

# **ELECTRICITY NORTH WEST**

**Use of System Charging Statement** 

**INDICATIVE NOTICE** 

**Effective from 1st April 2013** 

Version 9.0

304 Bridgewater Place

Birchwood Park

Warrington

Cheshire

WA3 6XG

Registered no: 2366949 (England)

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#### 9. Glossary of Terms

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- Annex 1 Schedule of Charges for use of the Distribution System by LV and HV Designated Properties
- Annex 2 Schedule of Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users).
- Annex 3 Schedule of Charges for use of the Distribution System to Preserved/Additional LLFC Classes
- Annex 4 Charges applied to LDNOs with HV/LV end users
- Annex 5 Schedule of Line Loss Factors
- Annex 6 Un-scaled nodal costs

#### 1. Introduction

1.1. This statement has been prepared in order to discharge Electricity North West's obligation under Standard Licence Condition 14 of our Electricity Distribution Licence. It contains information on our charges¹ and charging principles for use of our Distribution System. It also contains information on our Line Loss Factors.

1.2. The charges in this statement are calculated using the Common Distribution Charging Methodology (CDCM) for LV/HV Designated Properties and the EHV Distribution Charging Methodology (EDCM) for Designated EHV Properties. The application of charges to a premise can be referenced using the Line Loss Factor Class (LLFC) contained in the charge tables.

1.3. If you have any questions about this statement please contact us at the address shown below:

**Charging Manager** 

Customer Contracts & Supplier Liaision

**Electricity North West** 

304 Bridgewater Place

Birchwood park

Warrington

WA3 6XG

Email: electricitycommercialpolicy@enwl.co.uk

Telephone 01925 846855

1.4. All enquiries regarding Connection Agreements and Changes to Maximum Capacities should be addressed to:

**Business Improvements Manager** 

**Electricity North West** 

Hartington Road

Preston

PR18LE

Email: terms&conditions@enwl.co.uk

Telephone 0800 0481820

<sup>&</sup>lt;sup>1</sup> Charges can be positive or negative.

1.5. For all other queries please contact our general enquiries telephone number:01925 846999, lines are open 09:00 - 17:00 Monday to Friday.

Fax 01925 846990

Email: enquiries@enwl.co.uk.

## 2. Charge Application and Definitions

#### **Supercustomer Billing and Payment**

- 2.1. Supercustomer billing and payment applies to Metering Points registered as Non-Half Hourly (NHH) metered. The Supercustomer approach makes use of aggregated data obtained from the Supercustomer DUoS Report.
- 2.2. Invoices are calculated on a periodic basis and sent to each User, for whom Electricity North West is transporting electricity through its Distribution System. Invoices are reconciled, over a period of approximately 14 months, to ensure the cash positions of Users and Electricity North West are adjusted to reflect later and more accurate consumption figures.
- 2.3. The charges are applied on the basis of the Line Loss Factor Classes (LLFCs) assigned to the MPAN, and the units consumed within the time periods specified in this statement. These time periods may not necessarily be the same as those indicated by the Time Pattern Regimes (TPRs) associated to the Standard Settlement Class (SSC) specific to DNOs. All Line Loss Factor Classes (LLFCs) are assigned at the sole discretion of Electricity North West. The charges in this document are shown exclusive of VAT. Invoices take account of previous Settlement runs and include VAT.

#### **Supercustomer Charges**

- 2.4. Supercustomer charges are generally billed through the following components:
  - A fixed charge pence/MPAN/day, there will only be one fixed charge applied to each Metering Point Administration Number (MPAN) in respect of which you are registered; and
  - Unit charges pence/kilowatt-hour (kWh), based on the active consumption/production as provided through Settlement. More than one kWh charge may be applied.
- 2.5. These charges apply to Exit/Entry Points where NHH metering is used for Settlement.
- 2.6. Users who wish to supply electricity to Customers whose Metering System is Measurement Class A and settled on Profile Classes 1 through to 8 will be allocated the relevant charge structure set out in Annex 1.

- 2.7. Identification of the appropriate charge can be made by cross reference to the LLFC.
- 2.8. Valid Settlement Profile Class/Standard Settlement Configuration/Meter Timeswitch Code (PC/SSC/MTC) combinations for these LLFCs are detailed in Market Domain Data (MDD).
- 2.9. 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-TPR combinations, the default 'Domestic Unrestricted' fixed and unit charge will be applied for each invalid TPR combination.
- 2.10. The time periods for the charge rates are as specified by the SSC. To determine the appropriate charge rate for each SSC/TPR a lookup table is provided in the spreadsheet that accompanies this statement<sup>2</sup>.
- 2.11. The Domestic Off-Peak and Small Non-Domestic Off-Peak charges are supplementary to either an Unrestricted or a Two Rate charge.

### **Site-Specific Billing and Payment**

- 2.12. Site-specific billing and payment applies to Metering Points registered as Half Hourly (HH) metered. The site-specific billing and payment approach to Use of System billing makes use of Half Hourly (HH) metering data received through Settlement.
- 2.13. Invoices are calculated on a periodic basis and sent to each User, for whom Electricity North West is transporting electricity through its 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.
- 2.14. The charges are applied on the basis of the Line Loss Factor Classes (LLFCs) assigned to the MPAN (or the MSID for CVA sites), and the units consumed within the time periods specified in this statement. All Line Loss Factor Classes (LLFCs) are assigned at the sole discretion of Electricity North West. The charges in this document are shown exclusive of VAT.

## **Site-Specific Billed Charges**

2.15. Site-Specific billed charges may include the following components:

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<sup>&</sup>lt;sup>2</sup> Electricity North West - Schedule of charges and other tables - Version7.xlsx

- A fixed charge pence/MPAN/day;
- A capacity charge, pence/kVA/day, for agreed 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, for transportation of electricity over the system;
   and
- An excess reactive power charge, pence/kVArh, for each unit in excess of the reactive charge threshold.
- 2.16. These charges apply to Exit/Entry Points where HH metering, or an equivalent meter, is used for Settlement purposes.
- 2.17. Users who wish to supply electricity to Customers whose Metering System is Measurement Class C or E or CVA will be allocated the relevant charge structure dependent upon the voltage and location of the Metering Point.
- 2.18. Fixed charges are generally levied on a pence per MPAN basis. Where two or more HH MPANs 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.
- 2.19. LV & HV Designated Properties as calculated using the CDCM will be allocated the relevant charge structure set out in Annex 1.
- 2.20. Designated EHV Properties as calculated using the EDCM will be allocated the relevant charge structure set out in Annex 2.

#### **Time Periods for Half Hourly Metered Properties**

- 2.21. The time periods for the application of unit charges to LV & HV Designated Properties which are Half Hourly metered are as follows:
  - Unit charges in the red time band apply between 16:30 and 18:30, Mon to Fri including Bank Holidays
  - Unit charges in the amber time band apply between 09:00 and 16:30 and 18:30 to 20:30, Mon to Fri including Bank Holidays and between 16:30 and 18:30 Sat and Sun
  - Unit charges in the green time band apply between 00:00 and 09:00 and 20:30 and 24:00, Mon to Fri including Bank Holidays, and between 00:00 and 16:30 and 18:30 and 24:00 Sat and Sun
  - All times are UK clock time.

Electricity North West has not issued a notice to change the time bands.

- 2.22. The time periods for the application of unit charges to Designated EHV Properties are as follows:
  - Unit charges in the super red time band apply between 16:30 and 18:30,
     Mon to Fri including Bank Holidays during Nov to Feb
  - · All times are UK clock time.

Electricity North West has not issued a notice to change the time bands.

## **Charges for Unmetered Supplies**

- 2.23. Users who wish to supply electricity to Customers whose Metering System is Measurement Class B or Measurement Class D will be allocated the relevant charge structure in the Annex 1.
- 2.24. These charges are available to Exit Points which Electricity North West deems to be suitable as Unmetered Supplies as permitted in the Electricity (Unmetered Supply) Regulations 2001<sup>3</sup> and where operated in accordance with BSCP520<sup>4</sup>.

