

Serving the Midlands, South West and Wales

**Western Power Distribution** 

(East Midlands) plc

**Use of System Charging Statement** 

Effective from 1st April 2012

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#### 1. Introduction

1.1. This statement has been prepared in order to discharge Western Power Distribution (East Midlands) plc's (WPD) obligation under Standard Licence Condition 14 of our Electricity Distribution Licence. It contains information on our charges<sup>1</sup> 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, the EHV Distribution Charging Methodology (EDCM) for the import charges for Designated EHV Properties and WPD's Midlands EHV generation pricing methodology for the export charges 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:

WPD Income and Connections

Western Power Distribution

Avonbank

Feeder Rd

Bristol

BS2 0TB

Email: wpdpricing@westernpower.co.uk

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

Connection Policy Engineer

Western Power Distribution

Avonbank

Feeder Rd

Bristol

BS2 0TB

Email: wpdpricing@westernpower.co.uk

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

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

#### 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 WPD 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 WPD 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) registered 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). All Line Loss Factor Classes (LLFCs) are assigned at the sole discretion of WPD. 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. WPD does not apply a default tariff for invalid combinations. Where an invalid combination is received we will match it to the closest possible tariff based on voltage and Profile Class.
  - For all two rate NHH MPANs night is defined as 00.30 to 07.30 hours.
- 2.10. To determine the appropriate charge rate for each SSC/TPR a lookup table is provided on the ENA website<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 WPD 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) registered 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 WPD. 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:
  - 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;

<sup>&</sup>lt;sup>2</sup> http://2010.energynetworks.org/storage/DNO CDCM SSC TPR decoding for unit rates version3.xlsx

- 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. The time periods for the application of unit charges to LV & HV Designated Properties are as follows:

	Monday to Friday	Weekends
Unit Rate 1: red	16:00 to 19:00	
Unit Rate 2: Amber	07:30 to 16:00	
	19:00 to 21:00	
Unit Rate 3: Green	00:00 to 07:30	00:00 to 24:00
	21:00 to 24:00	

All times are UK clock times.

- 2.21. Designated EHV Properties as calculated using the EDCM will be allocated the relevant charge structure set out in Annex 2.
- 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 16:00 and 19:00,
     Mon to Fri from 1<sup>st</sup> November to the last date in February.
  - All times are UK clock time.

#### 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 WPD 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>.
- 2.25. The time periods for the application of unit charges to connections which are pseudo HH metered are the same as those in paragraph 2.20.

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

2.26. WPD does not operate networks outside its Distribution Service Area.

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

#### **Chargeable Capacity**

- 2.27. The Chargeable Capacity is, for each billing period, the highest of the MIC/MEC or the actual capacity, calculated as detailed below.
- 2.28. The MIC/MEC will be agreed with WPD 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 WPD using the contact details in paragraph 1.4.
- 2.29. 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

<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

MIC = Maximum Import Capacity in kVA

- 2.30. This calculation is completed for every half hour and the maximum value from the billing period is captured.
- 2.31. 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

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

#### **Standby Capacity for Additional Security on Site**

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

#### **Exceeded Capacity**

2.35. 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**

2.36. There is no minimum capacity threshold.

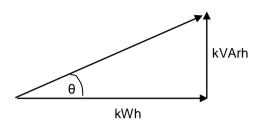
#### Application of charges for excess reactive power

2.37. 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.

#### 2.38. Power Factor is calculated as follows:

 $Cos \theta = Power Factor$ 



2.39. The chargeable reactive power is calculated as follows:

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

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

Where:

AI = Active Import in kWh

RI = Reactive Import in kVArh

RE = Reactive Export in kVArh

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

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

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

Where:

AE = Active Export in kWh

RI = Reactive Import in kVArh

RE = Reactive Export in kVArh

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

#### Provision of billing data

- 2.46. 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 WPD 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 each day and shall separately identify active and reactive import and export. Metering data provided to WPD shall be consistent with that received through the metering equipment installed. Metering data shall be provided in an electronic format specified by WPD 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 with the DNO). The data shall be e-mailed to wpdduos@westernpower.co.uk.
- 2.47. WPD 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). WPD reserves the right to levy a charge on Users who fail to provide such reactive data.

