 2019/20 need not apply in this case, and has directed that we are not required to change charges in accordance with our approved charging methodologies. We will

[13] https://www.ofgem.gov.uk/publications-and-updates/last-resort-supplier-payment-claim-octopus-energy-final-decision
[14] Precisely, £389,445.58

increase fixed charges for domestic unrestricted, domestic two rate and LV network domestic customers only[15].

9.5. The increase in fixed charges for these tariffs has been calculated as follows, rounded to two decimal places:

$$Supplementary\ fixed\ charge\ (p/day) = \left(\frac{A/B}{C}\right) \times 100$$

Where:

A = Amount to be recovered, being £389,445.58

B = Total combined forecast customer numbers for domestic unrestricted, domestic two rate and LV network domestic tariffs (from the published CDCM model for 2019/20), being 1,479,189

C = Days in the year, being 366

9.6. The resulting 0.08p/day increase in fixed charge for the aforementioned customers has been applied in this statement, and hence the tariffs published in this statement do not mirror either those originally published in December 2017, nor those in the published CDCM model for 2019/20. All other tariffs remain unaltered from the original December 2017 publication.

[15] https://www.ofgem.gov.uk/publications-and-updates/decision-grant-all-dnos-derogations-charging-years-201920-and-202021-due-last-resort-supply-payment-claim

Appendix 1 - Glossary of Terms

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

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

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

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

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

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

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

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

Appendix 2 - Guidance notes[16]

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

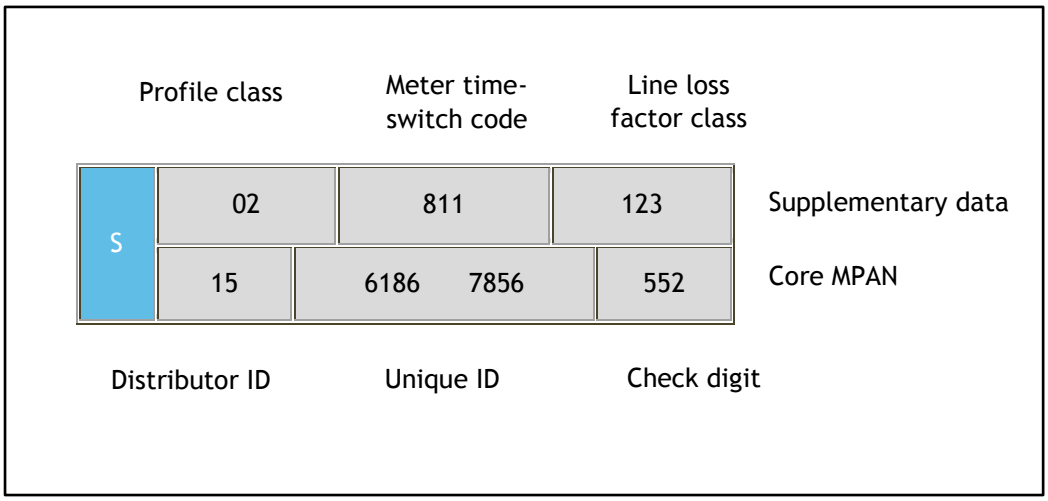
1.5. We are responsible for managing the electricity supply points that are connected to our Distribution System. Typically every supply point is identified by a Meter Point Administration Number (MPAN). A few supply points may have more than one MPAN depending on the metering configuration (e.g. a school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

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.

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

Full MPAN diagram example



1.8. Generally, you will only need to know the Distributor ID and line loss factor class to identify the distribution charges for your premises. However, there are some premises where charges are specific to that site. In these instances the charges are identified by the core MPAN. The Distributor ID for Northern Powergrid Northeast is 15. 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 15 are provided in this statement.

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

1.14. Once you have identified which charge structure applies to your MPAN then you will be able to calculate an estimate of your distribution charge using the calculator provided in the spreadsheet 'Schedule of charges and other tables' found in the sheet called 'Charge Calculator'. This spreadsheet can be downloaded from our website http://www.northernpowergrid.com/document-library/charges.

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 the peak periods and generation credits more beneficial, although the ability to directly benefit will be linked to the structure of your supply charges.

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

Reactive power and reactive power charges

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

1.18. Reactive Power (kVAr) 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 LRIC methodology. 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 LRIC 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 section 1.

The LRIC 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 LRIC 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 LRIC 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

Northern Powergrid (Northeast) Ltd - Effective from 1 April 2019 - Final LV and HV charges

Time Bands for Half Hourly Metered Properties			
Time periods	**Red Time Band**	**Amber Time Band**	**Green Time Band**
Monday to Friday (Including Bank Holidays) All Year	16:00 to 19:30	08:00 to 16:00 19:30 to 22:00	00:00 to 08:00 22:00 to 24:00
Saturday and Sunday All Year			00:00 to 24:00
Notes	All the above times are in UK Clock time		

Time Bands for Half Hourly Unmetered Properties			
	Black Time Band	**Yellow Time Band**	**Green Time Band**
Monday to Friday (Including Bank Holidays) November to February Inclusive	16:00 to 19:30	08:00 to 16:00 19:30 to 22:00	00:00 to 08:00 22:00 to 24:00
Monday to Friday (Including Bank Holidays) April to October Inclusive and March		08:00 to 22:00	00:00 to 08:00 22:00 to 24:00
Saturday and Sunday All year			00:00 to 24:00
Notes	All the above times are in UK Clock time		

Tariff name	Open LLFCs	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh	Closed LLFCs
Domestic Unrestricted *	1	1	2.355			5.57				998, 999
Domestic Two Rate *	2	2	2.674	1.131		5.57				
Domestic Off Peak (related MPAN)	12	2	1.250							
Small Non Domestic Unrestricted	203	3	2.379			5.84				
Small Non Domestic Two Rate	204	4	2.600	1.166		5.84				
Small Non Domestic Off Peak (related MPAN)	205	4	1.311							
LV Medium Non-Domestic	257	5-8	2.290	1.120		30.49				
LV Sub Medium Non-Domestic	265	5-8	2.343	1.152		30.50				
HV Medium Non-Domestic	304	5-8	1.653	1.103		284.23				
LV Network Domestic *	249	0	7.567	1.910	1.117	5.57				
LV Network Non-Domestic Non-CT	278	0	7.934	1.958	1.120	5.84				
LV HH Metered	251	0	5.589	1.641	1.099	15.90	1.77	4.14	0.166	
LV Sub HH Metered	293	0	4.010	1.419	1.086	15.90	2.49	4.11	0.097	
HV HH Metered	301	0	3.266	1.314	1.080	151.06	2.39	4.32	0.067	
NHH UMS category A	506	8	1.972							
NHH UMS category B	507	1	2.283							
NHH UMS category C	508	1	3.317							
NHH UMS category D	509	1	1.762							
LV UMS (Pseudo HH Metered)	554 & 555	0	18.384	1.815	1.112					
LV Generation NHH or Aggregate HH	774	8&0	(0.671)							
LV Sub Generation NHH	776	8	(0.595)							
LV Generation Intermittent	792	0	(0.671)						0.141	
LV Generation Intermittent no RP charge	392	0	(0.671)							
LV Generation Non-Intermittent	794	0	(4.445)	(0.583)	(0.042)				0.141	
LV Generation Non-Intermittent no RP charge	394	0	(4.445)	(0.583)	(0.042)					
LV Sub Generation Intermittent	793	0	(0.595)						0.134	
LV Sub Generation Intermittent no RP charge	393	0	(0.595)							
LV Sub Generation Non-Intermittent	795	0	(3.947)	(0.514)	(0.038)				0.134	
LV Sub Generation Non-Intermittent no RP charge	395	0	(3.947)	(0.514)	(0.038)					
HV Generation Intermittent	796	0	(0.379)			84.92			0.104	
HV Generation Intermittent no RP charge	396	0	(0.379)			84.92				
HV Generation Non-Intermittent	798	0	(2.548)	(0.311)	(0.027)	84.92			0.104	
HV Generation Non-Intermittent no RP charge	398	0	(2.548)	(0.311)	(0.027)	84.92				