## **Time Periods for Half Hourly Unmetered Properties**

- 2.25. The time periods for the application of unit charges to connections which are pseudo HH metered are as follows:
  - Unit charges in the black time band apply between 16:30 and 18:30, Mon to Fri including Bank Holidays during Nov to Feb
  - Unit charges in the yellow time band apply between 09:00 and 16:30 and 18:30 to 20:30, Mon to Fri including Bank Holidays and between 16:30 and 18:30 Sat and Sun during Mar to Oct and between 16:30 and 18:30, Mon to Fri including Bank Holidays during Mar to Oct
  - Unit charges in the green time band apply between 00:00 and 09:00 and 20:30 and 24:00, Mon to Fri including Bank Holidays, and between 00:00 and 16:30 and 18:30 and 24:00 Sat and Sun

#### **Use of System Charges Out of Area**

Electricity North West does not operate networks outside its Distribution Service Area.

#### **Application of Capacity Charges**

#### **Chargeable Capacity**

2.26. The Chargeable Capacity is, for each billing period, the highest of the MIC/MEC or the actual capacity, calculated as detailed below.

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

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

- 2.27. The MIC/MEC will be agreed with Electricity North West 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 period of one year. In the absence of an agreement the chargeable capacity, save for error or omission, will be based on the last MIC and/or MEC previously agreed by the distributor for the relevant premises' connection. A Customer can seek to agree or vary the MIC and/or MEC by contacting Electricity North West using the contact details in paragraph 1.4.
- 2.28. Reductions to the MIC/MEC may only be permitted once in a 12 month period and no retrospective changes will be allowed. Where MIC/MEC is reduced the new lower level will be agreed with reference to the level of the Customer's maximum demand. 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 cost.

### **Demand Chargeable Capacity**

Demand Chargeable Capacity =  $Max(2 \times \sqrt{Al^2 + max(Rl,RE)^2},MlC)$ 

Where:

AI = Import consumption in kWh

RI = Reactive import in kVArh

RE = Reactive export in kVArh

MIC = Maximum Import Capacity in kVA

- 2.29. This calculation is completed for every half hour and the maximum value from the billing period is captured.
- 2.30. Only kVArh Import and kVArh Export values occurring at times of kWh Import are used.

#### **Generation Chargeable Capacity**

Generation Chargeable Capacity =  $Max(2 \times \sqrt{AE^2 + max(RI,RE)^2},MEC)$ 

Where:

AE = Export Production in kWh

RI = Reactive import in kVArh

RE = Reactive export in kVArh

MEC = Maximum Export Capacity in kVA

- 2.31. This calculation is completed for every half hour and the maximum value from the billing period is captured.
- 2.32. Only kVArh Import and kVArh Export values occurring at times of kWh Export are used.

#### Standby Capacity for Additional Security on Site

2.33. Where standby capacity charges are applied, the charge will be set at the same rate as that applied to normal MIC.

#### **Exceeded Capacity**

2.34. 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. This will be charged for the duration of the full month in which the breach occurs.

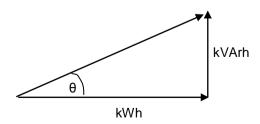
#### **Minimum Capacity Levels**

2.35. There is no minimum capacity threshold.

## Application of charges for excess reactive power

- 2.36. The excess reactive power charge applies when a site's reactive power (measured in kVArh) exceeds 33% of total active power (measured in kWh) in any half-hourly period. 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.
- 2.37. Power Factor is calculated as follows:

 $Cos \theta = Power Factor$ 



2.38. The chargeable reactive power is calculated as follows:

#### **Demand Chargeable Reactive Power**

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

Where:

AI = Active Import in kWh

RI = Reactive Import in kVArh

RE = Reactive Export in kVArh

- 2.39. This calculation is completed for every half hour and the values summated over the billing period.
- 2.40. Only kVArh Import and kVArh Export values occurring at times of kWh Import are used.
- 2.41. The square root calculation will be to two decimal places.

#### **Generation Chargeable Reactive Power**

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

Where:

AE = Active Export in kWh

RI = Reactive Import in kVArh

RE = Reactive Export in kVArh

- 2.42. This calculation is completed for every half hour and the values summated over the billing period.
- 2.43. Only kVArh Import and kVArh Export values occurring at times of kWh Export are used.
- 2.44. The square root calculation will be to two decimal places.

#### Provision of billing data

2.45. Where HH metering data is required for Use of System charging and this is not provided through Settlement processes, such metering data shall be provided by the User of the system to Electricity North West in respect of each calendar month within 5 working days of the end of that calendar month. The metering data shall identify the amount consumed and/or produced in each half hour of

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each day and shall separately identify active and reactive import and export. Metering data provided to the Electricity North West shall be consistent with that received through the metering equipment installed. Metering data shall be provided in an electronic format specified by Electricity North West 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 D0036 MRA data flow (as agreed Electricity North West). The data shall e-mailed with he enquiries@enwl.co.uk

2.46. Electricity North West requires reactive consumption or production to be provided for all Measurement Class C (mandatory HH metered) sites and for Measurement Class E (elective HH metered sites). Electricity North West reserves the right to levy a charge on Users who fail to provide such reactive data. Where data is missing, Electricity North West will use an estimate of the data. Details of how the missing data has been estimated are available on request.

## **Licensed Distributor Network Operator (LDNO) charges**

- 2.47. LDNO charges are applied to LDNOs who operate Embedded Networks within Electricity North West area.
- 2.48. The charge structure for LV and HV Designated Properties end users embedded in Networks operated by LDNOs will mirror the structure of the 'all-the-way' charge and is dependent upon the voltage of connection of each Embedded Network to the Host DNO's network. The same charge elements will apply as those that match the LDNO's end Customer charges.
- 2.49. Where an 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 TPR combination.
- 2.50. The charge structure for Designated EHV Properties end-users embedded in Networks operated by LDNOs will be calculated individually using the EDCM.
- 2.51. For Nested Networks the Host DNO charges (or pays) the Nested LDNO on the basis of discounted charges for the voltage of connection of the Intermediate LDNO to the Host DNO, irrespective of the connection of the Nested LDNO to the Intermediate LDNO. Additional arrangements might exist between the

Nested LDNO and the Intermediate LDNO; these arrangements are not covered in this statement.

## 3. Schedule of Charges for use of the Distribution System

- 3.1. Tables listing the charges for the distribution of electricity under use of system are published in annexes of this document.
- 3.2. These charges are also listed in a spreadsheet which is published with this statement and can be downloaded from www.enwl.co.uk.
- 3.3. Annex 1 contains charges to LV and HV Designated Properties.
- 3.4. Annex 2 contains the charges to Designated EHV Properties and charges applied to LDNOs with Designated EHV Properties/end-users embedded in Networks within the Electricity North West area.
- 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 with LV and HV Designated Properties end users embedded in Networks within the Electricity North West area.

#### 4. Schedule of Line Loss Factors

#### Role of Line Loss Factors in the Supply of Electricity

- 4.1. Electricity entering or exiting the DNOs' networks is adjusted to take account of energy which is lost<sup>5</sup> as it is distributed through the network.
- 4.2. This adjustment is made to ensure that energy bought or sold by a User, from/to a Customer, accounts for energy lost as part of distributing energy to and from the Customer's premises.
- 4.3. DNOs are responsible for calculating the Line Loss Factors (LLFs) and providing these factors to Elexon. Elexon manage the Balancing and Settlement Code. The code covers the governance and rules for the balancing and settlement arrangements.
- 4.4. Annex 5 provides the LLFs which must be used to adjust the Metering System volumes to take account of losses on the Distribution Network.

#### **Calculation of Line Loss Factors**

- 4.5. LLFs are calculated in accordance with BSC Procedure (BSCP) 128. BSCP 128 determines the principles which DNOs must comply with when calculating LLFs.
- 4.6. LLFs are either calculated using 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 to all new EHV sites until sufficient data is available for a site specific calculation.
- 4.7. The Elexon website (<a href="http://www.elexon.co.uk/pages/losses.aspx">http://www.elexon.co.uk/pages/losses.aspx</a>) contains more information on LLFs. This page also has links to BSCP 128 and to our LLF methodology.

#### **Line Loss Factor time periods**

4.8. LLFs are calculated for a set number of time periods during the year. These time periods are detailed in Annex 5.

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<sup>&</sup>lt;sup>5</sup> 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.

#### **Line Loss Factor tables**

- 4.9. When using the LLF tables in Annex 5 reference should be made to the LLFC allocated to the MPAN to find the appropriate LLF.
- 4.10. The Elexon Portal website, <a href="https://www.bsccentralservices.com/">https://www.bsccentralservices.com/</a>, contains the LLFs in standard industry data format (D0265). A user guide with details on registering and using the portal can be downloaded from <a href="https://www.bsccentralservices.com/index.php/userguide/download">https://www.bsccentralservices.com/index.php/userguide/download</a>.