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

- 2.48. LDNO charges are applied to LDNOs who operate Embedded Networks within WPD's area.
- 2.49. 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.
- 2.50. 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:
  - http://www.westernpower.co.uk/getdoc/dcebd268-787c-4f4f-8f1a-dba7bb14e3ce/Use-of-System.aspx .
- 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 WPD's 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 WPD's area.

#### 4. Schedule of Line Loss Factors

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

- 4.1. Electricity entering or exiting the DNO's 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.

<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:

https://www.bsccentralservices.com/index.php/userguide/download.

#### 5. Notes for Designated EHV Properties

#### **EDCM** network group costs

- 5.1. The table in Annex 6 shows the un-scaled network group 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.

#### **Demand Side Management**

- 5.3. WPD's Demand Side Management approach is as follows:
  - All EDCM customers will be entitled to enter into a Demand Side Management Contract
  - WPD may, at its sole discretion approach specific customers, aggregators or suppliers to provide a range of demand side responses in specific locations based on network needs. These agreements may be for pre or post fault arrangements. It is at WPD's sole discretion whether to offer post-fault Demand Side Management agreements.
  - Payments accrued by a customer who enters into a Demand Side Management agreement will be reflected in their Distribution Use of System charges to their supplier. Payments may be subject to reduction if the customer fails to deliver demand reductions in accordance with the agreement
  - The minimum demand reduction capacity a customer can offer is 25% of its Maximum Import Capacity.
  - Requests for Demand Side Management agreements should be sent to the Income and Connections Manager at the address shown in paragraph 1.3

#### 6. Electricity Distribution Rebates

6.1. WPD 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

None

- 7.1. Where a User has failed to settle a DUoS invoice or notify WPD of a bona fide dispute, in accordance with the DCUSA an account review charge may be made in accordance with the Late Payment of Commercial Debts regulations 2002 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 DCUSA.
- 8. Charges for electrical plant provided ancillary to the grant of Use of System

None

### 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.
	The system consisting (wholly or mainly) of:  • electric lines owned or operated by an authorised distributor that is used for the distribution of electricity from grid supply points or generation sets or other Entry Points to the points of delivery to
Distribution System	<ul> <li>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,</li> </ul>
	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.
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.
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.

Term	Definition
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	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

Western	Western Power Distribution - East Midlands - Effective from April 2012 - FINAL 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	1	1	1.931			3.72					
Domestic Two Rate	3	2	2.413	0.057		3.72				4,8	
Domestic Off Peak (related MPAN)	11	2	0.418							900	
Small Non Domestic Unrestricted	13	3	1.695			5.00				22,34,43	
Small Non Domestic Two Rate	37	4	1.861	0.049		5.00				16, 28,31, 49,52	
Small Non Domestic Off Peak (related MPAN)	901	4	0.277								
LV Medium Non-Domestic	81	5-8	1.763	0.043		31.18				83,85	
LV Sub Medium Non-Domestic	80	5-8	1.242	0.029		9.31					
LV HH Metered	58, 990	0	8.255	0.569	0.033	9.31	2.21	0.314	2.21		
LV Sub HH Metered	59	0	6.683	0.409	0.022	9.31	3.00	0.256	3.00		
HV HH Metered	60, 991	0	4.934	0.231	0.010	93.62	3.86	0.159	3.86	929	
NHH UMS	800, 801, 802, 803	1&8	2.481								
LV UMS (Pseudo HH Metered)	804	0	25.432	2.479	0.686					805	
LV Generation NHH	986	8	-0.771								
LV Sub Generation NHH	970	8	-0.664								
LV Generation Intermittent	971	0	-0.771					0.272			
LV Generation Non-Intermittent	973	0	-6.353	-0.592	-0.035			0.272			
LV Sub Generation Intermittent	972	0	-0.664					0.246			
LV Sub Generation Non-Intermittent	974	0	-5.522	-0.497	-0.029			0.246			
HV Generation Intermittent	975	0	-0.482			16.07		0.195			
HV Generation Non-Intermittent	977	0	-4.153	-0.328	-0.017	16.07		0.195			