*The fixed charges for these tariffs are inclusive of the Ofgem approved adjustment (0.08p/day) to recover Octopus Energy Limited's last resort supply payment claim: https://www.ofgem.gov.uk/publications-and-updates/decision-grant-all-dnos-derogations-charging-years-201920-and-202021-due-last-resort-supply-payment-claim

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

Northern Powergrid (Northeast) Ltd - Effective from 1 April 2019 - Final EDCM charges

Time Periods for Designated EHV Properties	
Time periods	**Super Red Time Band**
Monday to Friday (Including Bank Holidays) November to February Inclusive	1600 - 1930
Notes	All the above times are in UK Clock time

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
	601	1592001005770 1592101005776		701	1574000216135 1594001005774	EHV Site Specific - Generation Exempt (LLFC 601 & 701)		715.82	0.72	0.72				
	603	1592001051182				EHV Site Specific (LLFC 603)		8,053.96	1.92	1.92				
	604	MSID_7299		727	MSID_7300	EHV Site Specific (LLFC 604 & 727)		52.97	0.77	0.77		1,059.37	0.05	0.05
	605	1592001092676				EHV Site Specific (LLFC 605)	0.372	1,997.93	1.75	1.75				
	606	1592001092719				EHV Site Specific (LLFC 606)	0.408	3,995.86	2.00	2.00				
	607	1592001092728				EHV Site Specific (LLFC 607)	1.182	3,995.86	2.91	2.91				
	608	1592001092737				EHV Site Specific (LLFC 608)	0.037	3,995.86	2.70	2.70				
	609	1592001046085				EHV Site Specific (LLFC 609)		703.73	3.05	3.05				
	611	1592001111628				EHV Site Specific (LLFC 611)		3,493.87	4.97	4.97				
	612	1592001073112		704	1594001073116	EHV Site Specific (LLFC 612 & 704)	0.448	184.47	1.18	1.18	(0.565)	1,844.66	0.05	0.05
	613	TBC				EHV Site Specific (LLFC 613)	0.982	65.85	1.16	1.16				
	614	1592001055257		709	1594001055250	EHV Site Specific (LLFC 614 & 709)		6,364.26	0.53	0.53		1,272.85	0.05	0.05
	615 & 616	1592001055239 1592001055248				EHV Site Specific (LLFC 615 & 616)	0.309	3,313.77	2.63	2.63				
	617	1592001110572				EHV Site Specific (LLFC 617)		9,368.64	1.80	1.80				
	618	1592001094308				EHV Site Specific (LLFC 618)	0.239	3,342.48	5.17	5.17				
	619	1570000150382		710	1594000000038	EHV Site Specific - Generation Exempt (LLFC 619 & 710)	0.027	24.00	1.33	1.33				
	620	1592001007476				EHV Site Specific (LLFC 620)		1,407.46	5.02	5.02				
	621	1592001007494				EHV Site Specific (LLFC 621)	0.091	65.85	2.21	2.21				
	622	1592001036574		711	1594001036578	EHV Site Specific - Generation Exempt (LLFC 622 & 711)	0.163	465.53	1.50	1.50				
	624	1592001063540		804	1574000324772	EHV Site Specific (LLFC 624 & 804)	0.009	3,063.56	2.46	2.46		958.73	0.05	0.05
	625	1592001006890		748	1594001006893	EHV Site Specific - Generation Exempt (LLFC 625 & 748)	1.158	25.46	2.32	2.32				
	627	1570000199077		729	1574000199083	EHV Site Specific - Generation Exempt (LLFC 627 & 729)		1,104.16	1.49	1.49				
	626	1592001005637				EHV Site Specific (LLFC 626)	0.237	3,132.37	3.99	3.99				
	628	1592001111405				EHV Site Specific (LLFC 628)	1.081	601.63	4.06	4.06				
	631	1592001110216				EHV Site Specific (LLFC 631)		65.85	3.38	3.38				
	632	1592001007467				EHV Site Specific (LLFC 632)	0.286	256.45	4.18	4.18				
	633	1580001273940 1580001273950				EHV Site Specific (LLFC 633)	0.180	3,439.26	2.71	2.71				
	637	1592001141543		728	1594001141547	EHV Site Specific - Generation Exempt (LLFC 637 & 728)	0.053	1,299.31	1.52	1.52				
	680	1580000675845		759	1574000275033	EHV Site Specific (LLFC 680 & 759)	0.250	2.96	1.17	1.17		125.26	0.05	0.05
	681	1580000872387		760	1574000283735	EHV Site Specific (LLFC 681 & 760)	0.285	106.93	1.27	1.27		4,277.30	0.05	0.05
	544	1570000124531		761	1594000000047	EHV Site Specific - Generation Exempt (LLFC 544 & 761)		11.25	0.81	0.81				
	682	1580000909309		762	1574000285644	EHV Site Specific (LLFC 682 & 762)	0.448	805.14	0.84	0.84	(0.565)	4,391.65	0.05	0.05
	691	1592101007746				EHV Site Specific (LLFC 691)	0.062	32.92	4.59	4.59				
	683	1570000166434		763	1594000000029	EHV Site Specific - Generation Exempt (LLFC 683 & 763)		6.44	1.05	1.05				
	692	1580000867554 1580000911799				EHV Site Specific (LLFC 692)	1.218	65.85	2.70	2.70				
	693	1592001074941				EHV Site Specific (LLFC 693)	0.813	32.92	3.71	3.71				
	694	1570000190631				EHV Site Specific (LLFC 694)	0.353	65.85	5.29	5.29				
	695	1580000918163 1580000918172				EHV Site Specific (LLFC 695)	0.003	65.85	2.92	2.92				
	684	1580001085400		764	1574000298500	EHV Site Specific (LLFC 684 & 764)	0.006	589.61	1.33	1.33	(0.148)	3,931.23	0.05	0.05
	685	1580001132432		765	1574000302403	EHV Site Specific (LLFC 685 & 765)		31.91	0.66	0.66		874.38	0.05	0.05
	686	1580001150566 1580001150575		766	1574000303940 1574000303959	EHV Site Specific (LLFC 686 & 766)		311.53	0.53	0.53		19,339.22	0.05	0.05
	687	TBC				EHV Site Specific (LLFC 687)		2,017.98	1.24	1.24				
	688	1580001208659		767	1574000309384	EHV Site Specific (LLFC 688 & 767)		17.36	1.89	1.89		1,978.85	0.05	0.05
	689	1580001208668		768	1574000309375	EHV Site Specific (LLFC 689 & 768)		90.78	1.73	1.73		3,918.00	0.05	0.05
	690	1580001174414		782	1574000306374	EHV Site Specific (LLFC 690 & 782)	0.241	36.80	2.71	2.71		1,324.71	0.05	0.05