### 5. Notes for Designated EHV Properties

#### **EDCM** nodal costs

- 5.1. The table in Annex 6 shows the un-scaled nodal costs used to calculate the current EDCM 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, i.e. 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.

## **Charges for New Designated EHV Properties**

- 5.3. When new Designated EHV Properties, that are not already included in the charging statement, are energised after publication of charging statements an addendum to the current statement will be issued incorporating the appropriate charges for the new site.
- 5.4. The form of the addendum is detailed in Annex 7 of this statement.
- 5.5. The addendum will be sent to DCUSA parties and published as a revised "Schedule of Charges and other tables" spreadsheet on our website. The addendum will include charge information that under enduring circumstances would be found in Annex 2 and line loss factors that would normally be found in Annex 5.
- 5.6. The new Designated EHV Properties charges will be added to Annex 2 in the next full statement released.

#### **Demand Side Management**

5.7. Electricity North West has a standard Demand Side Management (DSM) contract that is available to any customer that is charged under the Extra High Voltage Distribution Charging Methodology (EDCM). Under this contract, Electricity North West will pay a DSM payment to any EDCM customer who is willing to reduce their capacity by a minimum of 25% in the time periods specified by Electricity North West. The value of this payment will depend on the location of the EDCM site and how much spare capacity there is available on that part of the distribution network. Where the distribution network is very congested Electricity North West will pay more to the EDCM customer to

reduce their load. For more information please view the Electricity North West website using the following link: <a href="http://www.enwl.co.uk/our-services/use-of-system-charges/demand-side-management">http://www.enwl.co.uk/our-services/use-of-system-charges/demand-side-management</a> or contact our Commercial Policy team using the following email address: <a href="mailto:electricitycommercialpolicy@enwl.co.uk">electricitycommercialpolicy@enwl.co.uk</a>.

## 6. Electricity Distribution Rebates

6.1. Electricity North West has neither given nor announced any distribution use of system rebates to Users in the 12 months preceding the date of publication of this revision of the statement.

## 7. Accounting and Administration Services

## **Administration Charge**

7.1. Where a User has failed to settle a DUoS invoice or notify Electricity North West of a bona fide dispute, in accordance with the Use of System agreement an account review charge of £50.00 may be made to cover the associated credit control, administration, invoicing and collection costs. This is in addition to the interest charge that will be made in accordance with clause 23.3 of the Distribution Connection and Use of System Agreement (DCUSA).

# 8. Charges for electrical plant provided ancillary to the grant of Use of System

8.1. Electricity North West does not have a schedule of the charges which may be made (i) for providing and installing any electrical plant at Entry Points or Exit Points, where such provision and installation are ancillary to the grant of Use of System, and (ii) for maintaining such plant.

# 9. Glossary of Terms

# 9.1. The following definitions are included to aid understanding:

Term	Definition
Balancing and Settlement Code (BSC)	The Balancing and Settlement Code contains the governance arrangements for electricity balancing and settlement in Great Britain. An over view document is available from " <a href="www.elexon.co.uk/ELEXON">www.elexon.co.uk/ELEXON</a> Documents/trading_arrangements.pdf".
CDCM	The Common Distribution Charging Methodology used for calculating charges to Designated Properties as required by standard licence condition 13A of the Electricity Distribution Licence.
Customer	A person to whom a User proposers 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 though 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).
CVA	Central volume allocation in accordance with the BSC.
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.
Distributed Generator	A generator directly connected or embedded within the Distribution System.
Distribution Connection and Use of System Agreement (DCUSA)	The Distribution Connection and Use of System Agreement (DCUSA) is a multi-party contract between the licensed electricity distributors, suppliers and generators of Great Britain.  It is a requirement that all licensed electricity distributors and suppliers become parties to the DCUSA.
Electricity Distribution Licence	The Electricity Distribution Licence granted or treated as granted pursuant to section 6(1) of the Electricity Act 1989.
Distribution Network Operator (DNO)	An Electricity Distributor who operates one of the fourteen Distribution Services Areas and in whose Electricity Distribution Licence the requirements of Section B of the standard conditions of that licence have effect.
Distribution Services Area	The area specified by the Authority that a DNO as Distribution Services Provider will operate.

Term	Definition
Distribution Services Provider	An Electricity Distributor in whose Electricity Distribution Licence the requirements of Section B of the standard conditions of that licence have effect.
Distribution System	<ul> <li>The system consisting (wholly or mainly) of:</li> <li>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</li> <li>any transmission licensee in its capacity as operator of that licensee's transmission system or the GB transmission system;</li> <li>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.</li> </ul>
EDCM	The EHV Distribution Charging Methodology used for calculating charges to Designated EHV Properties as required by standard licence condition 13B of the Electricity Distribution Licence
Electricity Distributor	Any person who is authorised by an Electricity Distribution Licence to distribute electricity.
Embedded LDNO	This refers to an LDNO operating a distribution network which is embedded within another distribution network.
Embedded Network	An electricity Distribution System operated by an LDNO and embedded within another distribution network.
Entry Point	A boundary point at which electricity is exported onto a Distribution System to a connected installation or to 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) (the Authority)	As established by the Utilities Act.
Grid Supply Point	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.

Term	Definition
GSP Group	Grid Supply Point Group; a distinct electrical system, that is supplied from one or more Grid Supply Points 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
Host DNO	A distribution network operator that is responsible for a Distribution Services Area as defined in Standard conditions of the Electricity Distribution Licence
Intermediate LDNO	An embedded licenced distribution network operator that is responsible for a Distribution System between a Host DNO and another Embedded Distribution System.
Invalid Settlement Combination	A Settlement combination that is not recognised as a valid combination in Market Domain Data. <a href="http://mddonline.elexon.co.uk/default.aspx">http://mddonline.elexon.co.uk/default.aspx</a>
kVA	Kilovolt amperes
kVArh	Kilovolt ampere reactive hour
kW	Kilowatt
kWh	Kilowatt hour (equivalent to one "unit" of electricity)
LDNO	Licensed Distribution Network Operator.
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.
Line Loss Factor (LLF)	The factor which is used in Settlement to adjust the Metering System volumes to take account of losses on the Distribution System.
Low Voltage (LV)	Nominal voltages below 1kV
Market Domain Data (MDD)	Market Domain Data is a central repository of reference data used by all Users involved in Settlement. It is essential to the operation of Supplier Volume Allocation (SVA) Trading Arrangements.
Maximum Export Capacity (MEC)	The Maximum Export Capacity of apparent power expressed in kVA that has been agreed can flow through the Entry Point to the Distribution System from the Customer's installation as specified in the connection agreement.
Maximum Import Capacity (MIC)	The Maximum Import Capacity of apparent power expressed in kVA that has been agreed can flow through the Exit Point from the Distribution System to the Customer's installation as specified in the connection agreement.

Term	Definition
	A classification of Metering Systems which indicates how Consumption is measured i.e.
	Non Half Hourly Metering Equipment (equivalent to Measurement Class "A")
Measurement Class	Non Half Hourly Unmetered Supplies (equivalent to Measurement Class "B")
Class	Half Hourly Metering Equipment at above 100kW Premises (equivalent to Measurement Class "C")
	Half Hourly Unmetered Supplies (equivalent to Measurement Class "D") Half Hourly Metering Equipment at below 100kW Premises (equivalent to
	Measurement Class "E").
Metering Point	The point at which electricity 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 Grid Supply Points are not 'Metering Points')
Metering System	Particular commissioned metering equipment installed for the purposes of measuring the quantities of Exports and Imports at the Boundary Point.
MPAN	Metering Point Administration Number. A number relating to a Metering Point under the MRA.
MRA	The Master Registration Agreement.
MTC	Meter Timeswitch Codes (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.
Nested LDNO	A distribution system operator that is responsible for a Nested Network.
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→intermediate LDNO→nested LDNO→Customer).
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 Balancing and Settlement Code
Settlement Class (SC)	The combination of Profile Class, Line Loss Factor Class, Time Pattern Regime and Standard Settlement Configuration, by Supplier within GSP Group and used for Settlement.