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

Charges									
LLFC	Tariff name	Super red rate p/kWh	Fixed charge for demand p/day	Import capacity p/kVA/day	Exceeded import capacity charge (p/kVA/day)	Unique Identifier			
824	Network Rail Bytham (Import)		4455.44	7.58	7.58	1100039676983 1100039676992			
825	Network Rail Grantham (Import)		4246.01	7.38	7.38	1100039676690 1100039676706			
826	Network Rail Staythorpe (Import)			1.70	1.70	1100050106527			
827	Network Rail Retford (Import)		7496.26	8.09	8.09	1100039676965 1100039676974			
828	Network Rail Rugby (Import)		4562.81	3.95	3.95	1100050106554			
829	Network Rail Tamworth (Import)		8801.20	3.55	3.55	1100050106572			
830	Network Rail Wolverton (Import)		4515.70	3.38	3.38	1100050106545			
831	Jaguar Cars (Import)		124.66	8.32	8.32	1100039602086			
832	Alstom Frankton (Import)		1430.73	2.43	2.43	1100039600655			
833	University of Warwick (Import)		124.66	5.61	5.61	1100039602156			
834	Dunlop Factory (Import)		124.66	5.40	5.40	1100039603131			
835	Bombardier (Import)		308.84	6.45	6.45	1160001030330 1160001139525			
836	British Steel (Import)	3.492	463.25	2.28	2.28	1100039600015			
837	Acordis (Import)		2276.60	1.93	1.93	1100039669504			
838	Derwent (Import)		20.83	1.76	1.76	No MPAN			
839	GEC Alsthom (Import)		1185.49	2.72	2.72	1100039667570			

LLFC	Tariff name	Super red rate p/kWh	Fixed charge for demand p/day	Import capacity p/kVA/day	Exceeded import capacity charge (p/kVA/day)	Unique Identifier
840	St Gobain (Import)		308.84	3.51	3.51	1100050311185 1100050311194
841	Toyota (Import)		19126.34	2.94	2.94	1100039603559
842	RR AB&E (Import)			3.89	3.89	1100039600051
843	RR Sinfin C (Import)		18523.81	1.10	1.10	1100039600060 1100050311167
844	ABR Foods (Import)	3.499	520.17	1.30	1.30	1100039671841
845	Petsoe Wind Farm (Import)			1.65	1.65	1160001236210
846	Castle Cement (Import)		4042.96	4.01	4.01	1100039600042
847	Rugby Cement (Import)		982.19	3.89	3.89	1100050013290 1100050314594
848	Cov & Sol Waste (Import)			1.79	1.79	1100039667446
852	Asfordby 132kV (Import)		1439.68	2.27	2.27	1100050780529
853	Calvert Landfill (Import)	0.041	29.25	1.73	1.73	1100770095532
854	Weldon Landfill (Import)	3.491	32.91	1.29	1.29	1100770104666
855	Goosy Lodge Power (Import)	3.749	48.07	1.30	1.30	1100770099918
856	BAR Honda (Import)	0.295	336.15	2.86	2.86	1160000116234 1160000135185
857	Burton Wolds Wind Farm (Import)	10.111	7.14	1.47	1.47	1160000226327
858	Network Rail Bretton (Import)		905.51	5.85	5.85	1100039606090
859	Bambers Farm Wind Farm Import		2.22	1.38	1.38	1100770683368