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

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
	540	1580001190763		783	1574000307917	EHV Site Specific (LLFC 540 & 783)	0.001	2.12	1.25	1.25	(0.035)	511.47	0.05	0.05
	541	1580001197945		784	1574000308405	EHV Site Specific (LLFC 541 & 784)	0.524	315.86	3.90	3.90	(0.637)	4,667.02	0.05	0.05
	542	1580001278406		785	1574000315040	EHV Site Specific (LLFC 542 & 785)		169.30	0.81	0.81		313.20	0.05	0.05
	543	1580001278415				EHV Site Specific (LLFC 543)		3,992.41	0.98	0.98				
	545	1580001417656				EHV Site Specific (LLFC 545)	0.064	17,393.39	1.31	1.31				
	547	1580001440530		787	1574000324470	EHV Site Specific (LLFC 547 & 787)		32.26	1.77	1.77		2,228.06	0.05	0.05
	548	1580001440520		788	1574000324461	EHV Site Specific (LLFC 548 & 788)		64.28	1.76	1.76		5,563.62	0.05	0.05
	549	1580001487955		789	1574000327286	EHV Site Specific (LLFC 549 & 789)		258.78	2.12	2.12		18,287.13	0.05	0.05
	560	MSID 7331		806	MSID 7333	EHV Site Specific (LLFC 560 & 806)		32.41	1.91	1.91		2,690.13	0.05	0.05
	561	1580001519739		807	1574000328420	EHV Site Specific (LLFC 561 & 807)		51.34	1.70	1.70		8,899.60	0.05	0.05
	563	1580001448895		802	1574000324790	EHV Site Specific (LLFC 563 & 802)	0.723	1.34	1.93	1.93		126.88	0.05	0.05
	562	1580001448900		769	1574000324781	EHV Site Specific (LLFC 562 & 769)	0.723	1.34	1.84	1.84		126.88	0.05	0.05
	564	1580001527952		803	1574000328703	EHV Site Specific (LLFC 564 & 803)		248.29	1.91	1.91		248.29	0.05	0.05
	565	1580001498380		805	1574000327505	EHV Site Specific (LLFC 565 & 805)	0.183	130.51	2.52	2.52	(0.285)	511.05	0.05	0.05
	567	1580001531639		809	1574000328810	EHV Site Specific (LLFC 567 & 809)	0.361	7.03	3.36	3.36		606.91	0.05	0.05
	566	1580001511800		808	1574000328094	EHV Site Specific (LLFC 566 & 808)	0.001	495.72	2.45	2.45	(0.014)	1,990.84	0.05	0.05

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

Northern Powergrid (Northeast) Ltd - Effective from 1 April 2019 - Final EDCM import charges