Term	Definition
Standard Settlement Configuration (SSC)	A standard metering configuration relating to a specific combination of TPRs.
Supercustomer	The method of billing Users for Use of System on an aggregated basis, grouping consumption and standing charges for all similar NHH metered Customers together.
Supercustomer DUoS Report	A report of profiled data by Settlement Class providing counts of MPANs and units consumed.
Supplier	An organisation with a Supply License which can register itself as supplying electricity to a Metering Point.
Supplier Volume Allocation (SVA)	As defined in the Balancing and Settlement Code.
Supplier Volume Allocation Agent (SVAA)	The agency which uses aggregated consumption data from the Data Aggregator to calculate Supplier purchases by Settlement Class for each Settlement day, and then passes this information to the relevant distributors and Suppliers across the national data transfer network.
Time Pattern Regime (TPR)	The pattern of switching behaviour though time that one or more meter registers follow.
Use of System Charges	Charges for demand and generation Customers which are connected to and utilising the distribution network.
User/s	Someone who has a use of system agreement with the DNO e.g. A Supplier, Generator or LDNO.

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

Electricity North West - Effective from 1 April 2013 - Indicative LV/HV Charges													
	Open LLFCs	PCs	Unit rate 1 p/kWh	Unit rate 2 p/kWh	Unit rate 3 p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Reactive power charge p/kVArh	Excess Capacity charge (p/kVA)	Closed LLFCs			
Domestic Unrestricted	011, 041, 441, 511	1	2.887			3.42							
Domestic Two Rate	031, 051, 061, 451, 531	2	2.992	0.291		3.42							
Domestic Off Peak (related MPAN)	081, 581	2	0.304										
Small Non Domestic Unrestricted	131, 191, 631	3	2.412			3.42							
Small Non Domestic Two Rate	161, 171, 661	4	2.553	0.251		3.42							
Small Non Domestic Off Peak (related MPAN)	091, 591	4	0.252										
LV Medium Non-Domestic	241, 431, 481, 751	5-8	2.448	0.225		24.20							
LV Sub Medium Non-Domestic	242, 432, 482, 752	5-8	2.070	0.186		57.08							
HV Medium Non-Domestic		5-8	1.440	0.123		254.67				483, 753			
LV HH Metered	801	0	11.537	0.941	0.142	11.93	3.35	0.316	3.35				
LV Sub HH Metered	802	0	11.547	0.890	0.137	34.94	3.29	0.297	3.29				
HV HH Metered	803	0	8.823	0.608	0.098	102.60	3.19	0.206	3.19				
HV Sub HH Metered		0	7.207	0.452	0.076	134.66	2.25	0.175	2.25	804			
NHH UMS category A	761	8	2.719										
NHH UMS category B	771	1	3.183										
NHH UMS category C	781	1	4.587										
NHH UMS category D	791	1	2.439										
LV UMS (Pseudo HH Metered)	811	0	42.508	2.471	1.622								
LV Generation NHH	961	8	( 0.898)										
LV Sub Generation NHH	962	8	( 0.700)										
LV Generation Intermittent	971	0	( 0.898)					0.229					
LV Generation Non-Intermittent	981	0	( 8.907)	( 0.931)	( 0.129)			0.229					
LV Sub Generation Intermittent	972	0	( 0.700)					0.185					
LV Sub Generation Non-Intermittent	982	0	( 7.001)	( 0.716)	( 0.100)			0.185					
HV Generation Intermittent	973	0	( 0.444)			6.36		0.125					
HV Generation Non-Intermittent	983	0	( 4.546)	( 0.435)	( 0.062)	6.36		0.125					
HV Sub Generation Non-Intermittent		0	( 3.111)	( 0.271)	( 0.040)	6.36		0.070		984			
HV Sub Generation Intermittent		0	( 0.294)			6.36		0.070		974			
Notes:			estic Two Rate and										
			TPRs 415 and 416										
	Small Non-Dome capacity of less t		ricted, Small Non-Do	mestic Two Rate	and Small Non-Dom	nestic Off Peak (R	elated MPAN) - Th	nese tariffs genera	illy apply to NHH c	ustomers with a			

LLFC 661 with SSC 948 and TPRs 415 and 416 will be charged at the Small Non Domestic Unrestricted rate for both rate 1 and rate 2.

LV Sub applies to customers connected to the licensee's distribution system at a voltage of less than 1 kV at a substation with a primary voltage (the highest operating voltage present at the substation) of at least 1 kV and less that 22kV, where the current transformer used for the customer's settlement metering is located at the substation.

LV Medium Non-Domestic and LV Sub Medium Non-Domestic apply to NHH customers with a demand of less than 100kW.

For Profiles classes' 5-8 Maximum Demand metering functionality is required.

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

	Electricity North West - Effective from 1 April 2013 - Indicative EDCM Charges													
Import LLFC - Unique Identifier	Export LLFC - Unique Identifier	Import MPAN/s / MSIDs	Export MPANs / MSIDs	Name	Import super-red unit rate (p/kWh)	Import fixed charge (p/day)	Import capacity rate (p/kVA/day)	Import exceeded capacity rate (p/kVA/day)	Export super-red unit rate (p/kWh)	Export fixed charge p/day	Export capacity rate (p/kVA/day)	Export exceeded capacity rate (p/kVA/day)		
610	-	1600000132063		EHV Customer 1	0.006	14,657.44	1.96	1.96						
500	-	1620000772484		EHV Customer 2		1,163.19	4.40	4.40						
650	-	1600000139069		EHV Customer 3	0.061	775.46	2.85	2.85						
660	-	1600000138836		EHV Customer 4	0.171	1,637.55	2.43	2.43						
640	-	1600000138766		EHV Customer 5	0.936	1,700.63	5.57	5.57						
700	-	1600000138845		EHV Customer 6	0.331	1,932.45	2.07	2.07						
900	-	1620000595805		EHV Customer 7	1.506	775.46	5.57	5.57						
670	-	1600000176734		EHV Customer 8		901.02	9.86	9.86						
320	-	1630000239738 1630000239747		EHV Customer 9		8,705.47	1.82	1.82						
850	-	1620000847420		EHV Customer 10		775.46	5.36	5.36						
450	-	1620001195216		EHV Customer 11	3.293	3,929.92	4.25	4.25						
460	470	1620001102921 1620001102912	1620001102930 1620001102940	EHV Customer 12		837.34	0.77	0.77						
680	690	1600000135019	1620000193245	EHV Customer 13	0.037	462.77	2.57	2.57	( 1.965)	312.69	0.11	0.11		
520	730	1620000398404	1630000403060	EHV Customer 14		1,589.97	2.51	2.51						
510	720	1620000398399 1620000145890	1630000408166 1630000408148	EHV Customer 15		2,861.53	1.91	1.91						
530	770	1620000398440 1620000398461	1630000402252 1630000402261	EHV Customer 16		8,908.84	2.73	2.73						
540	740	1620000398413 1620000273477	1630000402304 1630000402299	EHV Customer 17	0.067	2,899.68	1.86	1.86						
550	750	1620000398422 1620000145915	1630000403070	EHV Customer 18		3,189.65	3.15	3.15						
810	820	1620000622316	1620000622325	EHV Customer 19		1,483.97	3.02	3.02						
830	840	1620000828143	1620000828134	EHV Customer 20		27.56	2.02	2.02	( 1.395)	2,066.73	0.11	0.11		
960	970	1620000388390	1620000388406	EHV Customer 21		450.61	1.46	1.46						
370	360	1630000165174	1630000165183	EHV Customer 22	0.052	2.61	4.88	4.88						
410	420	1620001681340	1620001681359	EHV Customer 23	3.610	6.47	5.29	5.29	( 12.256)	1,042.09	0.11	0.11		
430	440	1620001638558	1620001638567	EHV Customer 24	0.267	2.87	2.61	2.61						
340	350	1630000215620	1630000215630	EHV Customer 25	0.477	13.89	4.15	4.15						