Import Unique Identifier	LLFC	Import MPANs/MSIDs	Name	Import Super Red unit charge (p/kWh)	Import fixed charge (p/day)	Import capacity charge (p/kVA/day)	Import exceeded capacity charge (p/kVA/day)
	601	1592001005770 1592101005776	EHV Site Specific - Generation Exempt (LLFC 601 & 701)		715.82	0.72	0.72
	603	1592001051182	EHV Site Specific (LLFC 603)		8,053.96	1.92	1.92
	604	MSID_7299	EHV Site Specific (LLFC 604 & 727)		52.97	0.77	0.77
	605	1592001092676	EHV Site Specific (LLFC 605)	0.372	1,997.93	1.75	1.75
	606	1592001092719	EHV Site Specific (LLFC 606)	0.408	3,995.86	2.00	2.00
	607	1592001092728	EHV Site Specific (LLFC 607)	1.182	3,995.86	2.91	2.91
	608	1592001092737	EHV Site Specific (LLFC 608)	0.037	3,995.86	2.70	2.70
	609	1592001046085	EHV Site Specific (LLFC 609)		703.73	3.05	3.05
	611	1592001111628	EHV Site Specific (LLFC 611)		3,493.87	4.97	4.97
	612	1592001073112	EHV Site Specific (LLFC 612 & 704)	0.448	184.47	1.18	1.18
	613	TBC	EHV Site Specific (LLFC 613)	0.982	65.85	1.16	1.16
	614	1592001055257	EHV Site Specific (LLFC 614 & 709)		6,364.26	0.53	0.53
	615 & 616	1592001055239 1592001055248	EHV Site Specific (LLFC 615 & 616)	0.309	3,313.77	2.63	2.63
	617	1592001110572	EHV Site Specific (LLFC 617)		9,368.64	1.80	1.80
	618	1592001094308	EHV Site Specific (LLFC 618)	0.239	3,342.48	5.17	5.17
	619	1570000150382	EHV Site Specific - Generation Exempt (LLFC 619 & 710)	0.027	24.00	1.33	1.33
	620	1592001007476	EHV Site Specific (LLFC 620)		1,407.46	5.02	5.02
	621	1592001007494	EHV Site Specific (LLFC 621)	0.091	65.85	2.21	2.21
	622	1592001036574	EHV Site Specific - Generation Exempt (LLFC 622 & 711)	0.163	465.53	1.50	1.50
	624	1592001063540	EHV Site Specific (LLFC 624 & 804)	0.009	3,063.56	2.46	2.46
	625	1592001006890	EHV Site Specific - Generation Exempt (LLFC 625 & 748)	1.158	25.46	2.32	2.32
	627	1570000199077	EHV Site Specific - Generation Exempt (LLFC 627 & 729)		1,104.16	1.49	1.49
	626	1592001005637	EHV Site Specific (LLFC 626)	0.237	3,132.37	3.99	3.99
	628	1592001111405	EHV Site Specific (LLFC 628)	1.081	601.63	4.06	4.06
	631	1592001110216	EHV Site Specific (LLFC 631)		65.85	3.38	3.38
	632	1592001007467	EHV Site Specific (LLFC 632)	0.286	256.45	4.18	4.18
	633	1580001273940 1580001273950	EHV Site Specific (LLFC 633)	0.180	3,439.26	2.71	2.71
	637	1592001141543	EHV Site Specific - Generation Exempt (LLFC 637 & 728)	0.053	1,299.31	1.52	1.52
	680	1580000675845	EHV Site Specific (LLFC 680 & 759)	0.250	2.96	1.17	1.17
	681	1580000872387	EHV Site Specific (LLFC 681 & 760)	0.285	106.93	1.27	1.27
	544	1570000124531	EHV Site Specific - Generation Exempt (LLFC 544 & 761)		11.25	0.81	0.81
	682	1580000909309	EHV Site Specific (LLFC 682 & 762)	0.448	805.14	0.84	0.84
	691	1592101007746	EHV Site Specific (LLFC 691)	0.062	32.92	4.59	4.59
	683	1570000166434	EHV Site Specific - Generation Exempt (LLFC 683 & 763)		6.44	1.05	1.05
	692	1580000867554 1580000911799	EHV Site Specific (LLFC 692)	1.218	65.85	2.70	2.70
	693	1592001074941	EHV Site Specific (LLFC 693)	0.813	32.92	3.71	3.71
	694	1570000190631	EHV Site Specific (LLFC 694)	0.353	65.85	5.29	5.29
	695	1580000918163 1580000918172	EHV Site Specific (LLFC 695)	0.003	65.85	2.92	2.92
	684	1580001085400	EHV Site Specific (LLFC 684 & 764)	0.006	589.61	1.33	1.33
	685	1580001132432	EHV Site Specific (LLFC 685 & 765)		31.91	0.66	0.66
	686	1580001150566 1580001150575	EHV Site Specific (LLFC 686 & 766)		311.53	0.53	0.53
	687	TBC	EHV Site Specific (LLFC 687)		2,017.98	1.24	1.24
	688	1580001208659	EHV Site Specific (LLFC 688 & 767)		17.36	1.89	1.89
	689	1580001208668	EHV Site Specific (LLFC 689 & 768)		90.78	1.73	1.73
	690	1580001174414	EHV Site Specific (LLFC 690 & 782)	0.241	36.80	2.71	2.71
	540	1580001190763	EHV Site Specific (LLFC 540 & 783)	0.001	2.12	1.25	1.25
	541	1580001197945	EHV Site Specific (LLFC 541 & 784)	0.524	315.86	3.90	3.90
	542	1580001278406	EHV Site Specific (LLFC 542 & 785)		169.30	0.81	0.81
	543	1580001278415	EHV Site Specific (LLFC 543)		3,992.41	0.98	0.98
	545	1580001417656	EHV Site Specific (LLFC 545)	0.064	17,393.39	1.31	1.31
	547	1580001440530	EHV Site Specific (LLFC 547 & 787)		32.26	1.77	1.77
	548	1580001440520	EHV Site Specific (LLFC 548 & 788)		64.28	1.76	1.76
	549	1580001487955	EHV Site Specific (LLFC 549 & 789)		258.78	2.12	2.12
	560	MSID_7331	EHV Site Specific (LLFC 560 & 806)		32.41	1.91	1.91
	561	1580001519739	EHV Site Specific (LLFC 561 & 807)		51.34	1.70	1.70
	563	1580001448895	EHV Site Specific (LLFC 563 & 802)	0.723	1.34	1.93	1.93
	562	1580001448900	EHV Site Specific (LLFC 562 & 769)	0.723	1.34	1.84	1.84
	564	1580001527952	EHV Site Specific (LLFC 564 & 803)		248.29	1.91	1.91
	565	1580001498380	EHV Site Specific (LLFC 565 & 805)	0.183	130.51	2.52	2.52
	567	1580001531639	EHV Site Specific (LLFC 567 & 809)	0.361	7.03	3.36	3.36
	566	1580001511800	EHV Site Specific (LLFC 566 & 808)	0.001	495.72	2.45	2.45

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

Northern Powergrid (Northeast) Ltd - Effective from 1 April 2019 - Final EDCM export charges

Export Unique Identifier	LLFC	Export MPANs/MSIDs	Name	Export Super Red unit charge (p/kWh)	Export fixed charge (p/day)	Export capacity charge (p/kVA/day)	Export exceeded capacity charge (p/kVA/day)
	701	1574000216135 1594001005774	EHV Site Specific - Generation Exempt (LLFC 601 & 701)				
	727	MSID_7300	EHV Site Specific (LLFC 604 & 727)		1,059.37	0.05	0.05
	704	1594001073116	EHV Site Specific (LLFC 612 & 704)	(0.565)	1,844.66	0.05	0.05
	709	1594001055250	EHV Site Specific (LLFC 614 & 709)		1,272.85	0.05	0.05
	710	1594000000038	EHV Site Specific - Generation Exempt (LLFC 619 & 710)				
	711	1594001036578	EHV Site Specific - Generation Exempt (LLFC 622 & 711)				
	804	1574000324772	EHV Site Specific (LLFC 624 & 804)		958.73	0.05	0.05
	748	1594001006893	EHV Site Specific - Generation Exempt (LLFC 625 & 748)				
	729	1574000199083	EHV Site Specific - Generation Exempt (LLFC 627 & 729)				
	728	1594001141547	EHV Site Specific - Generation Exempt (LLFC 637 & 728)				
	759	1574000275033	EHV Site Specific (LLFC 680 & 759)		125.26	0.05	0.05
	760	1574000283735	EHV Site Specific (LLFC 681 & 760)		4,277.30	0.05	0.05
	761	1594000000047	EHV Site Specific - Generation Exempt (LLFC 544 & 761)				
	762	1574000285644	EHV Site Specific (LLFC 682 & 762)	(0.565)	4,391.65	0.05	0.05
	763	1594000000029	EHV Site Specific - Generation Exempt (LLFC 683 & 763)				
	764	1574000298500	EHV Site Specific (LLFC 684 & 764)	(0.148)	3,931.23	0.05	0.05
	765	1574000302403	EHV Site Specific (LLFC 685 & 765)		874.38	0.05	0.05
	766	1574000303940 1574000303959	EHV Site Specific (LLFC 686 & 766)		19,339.22	0.05	0.05
	767	1574000309384	EHV Site Specific (LLFC 688 & 767)		1,978.85	0.05	0.05
	768	1574000309375	EHV Site Specific (LLFC 689 & 768)		3,918.00	0.05	0.05
	782	1574000306374	EHV Site Specific (LLFC 690 & 782)		1,324.71	0.05	0.05
	783	1574000307917	EHV Site Specific (LLFC 540 & 783)	(0.035)	511.47	0.05	0.05
	784	1574000308405	EHV Site Specific (LLFC 541 & 784)	(0.637)	4,667.02	0.05	0.05
	785	1574000315040	EHV Site Specific (LLFC 542 & 785)		313.20	0.05	0.05
	787	1574000324470	EHV Site Specific (LLFC 547 & 787)		2,228.06	0.05	0.05
	788	1574000324461	EHV Site Specific (LLFC 548 & 788)		5,563.62	0.05	0.05
	789	1574000327286	EHV Site Specific (LLFC 549 & 789)		18,287.13	0.05	0.05
	806	MSID_7333	EHV Site Specific (LLFC 560 & 806)		2,690.13	0.05	0.05
	807	1574000328420	EHV Site Specific (LLFC 561 & 807)		8,899.60	0.05	0.05
	802	1574000324790	EHV Site Specific (LLFC 563 & 802)		126.88	0.05	0.05
	769	1574000324781	EHV Site Specific (LLFC 562 & 769)		126.88	0.05	0.05
	803	1574000328703	EHV Site Specific (LLFC 564 & 803)		248.29	0.05	0.05
	805	1574000327505	EHV Site Specific (LLFC 565 & 805)	(0.285)	511.05	0.05	0.05
	809	1574000328810	EHV Site Specific (LLFC 567 & 809)		606.91	0.05	0.05
	808	1574000328094	EHV Site Specific (LLFC 566 & 808)	(0.014)	1,990.84	0.05	0.05

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

Northern Powergrid (Northeast) Ltd - Effective from 1 April 2019 - Final LV and HV tariffs									
NHH preserved charges/additional LLFCs									
	Closed LLFCs	PCs	Unit charge 1 (NHH) p/kWh	Unit charge 2 (NHH) p/kWh	Fixed charge p/MPAN/day				
Notes:	Unit time periods are as specified in the SSC.								

HH preserved charges/additional LLFCs									
	Closed LLFCs	PCs	Red/black charge (HH) p/kWh	Amber/yellow charge (HH) p/kWh	Green charge (HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
Notes:	Time periods								
	Unit charges in the red time band apply – between 16:00 and 19:30, Monday to Friday including bank holidays.								
	Unit charges in the amber time band apply – between 08:00 and 16:00; and between 19:30 and 22:00, Monday to Friday including bank holidays.								
	Unit charges in the green time band apply – between 00:00 and 08:00; and between 22:00 and 24:00, Monday to Friday including bank holidays, and between 00:00 and 24:00 Saturday and Sunday.								
	All times are UK clock-time.								

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

Northern Powergrid (Northeast) Ltd - Effective from 1 April 2019 - Final LDNO tariffs

Time Bands for Half Hourly Metered Properties			
Time periods	**Red Time Band**	**Amber Time Band**	**Green Time Band**
Monday to Friday (Including Bank Holidays) All Year	16:00 to 19:30	08:00 to 16:00 19:30 to 22:00	00:00 to 08:00 22:00 to 24:00
Saturday and Sunday All Year			00:00 to 24:00
Notes	All the above times are in UK Clock time		

Time Bands for Half Hourly Unmetered Properties			
	Black Time Band	**Yellow Time Band**	**Green Time Band**
Monday to Friday (Including Bank Holidays) November to February Inclusive	16:00 to 19:30	08:00 to 16:00 19:30 to 22:00	00:00 to 08:00 22:00 to 24:00
Monday to Friday (Including Bank Holidays) April to October Inclusive and March		08:00 to 22:00	00:00 to 08:00 22:00 to 24:00
Saturday and Sunday All year			00:00 to 24:00
Notes	All the above times are in UK Clock time		

Tariff name	Unique billing identifier	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO LV: Domestic Unrestricted	150	1	1.412			3.29			
LDNO LV: Domestic Two Rate	151	2	1.603	0.678		3.29			
LDNO LV: Domestic Off Peak (related MPAN)	152	2	0.749						
LDNO LV: Small Non Domestic Unrestricted	153	3	1.426			3.50			
LDNO LV: Small Non Domestic Two Rate	154	4	1.559	0.699		3.50			
LDNO LV: Small Non Domestic Off Peak (related MPAN)	155	4	0.786						
LDNO LV: LV Medium Non-Domestic	156	5-8	1.373	0.671		18.28			
LDNO LV: LV Network Domestic	199	0	4.536	1.145	0.670	3.29			
LDNO LV: LV Network Non-Domestic Non-CT	206	0	4.756	1.174	0.671	3.50			
LDNO LV: LV HH Metered	157	0	3.351	0.984	0.659	9.53	1.06	2.48	0.100
LDNO LV: NHH UMS category A	37	8	1.182						
LDNO LV: NHH UMS category B	38	1	1.369						
LDNO LV: NHH UMS category C	39	1	1.989						
LDNO LV: NHH UMS category D	40	1	1.056						
LDNO LV: LV UMS (Pseudo HH Metered)	170	0	11.021	1.088	0.667				
LDNO LV: LV Generation NHH or Aggregate HH	172	8&0	(0.671)						
LDNO LV: LV Generation Intermittent	173	0	(0.671)						0.141
LDNO LV: LV Generation Non-Intermittent	174	0	(4.445)	(0.583)	(0.042)				0.141
LDNO HV: Domestic Unrestricted	158	1	0.858			2.00			
LDNO HV: Domestic Two Rate	159	2	0.975	0.412		2.00			
LDNO HV: Domestic Off Peak (related MPAN)	160	2	0.456						
LDNO HV: Small Non Domestic Unrestricted	161	3	0.867			2.13			
LDNO HV: Small Non Domestic Two Rate	162	4	0.948	0.425		2.13			
LDNO HV: Small Non Domestic Off Peak (related MPAN)	163	4	0.478						
LDNO HV: LV Medium Non-Domestic	164	5-8	0.835	0.408		11.11			
LDNO HV: LV Network Domestic	207	0	2.758	0.696	0.407	2.00			
LDNO HV: LV Network Non-Domestic Non-CT	208	0	2.892	0.714	0.408	2.13			
LDNO HV: LV HH Metered	165	0	2.037	0.598	0.401	5.80	0.65	1.51	0.061
LDNO HV: LV Sub HH Metered	166	0	2.457	0.869	0.665	9.74	1.53	2.52	0.059
LDNO HV: HV HH Metered	167	0	2.460	0.990	0.814	113.79	1.80	3.25	0.050
LDNO HV: NHH UMS category A	41	8	0.719						
LDNO HV: NHH UMS category B	42	1	0.832						
LDNO HV: NHH UMS category C	43	1	1.209						
LDNO HV: NHH UMS category D	44	1	0.642						
LDNO HV: LV UMS (Pseudo HH Metered)	171	0	6.702	0.662	0.405				
LDNO HV: LV Generation NHH or Aggregate HH	175	8&0	(0.671)						
LDNO HV: LV Sub Generation NHH	176	8	(0.595)						
LDNO HV: LV Generation Intermittent	177	0	(0.671)						0.141
LDNO HV: LV Generation Non-Intermittent	178	0	(4.445)	(0.583)	(0.042)				0.141
LDNO HV: LV Sub Generation Intermittent	179	0	(0.595)						0.134
LDNO HV: LV Sub Generation Non-Intermittent	180	0	(3.947)	(0.514)	(0.038)				0.134
LDNO HV: HV Generation Intermittent	181	0	(0.379)			0.00			0.104
LDNO HV: HV Generation Non-Intermittent	182	0	(2.548)	(0.311)	(0.027)	0.00			0.104
LDNO HVplus: Domestic Unrestricted	50	1	0.653			1.52			
LDNO HVplus: Domestic Two Rate	51	2	0.741	0.314		1.52			
LDNO HVplus: Domestic Off Peak (related MPAN)	52	2	0.347						
LDNO HVplus: Small Non Domestic Unrestricted	53	3	0.660			1.62			
LDNO HVplus: Small Non Domestic Two Rate	54	4	0.721	0.323		1.62			