	Electricity North West - Effective from 1 April 2013 - Indicative EDCM Charges													
Import LLFC - Unique Identifier	Export LLFC - Unique Identifier	Import MPAN/s / MSIDs	Export MPANs / MSIDs	Name	Import super-red unit rate (p/kWh)	Import fixed charge (p/day)	Import capacity rate (p/kVA/day)	Import exceeded capacity rate (p/kVA/day)	Export super-red unit rate (p/kWh)	Export fixed charge p/day	Export capacity rate (p/kVA/day)	Export exceeded capacity rate (p/kVA/day)		
480	490	1620000703611	1620000703620	EHV Customer 26	1.738	3.17	4.65	4.65						
600	590	1620000297228	1620000297237	EHV Customer 27	0.110	17.93	1.28	1.28						
980	990	1620000390840	1620000390850	EHV Customer 28		7.71	1.92	1.92						
280	290	1630000474610	1630000474683	EHV Customer 29		34.23	1.19	1.19		8,898.78	0.11	0.11		
260	270	1630000799836	1630000799845	EHV Customer 30	0.326	5.19	2.65	2.65		514.71	0.11	0.11		
180	190	1640000177307	1640000177316	EHV Customer 31	1.610	83.62	4.22	4.22		5,119.43	0.11	0.11		
200	210	1640000063195	1640000063200	EHV Customer 32		3,004.08	0.96	0.96		3,877.41	0.11	0.11		
140	150	1640000082620	1640000082630	EHV Customer 33	0.331	3.44	5.32	5.32		516.45	0.11	0.11		
160	170	1640000082286	1640000082295	EHV Customer 34	0.738	11.27	4.95	4.95		1,037.29	0.11	0.11		
950	-	1620000279707		EHV Customer 35	0.581	14,918.82	2.99	2.99						
910	-	1600000169151		EHV Customer 36	0.061	247.80	5.39	5.39						
920	-	1600000168859		EHV Customer 37		247.80	8.18	8.18						
570	-	1600000136918		EHV Customer 38		3,725.23	2.62	2.62						
109		1630000187381 1630000015594, 1630000015619, 1630000015637, 1630000015567, 1630000015585, 1630000015600, 1630000015602, 1630000187372		EHV Customer 39	6.976	2,477.98	6.76	6.76						
119	-	163000031105 163000031114, 1640000183347		EHV Customer 40	6.999	495.60	6.75	6.75						
129	-	1600000148392		EHV Customer 41	1.144	4,766.07	2.40	2.40						
139	-	1600000136244		EHV Customer 42	3.047	495.60	6.06	6.06						
149	-	1620001236332		EHV Customer 43	2.559	2,601.86	4.10	4.10						
419	-	1600000138108		EHV Customer 44	4.089	839.02	6.42	6.42						
169	-	1600000132620		EHV Customer 45	3.984	1,486.79	6.30	6.30						
179	-	1620000531591		EHV Customer 46	6.723	743.39	5.48	5.48						
189	-	1600000137841		EHV Customer 47	5.851	3,637.49	2.58	2.58						

	Electricity North West - Effective from 1 April 2013 - Indicative EDCM Charges													
Import LLFC - Unique Identifier	Export LLFC - Unique Identifier	Import MPAN/s / MSIDs	Export MPANs / MSIDs	Name	Import super-red unit rate (p/kWh)	Import fixed charge (p/day)	Import capacity rate (p/kVA/day)	Import exceeded capacity rate (p/kVA/day)	Export super-red unit rate (p/kWh)	Export fixed charge p/day	Export capacity rate (p/kVA/day)	Export exceeded capacity rate (p/kVA/day)		
199	-	1600000134831		EHV Customer 48	2.192	6,879.74	3.90	3.90						
209	•	1600000134901		EHV Customer 49	2.546	1,238.99	7.28	7.28						
219	•	1600000155460		EHV Customer 50	0.122	822.92	2.30	2.30						
229	•	1600000132392		EHV Customer 51	1.900	743.39	3.10	3.10						
239	•	1600000134850		EHV Customer 52	1.518	991.19	7.69	7.69						
249	•	1600000137318		EHV Customer 53	1.839	495.60	5.76	5.76						
259	•	1600000137674		EHV Customer 54	6.636	247.80	6.86	6.86						
369	•	1600000137823		EHV Customer 55	5.770	495.60	8.55	8.55						
289	•	1600000138516		EHV Customer 56	2.330	495.60	6.62	6.62						
299	•	1600000134822		EHV Customer 57	2.570	2,349.49	4.28	4.28						
309	•	1600000134984		EHV Customer 58	1.714	3,469.21	3.34	3.34						
319	•	1600000133856		EHV Customer 59	4.664	247.80	4.51	4.51						
329	-	1600000138924		EHV Customer 60	2.906	495.60	7.74	7.74						
339	•	1600000135064		EHV Customer 61	5.494	495.60	5.94	5.94						
349	•	1600000132036		EHV Customer 62	4.879	6,471.03	5.11	5.11						
359	•	1600000132045		EHV Customer 63	1.236	3,889.45	3.98	3.98						
269	•	1600000138311		EHV Customer 64	2.007	3,097.45	4.57	4.57						
379	509	1600000132018	1620000888230	EHV Customer 65	1.149	495.60	4.92	4.92						
389	499	1600000139087	1620000174048	EHV Customer 66	2.510	247.80	5.43	5.43						
439	479	1620000418238	1620000366875	EHV Customer 67	8.971	1.97	2.39	2.39						
159	489	1620000370375 1620000401378	1620000370366	EHV Customer 68	3.587	81.77	3.82	3.82						
110	120	1640000199737	1640000199746	EHV Customer 69	2.581	12.16	5.22	5.22		1,036.41	0.11	0.11		
220	230	1640000264119	1640000264128	EHV Customer 70	1.262	16.40	6.21	6.21		437.41	0.11	0.11		
080	090	1640000264146	1640000264155	EHV Customer 71	0.535	8.87	4.82	4.82		709.28	0.11	0.11		
040	050	tbc	tbc	EHV Customer 72	0.593	43.09	5.03	5.03		1,005.47	0.11	0.11		
060	070	tbc	tbc	EHV Customer 73	0.727	33.82	2.77	2.77		1,014.74	0.11	0.11		

	Electricity North West - Effective from 1 April 2013 - Indicative EDCM Charges													
Import LLFC - Unique Identifier	Export LLFC - Unique Identifier	Import MPAN/s / MSIDs	Export MPANs / MSIDs	Name	Import super-red unit rate (p/kWh)	Import fixed charge (p/day)	Import capacity rate (p/kVA/day)	Import exceeded capacity rate (p/kVA/day)	Export super-red unit rate (p/kWh)	Export fixed charge p/day	Export capacity rate (p/kVA/day)	Export exceeded capacity rate (p/kVA/day)		
MSID 7016	MSID 7016	MSID 7016	MSID 7016	EHV Customer 74		1.68	1.36	1.36						
MSID 7039, 7040	MSID 7039, 7040	MSID 7039, 7040	MSID 7039, 7040	EHV Customer 75		3,113.51	2.92	2.92						
MSID 7107	MSID 7107	MSID 7107	MSID 7107	EHV Customer 76		2,133.77	1.15	1.15						
MSID 7247	MSID 7247	MSID 7247	MSID 7247	EHV Customer 77		56.33	0.80	0.80		4,224.81	0.11	0.11		
MSID 7240	MSID 7240	MSID 7240	MSID 7240	EHV Customer 78		26.01	0.78	0.78		2,380.06	0.11	0.11		
MSID 7241, 7242	MSID 7241, 7242	MSID 7241, 7242	MSID 7241, 7242	EHV Customer 79	0.337	66.40	1.18	1.18						
MSID 7244	MSID 7244	MSID 7244	MSID 7244	EHV Customer 80		23.85	0.80	0.80						
MSID 2037, 2038	-	MSID 2037, 2038	-	EHV Customer 81	3.268		4.19	4.19						
MSID 7156	-	MSID 7156	-	EHV Customer 82	0.326		2.35	2.35						
MSID 0437	-	MSID 0437	-	EHV Customer 83	0.061		5.87	5.87						
n/a	-	IDNO1	-	EHV Customer 84	0.477	155.09	4.11	4.11						
n/a	-	IDNO2	-	EHV Customer 85	0.477	363.50	3.12	3.12						

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

	Electricity North West - Effective from 1 April 2013 - Indicative LV/HV Tariffs											
NHH Preserved Charges/Additional LLFC Classes												
	Closed LLFCs	PCs	Unit rate 1 p/kWh	Unit rate 2 p/kWh	Unit rate 3 p/kWh	Fixed charge p/MPAN/day						
HV Medium Non-Domestic	483, 753	5-8	1.440	0.123		254.67						
Notes:	Ides: Unit time periods are as specified in the SSC. HV Medium Non-Domestic - This tariff will be closed to new customers and all new HV connections will be required to be half-hourly metered.											
	Customers on H	V Medium Non	Domestic will be moved to the	ne HV HH Metered tariff (	LLF 803) once a Half Hou	urly meter has been insta	lled.					

HH Preserved Charges/Additional LLFC Classes									
	Closed LLFCs	PCs	Unit rate 1 p/kWh	Unit rate 2 p/kWh	Unit rate 3 p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Reactive power charge p/kVArh	Excess Capacity charge (p/kVA)
HV Sub HH Metered	804	0	7.207	0.452	0.076	134.66	2.25	0.175	2.25
HV Sub Generation Non- Intermittent	984	0	( 3.111)	( 0.271)	( 0.040)	6.36		0.070	
HV Sub Generation Intermittent	974	0	( 0.294)			6.36		0.070	
Notes:	The HVS tariff (in	mport and expo	ort) is no longer open to new	customers. New HVS cu	stomers will be charged o	n a site specifc basis un	der the EDCM.		

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

Electricity North West - Effective from 1 April 2013 - Indicative LDNO Tariffs									
	Unique billing identifier	PCs	Unit rate 1 p/kWh	Unit rate 2 p/kWh	Unit rate 3 p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Reactive power charge p/kVArh	Excess capacity charge (p/kVA)
LDNO LV: Domestic Unrestricted		1	1.947			2.31			
LDNO LV: Domestic Two Rate		2	2.018	0.196		2.31			
LDNO LV: Domestic Off Peak (related MPAN)		2	0.205						
LDNO LV: Small Non Domestic Unrestricted		3	1.627			2.31			
LDNO LV: Small Non Domestic Two Rate		4	1.722	0.169		2.31			
LDNO LV: Small Non Domestic Off Peak (related MPAN)		4	0.170						
LDNO LV: LV Medium Non-Domestic		5-8	1.651	0.152		16.32			
LDNO LV: LV HH Metered		0	7.782	0.635	0.096	8.05	2.26	0.213	2.26
LDNO LV: NHH UMS category A		8	1.834						
LDNO LV: NHH UMS category B		1	2.147						
LDNO LV: NHH UMS category C		1	3.094						
		1	1.645						
LDNO LV: NHH UMS category D			28.672	1 667	1.094				
LDNO LV: LV UMS (Pseudo HH Metered)		0		1.667	1.094				
LDNO LV: LV Generation NHH		8	( 0.898)						
LDNO LV: LV Generation Intermittent		0	( 0.898)					0.229	
LDNO LV: LV Generation Non-Intermittent		0	( 8.907)	( 0.931)	( 0.129)			0.229	
LDNO HV: Domestic Unrestricted		1	1.306			1.55			
LDNO HV: Domestic Two Rate		2	1.353	0.132		1.55			
LDNO HV: Domestic Off Peak (related MPAN)		2	0.137						
LDNO HV: Small Non Domestic Unrestricted		3	1.091			1.55			
LDNO HV: Small Non Domestic Two Rate		4	1.155	0.114		1.55			
LDNO HV: Small Non Domestic Off Peak (related MPAN)		4	0.114						
LDNO HV: LV Medium Non-Domestic		5-8	1.107	0.102		10.94			
LDNO HV: LV HH Metered		0	5.218	0.426	0.064	5.40	1.52	0.143	1.52
LDNO HV: LV Sub HH Metered		0	7.974	0.615	0.095	24.13	2.27	0.205	2.27
LDNO HV: HV HH Metered		0	7.118	0.491	0.079	82.78	2.57	0.166	2.57
LDNO HV: NHH UMS category A		8	1.230						
LDNO HV: NHH UMS category B		1	1.439						
LDNO HV: NHH UMS category C		1	2.074						
LDNO HV: NHH UMS category D		1	1.103						
			19.224	1.117	0.734				
LDNO HV: LV UMS (Pseudo HH Metered)		0		1.117	0.734				
LDNO HV: LV Generation NHH		8	( 0.898)						
LDNO HV: LV Sub Generation NHH		8	( 0.700)						
LDNO HV: LV Generation Intermittent		0	( 0.898)					0.229	
LDNO HV: LV Generation Non-Intermittent		0	( 8.907)	( 0.931)	( 0.129)			0.229	
LDNO HV: LV Sub Generation Intermittent		0	( 0.700)					0.185	
LDNO HV: LV Sub Generation Non-Intermittent		0	( 7.001)	( 0.716)	( 0.100)			0.185	
LDNO HV: HV Generation Intermittent		0	( 0.444)					0.125	
LDNO HV: HV Generation Non-Intermittent		0	( 4.546)	( 0.435)	( 0.062)			0.125	
Copy from EDCM table 6005 "LDNORev!B460:GXXX" and page	ste values into								
LDNO HVplus: Domestic Unrestricted		1	1.078			1.28			
LDNO HVplus: Domestic Two Rate		2	1.118	0.109		1.28			
LDNO HVplus: Domestic Off Peak (related MPAN)		2	0.114						
LDNO HVplus: Small Non Domestic Unrestricted		3	0.901			1.28			
LDNO HVplus: Small Non Domestic Two Rate		4	0.954	0.094		1.28			
LDNO HVplus: Small Non Domestic Off Peak (related MPAN)		4	0.094						
LDNO HVplus: LV Medium Non-Domestic		5-8	0.914	0.084		9.04			
LDNO HVplus: LV Sub Medium Non-Domestic			1.180	0.106		32.55			
LDNO HVplus: HV Medium Non-Domestic			0.960	0.082		169.69			
LDNO HVplus: LV HH Metered		0	4.308	0.351	0.053	4.46	1.25	0.118	1.25
LDNO HVplus: LV Sub HH Metered		0	6.583	0.507	0.078	19.93	1.88	0.169	1.88
LDNO HVplus: HV HH Metered		0	5.876	0.405	0.065	68.37	2.13	0.137	2.13
LDNO HVplus: NHH UMS category A		8	1.016						
LDNO HVplus: NHH UMS category B		1	1.188						
LDNO HVplus: NHH UMS category C		1	1.713						
LDNO HVplus: NHH UMS category D		1	0.911						
		0	15.873	0.923	0.606				
LDNO HVplus: LV UMS (Pseudo HH Metered)			( 0.512)	0.323	3.000				
LDNO HVplus: LV Generation NHH		8							
LDNO HVplus: LV Sub Generation NHH		8	( 0.466)						
LDNO HVplus: LV Generation Intermittent		0	( 0.512)			*		0.131	
LDNO HVplus: LV Generation Non-Intermittent		0	( 5.080)	( 0.531)	( 0.074)			0.131	
LDNO HVplus: LV Sub Generation Intermittent		0	( 0.466)					0.123	
LDNO HVplus: LV Sub Generation Non-Intermittent		0	( 4.665)	( 0.477)	( 0.067)			0.123	
LDNO HVplus: HV Generation Intermittent		0	( 0.444)			6.36		0.125	