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

Tariff name	Unique billing identifier	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO HVplus: Small Non Domestic Off Peak (related MPAN)	55	4	0.363						
LDNO HVplus: LV Medium Non-Domestic	56	5-8	0.635	0.310		8.45			
LDNO HVplus: LV Sub Medium Non-Domestic	0	5-8	1.077	0.530		14.02			
LDNO HVplus: HV Medium Non-Domestic	0	5-8	0.925	0.617		159.03			
LDNO HVplus: LV Network Domestic	209	0	2.098	0.529	0.310	1.52			
LDNO HVplus: LV Network Non-Domestic Non-CT	210	0	2.199	0.543	0.310	1.62			
LDNO HVplus: LV HH Metered	57	0	1.549	0.455	0.305	4.41	0.49	1.15	0.046
LDNO HVplus: LV Sub HH Metered	58	0	1.844	0.652	0.499	7.31	1.14	1.89	0.045
LDNO HVplus: HV HH Metered	59	0	1.827	0.735	0.604	84.52	1.34	2.42	0.037
LDNO HVplus: NHH UMS category A	45	8	0.547						
LDNO HVplus: NHH UMS category B	46	1	0.633						
LDNO HVplus: NHH UMS category C	47	1	0.920						
LDNO HVplus: NHH UMS category D	48	1	0.488						
LDNO HVplus: LV UMS (Pseudo HH Metered)	61	0	5.096	0.503	0.308				
LDNO HVplus: LV Generation NHH or Aggregate HH	62	8	(0.309)						
LDNO HVplus: LV Sub Generation NHH	63	8	(0.333)						
LDNO HVplus: LV Generation Intermittent	64	0	(0.309)						0.065
LDNO HVplus: LV Generation Non-Intermittent	65	0	(2.044)	(0.268)	(0.019)				0.065
LDNO HVplus: LV Sub Generation Intermittent	66	0	(0.333)						0.075
LDNO HVplus: LV Sub Generation Non-Intermittent	67	0	(2.208)	(0.288)	(0.021)				0.075
LDNO HVplus: HV Generation Intermittent	68	0	(0.379)			84.92			0.104
LDNO HVplus: HV Generation Non-Intermittent	69	0	(2.548)	(0.311)	(0.027)	84.92			0.104
LDNO EHV: Domestic Unrestricted	70	1	0.454			1.06			
LDNO EHV: Domestic Two Rate	71	2	0.515	0.218		1.06			
LDNO EHV: Domestic Off Peak (related MPAN)	72	2	0.241						
LDNO EHV: Small Non Domestic Unrestricted	73	3	0.458			1.13			
LDNO EHV: Small Non Domestic Two Rate	74	4	0.501	0.225		1.13			
LDNO EHV: Small Non Domestic Off Peak (related MPAN)	75	4	0.253						
LDNO EHV: LV Medium Non-Domestic	76	5-8	0.441	0.216		5.88			
LDNO EHV: LV Sub Medium Non-Domestic	0	5-8	0.749	0.368		9.75			
LDNO EHV: HV Medium Non-Domestic	0	5-8	0.643	0.429		110.55			
LDNO EHV: LV Network Domestic	211	0	1.458	0.368	0.215	1.06			
LDNO EHV: LV Network Non-Domestic Non-CT	212	0	1.529	0.377	0.216	1.13			
LDNO EHV: LV HH Metered	77	0	1.077	0.316	0.212	3.06	0.34	0.80	0.032
LDNO EHV: LV Sub HH Metered	78	0	1.282	0.454	0.347	5.08	0.80	1.31	0.031
LDNO EHV: HV HH Metered	79	0	1.270	0.511	0.420	58.75	0.93	1.68	0.026
LDNO EHV: NHH UMS category A	183	8	0.380						
LDNO EHV: NHH UMS category B	184	1	0.440						
LDNO EHV: NHH UMS category C	185	1	0.639						
LDNO EHV: NHH UMS category D	186	1	0.340						
LDNO EHV: LV UMS (Pseudo HH Metered)	81	0	3.543	0.350	0.214				
LDNO EHV: LV Generation NHH or Aggregate HH	82	8	(0.214)						
LDNO EHV: LV Sub Generation NHH	83	8	(0.231)						
LDNO EHV: LV Generation Intermittent	84	0	(0.214)						0.045
LDNO EHV: LV Generation Non-Intermittent	85	0	(1.421)	(0.186)	(0.013)				0.045
LDNO EHV: LV Sub Generation Intermittent	86	0	(0.231)						0.052
LDNO EHV: LV Sub Generation Non-Intermittent	87	0	(1.535)	(0.200)	(0.015)				0.052
LDNO EHV: HV Generation Intermittent	88	0	(0.263)			59.03			0.072
LDNO EHV: HV Generation Non-Intermittent	89	0	(1.771)	(0.216)	(0.019)	59.03			0.072
LDNO 132kV/EHV: Domestic Unrestricted	90	1	0.301			0.70			
LDNO 132kV/EHV: Domestic Two Rate	91	2	0.341	0.144		0.70			
LDNO 132kV/EHV: Domestic Off Peak (related MPAN)	92	2	0.160						
LDNO 132kV/EHV: Small Non Domestic Unrestricted	93	3	0.304			0.75			
LDNO 132kV/EHV: Small Non Domestic Two Rate	94	4	0.332	0.149		0.75			
LDNO 132kV/EHV: Small Non Domestic Off Peak (related MPAN)	95	4	0.167						
LDNO 132kV/EHV: LV Medium Non-Domestic	96	5-8	0.292	0.143		3.89			
LDNO 132kV/EHV: LV Sub Medium Non-Domestic	0	5-8	0.496	0.244		6.46			
LDNO 132kV/EHV: HV Medium Non-Domestic	0	5-8	0.426	0.284		73.22			
LDNO 132kV/EHV: LV Network Domestic	213	0	0.966	0.244	0.143	0.70			
LDNO 132kV/EHV: LV Network Non-Domestic Non-CT	214	0	1.013	0.250	0.143	0.75			