Electricity North West - Effective from 1 April 2013 - Indicative LDNO Tariffs									
	Unique billing identifier	PCs	Unit rate 1 p/kWh	Unit rate 2 p/kWh	Unit rate 3 p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Reactive power charge p/kVArh	Excess capacity charge (p/kVA)
LDNO HVplus: HV Generation Non-Intermittent		0	( 4.546)	( 0.435)	( 0.062)	6.36		0.125	
LDNO EHV: Domestic Unrestricted		1	0.855			1.01			
LDNO EHV: Domestic Two Rate		2	0.887	0.086		1.01			
LDNO EHV: Domestic Off Peak (related MPAN)		2	0.090						
LDNO EHV: Small Non Domestic Unrestricted		3	0.715			1.01			
LDNO EHV: Small Non Domestic Two Rate		4	0.757	0.074		1.01			
LDNO EHV: Small Non Domestic Off Peak (related MPAN)		4	0.075						
LDNO EHV: LV Medium Non-Domestic		5-8	0.725	0.067		7.17			
LDNO EHV: LV Sub Medium Non-Domestic			0.936	0.084		25.83			
LDNO EHV: HV Medium Non-Domestic			0.761	0.065		134.65			
LDNO EHV: LV HH Metered		0	3.418	0.279	0.042	3.54	0.99	0.094	0.99
LDNO EHV: LV Sub HH Metered		0	5.223	0.402	0.062	15.81	1.49	0.134	1.49
LDNO EHV: HV HH Metered		0	4.663	0.321	0.052	54.25	1.69	0.109	1.69
LDNO EHV: NHH UMS category A		8	0.806						
LDNO EHV: NHH UMS category B		1	0.943						
LDNO EHV: NHH UMS category C		1	1.359						
LDNO EHV: NHH UMS category D		1	0.723						
LDNO EHV: LV UMS (Pseudo HH Metered)		0	12.595	0.732	0.481				
LDNO EHV: LV Generation NHH		8	( 0.406)						
LDNO EHV: LV Sub Generation NHH		8	( 0.370)						
LDNO EHV: LV Generation Intermittent		0	( 0.406)					0.104	
LDNO EHV: LV Generation Non-Intermittent		0	( 4.031)	( 0.421)	( 0.058)			0.104	
LDNO EHV: LV Sub Generation Intermittent		0	( 0.370)					0.098	
LDNO EHV: LV Sub Generation Non-Intermittent		0	( 3.702)	( 0.379)	( 0.053)			0.098	
LDNO EHV: HV Generation Intermittent		0	( 0.352)			5.05		0.099	
LDNO EHV: HV Generation Non-Intermittent		0	( 3.607)	( 0.345)	( 0.049)	5.05		0.099	
LDNO 132kV/EHV: Domestic Unrestricted		1	0.714			0.85			
LDNO 132kV/EHV: Domestic Two Rate		2	0.740	0.072		0.85			
LDNO 132kV/EHV: Domestic Off Peak (related MPAN)		2	0.075						
LDNO 132kV/EHV: Small Non Domestic Unrestricted		3	0.597			0.85			
LDNO 132kV/EHV: Small Non Domestic Two Rate		4	0.632	0.062		0.85			
LDNO 132kV/EHV: Small Non Domestic Off Peak (related MPAN)		4	0.062						
LDNO 132kV/EHV: LV Medium Non-Domestic		5-8	0.606	0.056		5.99			
LDNO 132kV/EHV: LV Sub Medium Non-Domestic			0.782	0.070		21.57			
LDNO 132kV/EHV: HV Medium Non-Domestic			0.636	0.054		112.43			
LDNO 132kV/EHV: LV HH Metered		0	2.854	0.233	0.035	2.95	0.83	0.078	0.83
LDNO 132kV/EHV: LV Sub HH Metered		0	4.362	0.336	0.052	13.20	1.24	0.112	1.24
LDNO 132kV/EHV: HV HH Metered		0	3.893	0.268	0.043	45.29	1.41	0.091	1.41
LDNO 132kV/EHV: NHH UMS category A		8	0.673						
LDNO 132kV/EHV: NHH UMS category B		1	0.787						
LDNO 132kV/EHV: NHH UMS category C		1	1.135						
LDNO 132kV/EHV: NHH UMS category D		1	0.604						
LDNO 132kV/EHV: LV UMS (Pseudo HH Metered)		0	10.516	0.611	0.401				
LDNO 132kV/EHV: LV Generation NHH		8	( 0.339)						
LDNO 132kV/EHV: LV Sub Generation NHH		8	( 0.309)						
LDNO 132kV/EHV: LV Generation Intermittent		0	( 0.339)					0.087	
LDNO 132kV/EHV: LV Generation Non-Intermittent		0	( 3.366)	( 0.352)	( 0.049)			0.087	
LDNO 132kV/EHV: LV Sub Generation Intermittent		0	( 0.309)					0.082	
LDNO 132kV/EHV: LV Sub Generation Non-Intermittent		0	( 3.091)	( 0.316)	( 0.044)			0.082	
LDNO 132kV/EHV: HV Generation Intermittent		0	( 0.294)			4.21		0.083	
LDNO 132kV/EHV: HV Generation Non-Intermittent		0	( 3.012)	( 0.288)	( 0.041)	4.21		0.083	
LDNO 132kV: Domestic Unrestricted		1	0.542			0.64			
LDNO 132kV: Domestic Two Rate		2	0.562	0.055		0.64			
LDNO 132kV: Domestic Off Peak (related MPAN)		2	0.057						
LDNO 132kV: Small Non Domestic Unrestricted		3	0.453			0.64			
LDNO 132kV: Small Non Domestic Two Rate		4	0.480	0.047		0.64			
LDNO 132kV: Small Non Domestic Off Peak (related MPAN)		4	0.047						
LDNO 132kV: LV Medium Non-Domestic		5-8	0.460	0.042		4.55			
LDNO 132kV: LV Sub Medium Non-Domestic			0.594	0.053		16.38			
LDNO 132kV: HV Medium Non-Domestic			0.483	0.041		85.38			
LDNO 132kV: LV HH Metered		0	2.168	0.177	0.027	2.24	0.63	0.059	0.63
LDNO 132kV: LV Sub HH Metered		0	3.312	0.255	0.039	10.03	0.94	0.085	0.94
LDNO 132kV: HV HH Metered		0	2.957	0.204	0.033	34.40	1.07	0.069	1.07
LDNO 132kV: NHH UMS category A		8	0.511						
LDNO 132kV: NHH UMS category B		1	0.598						
		ii							

	Electricity	North West - Eff	ective from 1 Ap	ril 2013 - Indicati	ive LDNO Tariffs				
	Unique billing identifier	PCs	Unit rate 1 p/kWh	Unit rate 2 p/kWh	Unit rate 3 p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Reactive power charge p/kVArh	Excess capacity charge (p/kVA)
LDNO 132kV: NHH UMS category C		1	0.862						
LDNO 132kV: NHH UMS category D		1	0.458						
LDNO 132kV: LV UMS (Pseudo HH Metered)		0	7.986	0.464	0.305				
LDNO 132kV: LV Generation NHH		8	( 0.258)			-			
LDNO 132kV: LV Sub Generation NHH		8	( 0.235)			-			
LDNO 132kV: LV Generation Intermittent		0	( 0.258)			-		0.066	
LDNO 132kV: LV Generation Non-Intermittent		0	( 2.556)	( 0.267)	( 0.037)	-		0.066	
LDNO 132kV: LV Sub Generation Intermittent		0	( 0.235)			-		0.062	
LDNO 132kV: LV Sub Generation Non-Intermittent		0	( 2.347)	( 0.240)	( 0.034)			0.062	
LDNO 132kV: HV Generation Intermittent		0	( 0.223)			3.20		0.063	
LDNO 132kV: HV Generation Non-Intermittent		0	( 2.287)	( 0.219)	( 0.031)	3.20		0.063	
LDNO 0000: Domestic Unrestricted		1	0.195			0.23			
LDNO 0000: Domestic Two Rate		2	0.202	0.020		0.23			
LDNO 0000: Domestic Off Peak (related MPAN)		2	0.021						
LDNO 0000: Small Non Domestic Unrestricted		3	0.163			0.23			
LDNO 0000: Small Non Domestic Two Rate		4	0.172	0.017		0.23			
LDNO 0000: Small Non Domestic Off Peak (related MPAN)		4	0.017						
LDNO 0000: LV Medium Non-Domestic		5-8	0.165	0.015		1.63			
LDNO 0000: LV Sub Medium Non-Domestic			0.213	0.019		5.88			
LDNO 0000: HV Medium Non-Domestic			0.173	0.015		30.64			
LDNO 0000: LV HH Metered		0	0.778	0.063	0.010	0.80	0.23	0.021	0.23
LDNO 0000: LV Sub HH Metered		0	1.189	0.092	0.014	3.60	0.34	0.031	0.34
LDNO 0000: HV HH Metered		0	1.061	0.073	0.012	12.35	0.38	0.025	0.38
LDNO 0000: NHH UMS category A		8	0.183						
LDNO 0000: NHH UMS category B		1	0.215						
LDNO 0000: NHH UMS category C		1	0.309						
LDNO 0000: NHH UMS category D		1	0.165						
LDNO 0000: LV UMS (Pseudo HH Metered)		0	2.866	0.167	0.109				
LDNO 0000: LV Generation NHH		8	( 0.092)						
LDNO 0000: LV Sub Generation NHH		8	( 0.084)						
LDNO 0000: LV Generation Intermittent		0	( 0.092)					0.024	
LDNO 0000: LV Generation Non-Intermittent		0	( 0.917)	( 0.096)	( 0.013)			0.024	
LDNO 0000: LV Sub Generation Intermittent		0	( 0.084)					0.022	
LDNO 0000: LV Sub Generation Non-Intermittent		0	( 0.842)	( 0.086)	( 0.012)			0.022	
LDNO 0000: HV Generation Intermittent		0	( 0.080)			1.15		0.023	
LDNO 0000: HV Generation Non-Intermittent		0	( 0.821)	( 0.079)	( 0.011)	1.15		0.023	