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

Tariff name	Unique billing identifier	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO 132kV/EHV: LV HH Metered	97	0	0.713	0.209	0.140	2.03	0.23	0.53	0.021
LDNO 132kV/EHV: LV Sub HH Metered	98	0	0.849	0.300	0.230	3.37	0.53	0.87	0.021
LDNO 132kV/EHV: HV HH Metered	99	0	0.841	0.338	0.278	38.91	0.62	1.11	0.017
LDNO 132kV/EHV: NHH UMS category A	187	8	0.252						
LDNO 132kV/EHV: NHH UMS category B	188	1	0.291						
LDNO 132kV/EHV: NHH UMS category C	189	1	0.423						
LDNO 132kV/EHV: NHH UMS category D	190	1	0.225						
LDNO 132kV/EHV: LV UMS (Pseudo HH Metered)	101	0	2.346	0.232	0.142				
LDNO 132kV/EHV: LV Generation NHH or Aggregate HH	102	8	(0.142)						
LDNO 132kV/EHV: LV Sub Generation NHH	103	8	(0.153)						
LDNO 132kV/EHV: LV Generation Intermittent	104	0	(0.142)						0.030
LDNO 132kV/EHV: LV Generation Non-Intermittent	105	0	(0.941)	(0.123)	(0.009)				0.030
LDNO 132kV/EHV: LV Sub Generation Intermittent	106	0	(0.153)						0.035
LDNO 132kV/EHV: LV Sub Generation Non-Intermittent	107	0	(1.017)	(0.132)	(0.010)				0.035
LDNO 132kV/EHV: HV Generation Intermittent	108	0	(0.174)			39.10			0.048
LDNO 132kV/EHV: HV Generation Non-Intermittent	109	0	(1.173)	(0.143)	(0.012)	39.10			0.048
LDNO 132kV: Domestic Unrestricted	110	1	0.153			0.36			
LDNO 132kV: Domestic Two Rate	111	2	0.173	0.073		0.36			
LDNO 132kV: Domestic Off Peak (related MPAN)	112	2	0.081						
LDNO 132kV: Small Non Domestic Unrestricted	113	3	0.154			0.38			
LDNO 132kV: Small Non Domestic Two Rate	114	4	0.169	0.076		0.38			
LDNO 132kV: Small Non Domestic Off Peak (related MPAN)	115	4	0.085						
LDNO 132kV: LV Medium Non-Domestic	116	5-8	0.148	0.073		1.98			
LDNO 132kV: LV Sub Medium Non-Domestic	0	5-8	0.252	0.124		3.28			
LDNO 132kV: HV Medium Non-Domestic	0	5-8	0.216	0.144		37.18			
LDNO 132kV: LV Network Domestic	215	0	0.490	0.124	0.072	0.36			
LDNO 132kV: LV Network Non-Domestic Non-CT	216	0	0.514	0.127	0.073	0.38			
LDNO 132kV: LV HH Metered	117	0	0.362	0.106	0.071	1.03	0.11	0.27	0.011
LDNO 132kV: LV Sub HH Metered	118	0	0.431	0.153	0.117	1.71	0.27	0.44	0.010
LDNO 132kV: HV HH Metered	119	0	0.427	0.172	0.141	19.76	0.31	0.57	0.009
LDNO 132kV: NHH UMS category A	191	8	0.128						
LDNO 132kV: NHH UMS category B	192	1	0.148						
LDNO 132kV: NHH UMS category C	193	1	0.215						
LDNO 132kV: NHH UMS category D	194	1	0.114						
LDNO 132kV: LV UMS (Pseudo HH Metered)	121	0	1.192	0.118	0.072				
LDNO 132kV: LV Generation NHH or Aggregate HH	122	8	(0.072)						
LDNO 132kV: LV Sub Generation NHH	123	8	(0.078)						
LDNO 132kV: LV Generation Intermittent	124	0	(0.072)						0.015
LDNO 132kV: LV Generation Non-Intermittent	125	0	(0.478)	(0.063)	(0.005)				0.015
LDNO 132kV: LV Sub Generation Intermittent	126	0	(0.078)						0.018
LDNO 132kV: LV Sub Generation Non-Intermittent	127	0	(0.516)	(0.067)	(0.005)				0.018
LDNO 132kV: HV Generation Intermittent	128	0	(0.089)			19.85			0.024
LDNO 132kV: HV Generation Non-Intermittent	129	0	(0.596)	(0.073)	(0.006)	19.85			0.024
LDNO 0000: Domestic Unrestricted	130	1	0.048			0.11			
LDNO 0000: Domestic Two Rate	131	2	0.054	0.023		0.11			
LDNO 0000: Domestic Off Peak (related MPAN)	132	2	0.025						
LDNO 0000: Small Non Domestic Unrestricted	133	3	0.048			0.12			
LDNO 0000: Small Non Domestic Two Rate	134	4	0.053	0.024		0.12			
LDNO 0000: Small Non Domestic Off Peak (related MPAN)	135	4	0.027						
LDNO 0000: LV Medium Non-Domestic	136	5-8	0.046	0.023		0.62			
LDNO 0000: LV Sub Medium Non-Domestic	0	5-8	0.079	0.039		1.03			
LDNO 0000: HV Medium Non-Domestic	0	5-8	0.068	0.045		11.64			
LDNO 0000: LV Network Domestic	217	0	0.154	0.039	0.023	0.11			
LDNO 0000: LV Network Non-Domestic Non-CT	218	0	0.161	0.040	0.023	0.12			
LDNO 0000: LV HH Metered	137	0	0.113	0.033	0.022	0.32	0.04	0.08	0.003
LDNO 0000: LV Sub HH Metered	138	0	0.135	0.048	0.037	0.54	0.08	0.14	0.003
LDNO 0000: HV HH Metered	139	0	0.134	0.054	0.044	6.19	0.10	0.18	0.003
LDNO 0000: NHH UMS category A	195	8	0.040						
LDNO 0000: NHH UMS category B	196	1	0.046						
LDNO 0000: NHH UMS category C	197	1	0.067						

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

Tariff name	Unique billing identifier	PCs	Unit charge 1 (NHH) or red/black charge (HH) p/kWh	Unit charge 2 (NHH) or amber/yellow charge (HH) p/kWh	Green charge(HH) p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Exceeded capacity charge p/kVA/day	Reactive power charge p/kVArh
LDNO 0000: NHH UMS category D	198	1	0.036						
LDNO 0000: LV UMS (Pseudo HH Metered)	141	0	0.373	0.037	0.023				
LDNO 0000: LV Generation NHH or Aggregate HH	142	8	(0.023)						
LDNO 0000: LV Sub Generation NHH	143	8	(0.024)						
LDNO 0000: LV Generation Intermittent	144	0	(0.023)						0.005
LDNO 0000: LV Generation Non-Intermittent	145	0	(0.150)	(0.020)	(0.001)				0.005
LDNO 0000: LV Sub Generation Intermittent	146	0	(0.024)						0.005
LDNO 0000: LV Sub Generation Non-Intermittent	147	0	(0.162)	(0.021)	(0.002)				0.005
LDNO 0000: HV Generation Intermittent	148	0	(0.028)			6.22			0.008
LDNO 0000: HV Generation Non-Intermittent	149	0	(0.187)	(0.023)	(0.002)	6.22			0.008

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.