## Annex 5 – Schedule of Line Loss Factors

(Name 1)	(Name 2)	(Name 3)	
		(Name 3)	(Name 4)
24:00 - 07:00	07:00 - 24:00		
24:00 - 07:00		07:00 – 16:00 19:00 – 24:00	16:00 – 19:00
24:00- 07:00	07:00 – 24:00		
	24:00-07:00		24:00 - 07:00 19:00 - 24:00 24:00 - 07:00 07:00 - 24:00

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	1.079	1.086	1.091	1.102	011, 031, 041, 051, 061, 081, 091, 131, 161, 171, 191, 241, 431, 441, 451, 481, 511, 531, 581, 591, 631, 661, 751, 761, 771, 781, 791, 801, 811, 961, 971, 981					
Low Voltage Substation	1.045	1.048	1.049	1.052	242 ,432, 482, 752, 802, 962, 972, 982					
High Voltage Network	1.030	1.034	1.036	1.039	483, 753, 803, 973, 983					
High Voltage Substation	1.022	1.024	1.025	1.027	109, 119, 129,139, 149, 159, 169, 179,189, 199, 209, 219, 229,239, 249, 259, 269, 289, 299, 309, 319, 329, 339,349, 359, 369, 379, 389, 419, 459, 469, 479, 489, 499, 509, 519					
33kV Generic	1.017	1.019	1.020	1.021						
33kV Generic	1.012	1.013	1.014	1.015						
132kV Generic	1.007	1.008	1.009	1.010						

EHV Site Specific LLFs										
	Demand									
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC					
EHV Customer 1	1.017	1.017	1.017	1.017	610					
EHV Customer 2	1.005	1.005	1.005	1.005	500					
EHV Customer 3	1.034	1.034	1.034	1.034	650					
EHV Customer 4	1.077	1.077	1.077	1.077	660					
EHV Customer 5	1.029	1.029	1.029	1.029	640					
EHV Customer 6	1.239	1.239	1.239	1.239	700					
EHV Customer 7	1.038	1.038	1.038	1.038	900					
EHV Customer 8	1.013	1.013	1.013	1.013	670					
EHV Customer 9	1.042	1.042	1.042	1.042	320					
EHV Customer 10	1.032	1.032	1.032	1.032	850					
EHV Customer 11	1.014	1.014	1.014	1.014	450					
EHV Customer 12	1.001	1.001	1.001	1.001	460					
EHV Customer 13	1.018	1.018	1.018	1.018	680					
EHV Customer 14	1.007	1.007	1.007	1.007	520					
EHV Customer 15	1.039	1.039	1.039	1.039	510					
EHV Customer 16	1.021	1.021	1.021	1.021	530					
EHV Customer 17	1.024	1.024	1.024	1.024	540					
EHV Customer 18	1.13	1.13	1.13	1.13	550					

EHV Customer 19	1.005	1.005	1.005	1.005	810
EHV Customer 20	1.014	1.014	1.014	1.014	830
EHV Customer 21	1	1	1	1	960
EHV Customer 22	1	1	1	1	370
EHV Customer 23	1	1	1	1	410
EHV Customer 24	1	1	1	1	430
EHV Customer 25	1	1	1	1	340
EHV Customer 26	1.008	1.008	1.008	1.008	480
EHV Customer 27	1.004	1.004	1.004	1.004	600
EHV Customer 28	1	1	1	1	980
EHV Customer 29	1.007	1.007	1.007	1.007	280
EHV Customer 30	1	1	1	1	260
EHV Customer 31	1	1	1	1	180
EHV Customer 32	1	1	1	1	200
EHV Customer 33	1	1	1	1	140
EHV Customer 34	1	1	1	1	160
EHV Customer 35	1.009	1.009	1.009	1.009	950
EHV Customer 36	1.009	1.009	1.009	1.009	910
EHV Customer 37	1.003	1.003	1.003	1.003	920
EHV Customer 38	1.088	1.088	1.088	1.088	570
EHV Customer 69	1.037	1.037	1.037	1.037	110
EHV Customer 70	1	1	1	1	220
EHV Customer 71	1.018	1.018	1.018	1.018	080
EHV Customer 74	0.98	0.98	0.98	0.98	MSID 7016
EHV Customer 75	0.978	0.978	0.978	0.978	MSID 7039, 7040
EHV Customer 76	0.999	0.999	0.999	0.999	MSID 7107
EHV Customer 77	1	1	1	1	MSID 7247
EHV Customer 78	1	1	1	1	MSID 7240
EHV Customer 79	1	1	1	1	MSID 7241, 7242
EHV Customer 80	1	1	1	1	MSID 7244
EHV Customer 81	1.019	1.019	1.019	1.019	MSID 2037, 2038
EHV Customer 82	1	1	1	1	MSID 7156
EHV Customer 83	1.011	1.011	1.011	1.011	MSID 0437

EHV Site Specific LLFs										
	Generation									
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC					
EHV Customer 12	1	1	1	1	470					
EHV Customer 13	1	1	1	1	690					
EHV Customer 14	1	1	1	1	730					
EHV Customer 15	1	1	1	1	720					
EHV Customer 16	1	1	1	1	770					
EHV Customer 17	1	1	1	1	740					
EHV Customer 18	1	1	1	1	750					
EHV Customer 19	1	1	1	1	820					
EHV Customer 20	1.005	1.005	1.005	1.005	840					
EHV Customer 21	0.995	0.995	0.995	0.995	970					
EHV Customer 22	0.993	0.993	0.993	0.993	360					
EHV Customer 23	0.998	0.998	0.998	0.998	420					
EHV Customer 24	0.993	0.993	0.993	0.993	440					
EHV Customer 25	1	1	1	1	350					
EHV Customer 26	0.994	0.994	0.994	0.994	490					
EHV Customer 27	1.001	1.001	1.001	1.001	590					
EHV Customer 28	0.983	0.983	0.983	0.983	990					
EHV Customer 29	0.995	0.995	0.995	0.995	290					

0.971	0.971	0.971	0.971	270
1.004	1.004	1.004	1.004	190
1	1	1	1	210
0.988	0.988	0.988	0.988	150
1.003	1.003	1.003	1.003	170
0.999	0.999	0.999	0.999	120
1.012	1.012	1.012	1.012	230
0.99	0.99	0.99	0.99	090
0.98	0.98	0.98	0.98	MSID 7016
0.978	0.978	0.978	0.978	MSID 7039, 7040
0.999	0.999	0.999	0.999	MSID 7107
1	1	1	1	MSID 7247
1	1	1	1	MSID 7240
1	1	1	1	MSID 7241, 7242
1	1	1	1	MSID 7244
1.019	1.019	1.019	1.019	MSID 2037, 2038
1	1	1	1	MSID 7156
1.011	1.011	1.011	1.011	MSID 0437
	1.004  1 0.988 1.003 0.999 1.012 0.99 0.98 0.978 0.999 1 1 1 1 1 1 1.019	1.004     1.004       1     1       0.988     0.988       1.003     1.003       0.999     0.999       1.012     1.012       0.99     0.99       0.98     0.98       0.978     0.978       0.999     0.999       1     1	1.004     1.004     1.004       1     1     1       0.988     0.988     0.988       1.003     1.003     1.003       0.999     0.999     0.999       1.012     1.012     1.012       0.99     0.99     0.99       0.98     0.98     0.98       0.978     0.978     0.978       0.999     0.999     0.999       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1       1     1     1	1.004       1.004       1.004       1.004         1       1       1       1         0.988       0.988       0.988       0.988         1.003       1.003       1.003       1.003         0.999       0.999       0.999       0.999         1.012       1.012       1.012       1.012         0.99       0.99       0.99       0.99         0.98       0.98       0.98       0.98         0.978       0.978       0.978       0.978         0.999       0.999       0.999       0.999         1       1       1       1         1       1       1       1         1       1       1       1         1       1       1       1         1       1       1       1         1       1       1       1         1       1       1       1         1       1       1       1         1       1       1       1         1       1       1       1         1       1       1       1         1       1       1       1

## Annex 6 - Un-scaled nodal costs

The un-scaled nodal costs are available on the Electricity North West Schedule of Charges spreadsheet. This is available to download from the Electricity North West website using the following link: <a href="http://www.enwl.co.uk/our-services/use-of-system-charges">http://www.enwl.co.uk/our-services/use-of-system-charges</a>.