Northern Powergrid (Northeast) Ltd - Illustrative LLFs for year beginning 1 April 2019				
Time periods	**Period 1**	**Period 2**	**Period 3**	**Period 4**
Monday – Friday (Apr-Oct)			00:30 – 07:30	00:00 – 00:30 07:30 – 24:00
Monday – Friday (Nov)		07:30 – 20:00	00:30 – 07:30	00:00 – 00:30 20:00 – 24:00
Monday – Friday (Dec – Feb)	16:30 – 18:30	07:30 – 16:30 18:30 – 20:00	00:30 – 07:30	00:00 – 00:30 20:00 – 24:00
Monday – Friday (Mar)			00:30 – 07:30	00:00 – 00:30 07:30 – 24:00
Saturday and Sunday All Year			00:30 – 07:30	00:00 – 00:30 07:30 – 24:00
Notes	All the above times are in UK Clock time			

Generic demand and generation LLFs					
Metered voltage, respective periods and associated LLFCs					
Metered voltage	**Period 1**	**Period 2**	**Period 3**	**Period 4**	**Associated LLFC**
Low Voltage Network	1.086	1.079	1.066	1.070	1, 12, 2, 203, 204, 205, 249, 251, 257, 278, 392, 394, 506, 507, 508, 509, 554, 555, 774, 792, 794, 998, 999
Low Voltage Substation	1.040	1.039	1.042	1.039	265, 293, 393, 395, 776, 793, 795
High Voltage Network	1.025	1.023	1.019	1.021	301, 304, 396, 398, 796, 798
High Voltage Substation	1.015	1.015	1.014	1.014	691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 777, 778, 779, 780, 781
Greater than 22kV connected - generation	1.010	1.010	1.008	1.009	564, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 613
Greater than 22kV connected - demand	1.010	1.010	1.008	1.009	803, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825

EHV site specific LLFs					
Demand					
Site	**Period 1**	**Period 2**	**Period 3**	**Period 4**	**Associated LLFC**
Site 1	1.013	1.009	1.006	1.006	601
Site 2	1.002	1.002	1.002	1.002	603
Site 3	1.003	1.003	1.003	1.003	604
Site 4	1.013	1.013	1.018	1.013	605
Site 5	1.021	1.022	1.055	1.023	606
Site 6	1.022	1.022	1.044	1.022	607
Site 7	1.037	1.049	1.157	1.055	608
Site 8	1.006	1.005	1.006	1.006	609
Site 9	1.014	1.013	1.013	1.014	611
Site 10	1.006	1.006	1.004	1.005	612
Site 11	1.007	1.007	1.008	1.009	614
Site 12	1.005	1.005	1.004	1.005	615
Site 13	1.006	1.006	1.004	1.005	616
Site 14	1.007	1.007	1.007	1.007	617

Annex 5 – Schedule of Line Loss Factors

Metered voltage	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Site 15	1.013	1.013	1.012	1.012	618
Site 16	1.016	1.014	1.011	1.013	619
Site 17	1.000	1.000	1.000	1.000	620
Site 18	1.020	1.020	1.044	1.028	621
Site 19	1.021	1.019	1.024	1.020	622
Site 20	1.007	1.007	1.006	1.007	624
Site 21	1.016	1.015	1.015	1.015	625
Site 22	1.013	1.010	1.008	1.008	627
Site 23	1.046	1.024	1.020	1.021	626
Site 24	1.017	1.017	1.013	1.014	628
Site 25	1.008	1.008	1.008	1.008	631
Site 26	1.005	1.005	1.005	1.005	632
Site 27	1.015	1.016	1.016	1.015	633
Site 28	1.012	1.011	1.014	1.014	637
Site 29	1.086	1.093	1.089	1.087	680
Site 30	1.046	1.049	1.042	1.043	681
Site 31	1.015	1.009	1.007	1.007	544
Site 32	1.005	1.005	1.004	1.004	682
Site 33	1.014	1.015	1.016	1.017	683
Site 34	1.006	1.006	1.005	1.006	684
Site 35	1.011	1.012	1.012	1.011	685
Site 36	1.001	1.001	1.005	1.006	686
Site 37	1.015	1.015	1.014	1.014	687
Site 38	1.083	1.090	1.071	1.074	688
Site 39	1.190	1.178	1.158	1.164	689
Site 40	1.093	1.108	1.109	1.100	690
Site 41	1.013	1.015	1.020	1.017	540
Site 42	1.005	1.005	1.004	1.004	541
Site 43	1.002	1.003	1.002	1.002	542
Site 44	1.110	1.109	1.101	1.107	543
Site 45	1.042	1.039	1.741	1.149	545
Site 46	1.025	1.021	1.015	1.019	547
Site 47	1.042	1.039	1.032	1.039	548
Site 48	1.194	1.186	1.185	1.199	549
Site 49	1.010	1.010	1.008	1.009	560
Site 50	1.010	1.010	1.008	1.009	561
Site 51	1.050	1.046	1.042	1.041	563
Site 52	1.148	1.134	1.111	1.109	562
Site 53	1.024	1.022	1.016	1.019	565
Site 54	1.010	1.010	1.008	1.009	567
Site 55	1.010	1.010	1.008	1.009	566

EHV site specific LLFs					
Generation					
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Site 1	1.013	1.007	1.004	1.004	701
Site 2	0.999	0.998	0.997	0.998	727
Site 3	1.007	1.006	1.003	1.004	704

Annex 5 – Schedule of Line Loss Factors

Metered voltage	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Site 4	0.996	0.997	0.995	0.995	709
Site 5	1.020	1.019	1.015	1.016	710
Site 6	0.989	0.990	0.980	0.985	711
Site 7	1.010	1.010	1.008	1.009	804
Site 8	1.010	1.010	1.002	1.006	748
Site 9	1.013	1.006	1.003	1.002	729
Site 10	1.000	1.000	0.992	0.992	728
Site 11	1.005	1.003	1.001	1.003	759
Site 12	0.998	0.998	0.994	0.995	760
Site 13	1.014	1.008	1.000	1.005	761
Site 14	1.007	1.007	1.003	1.005	762
Site 15	0.982	0.983	0.986	0.991	763
Site 16	1.002	1.001	0.998	0.999	764
Site 17	1.001	1.001	1.001	1.001	765
Site 18	0.998	0.998	0.998	0.998	766
Site 19	1.051	1.050	1.044	1.044	767
Site 20	1.049	1.047	1.040	1.040	768
Site 21	1.000	1.002	0.996	0.999	782
Site 22	1.000	1.000	1.000	0.998	783
Site 23	1.007	1.007	1.003	1.005	784
Site 24	1.000	1.000	0.923	0.926	785
Site 25	1.000	0.998	0.993	0.996	787
Site 26	0.999	0.997	0.993	0.996	788
Site 27	0.993	0.993	0.992	0.992	789
Site 28	1.010	1.010	1.008	1.009	806
Site 29	1.010	1.010	1.008	1.009	807
Site 30	1.020	1.014	1.007	1.005	802
Site 31	1.025	1.014	1.008	1.005	769
Site 32	1.010	1.010	1.008	1.009	805
Site 33	1.010	1.010	1.008	1.009	809
Site 34	1.010	1.010	1.008	1.009	808

Annex 6 – Charges for New or Amended Designated EHV Properties

Nodal costs can be found in the spreadsheet that accompanies this statement.