LLFC	Tariff name	Super red rate p/kWh	Fixed charge for demand p/day	Import capacity p/kVA/day	Exceeded import capacity charge (p/kVA/day)	Unique Identifier
860	Vine House Wind Farm Import		46.34	1.75	1.75	1160000213601
861	Red House Wind Farm Import		9.01	1.64	1.64	1160000154150
862	Daneshill Landfill (Import)		45.54	1.29	1.29	1160000186551
863	Corby Power (Import)	3.572	4.70	2.05	2.05	1130000053950
864	Newton Longville (Import)	0.627	13.62	1.53	1.53	1160000745093
865	Hollies Wind Farm (Import)		1.21	1.68	1.68	1160000909822
866	Lynn (Import)		414.51	1.80	1.80	1130000044004
867	Inner Dowsing (Import)		414.51	1.80	1.80	1130000044022
868	Bicker Fen (Import)		17.50	1.40	1.40	1160000999037
869	London Road Heat Station (Import)		48.49	1.69	1.69	1100039667455
870	Lindhurst Wind Farm (Import)		10.96	1.29	1.29	1160001253330
871	Staveley Works		2105.02	4.17	4.17	1100039600103
872	AP Drivelines (Import)	0.291	3729.37	3.96	3.96	1100039600380
873	Rolls Royce Coventry (Import)		124.66	6.47	6.47	1100039600317
874	Daw Mill UK Coal (Import)	0.220	1587.84	4.68	4.68	1100039600460
875	Caterpillar (Import)	0.484	1687.39	5.42	5.42	1100039667989
876	Santander Carlton Park (Import)		20247.02	3.33	3.33	1100039602323

LLFC	Tariff name	Super red rate p/kWh	Fixed charge for demand p/day	Import capacity p/kVA/day	Exceeded import capacity charge (p/kVA/day)	Unique Identifier
877	Brush (Import)		124.66	3.59	3.59	1100039600308
878	JCB (Import)		124.66	11.70	11.70	1100039601524
879	Cast Bar UK (Import)		186.98	5.98	5.98	1100039606197
880	Bretby GP (Import)	0.376	62.33	8.33	8.33	1100039668227
881	Holwell Works (Import)	4.120	124.66	7.03	7.03	1100039601028
882	Pedigree Petfoods (Import)	4.049	62.33	6.78	6.78	1100039601019
883	Alstom Wolverton (Import)	0.654	124.66	3.98	3.98	1100039601339
884	Colworth Laboratory (Import)	3.709	124.66	7.40	7.40	1100039600567
885	Boots Thane Road (Import)	0.394	274.85	1.54	1.54	1100039601923 1100039601932
886	QMC (Import)	0.439	124.66	2.75	2.75	1100039606294
887	British Gypsum		1041.82	12.27	12.27	1100039604358
888	Melbourne STW (Import)		124.66	5.72	5.72	1100039605139 1100039605148
889	Whetstone (Import)	1.127	124.66	3.30	3.30	1100039601116 1100050484817
890	Holbrook Works (Import)		124.66	3.99	3.99	1100039603647 1100039603656
891	Astrazeneca Charnwood (Import)		1635.75	4.20	4.20	1100050674421 1100050677575
892	B&Q Manton (Import)		62.33	3.76	3.76	1160000002893 1160000065918
893	Transco Churchover (Import)		124.66	3.16	3.16	1160001007100 1160001122717

LLFC	Tariff name	Super red rate p/kWh	Fixed charge for demand p/day	Import capacity p/kVA/day	Exceeded import capacity charge (p/kVA/day)	Unique Identifier
894	Alstom Rugby (Import)		944.83	2.93	2.93	1100039600033
895	Volkersteven (VSB Avenue) (Import)		176.59	2.10	2.10	1160001246403
896	LOW SPINNEY WIND FARM (Import)		154.38	1.40	1.40	1160001363390
897	SWINFORD WINDFARM (Import)		213.76	1.52	1.52	1160001457392
898	Yelvertoft Wind Farm		83.13	1.75	1.75	
899	Maxwell House Data Centre	0.624	62.33	2.88	2.88	
903	EuroHub Data Centre	3.993	2375.14	3.17	3.17	
904	Hatton Gas Compressor		15091.77	8.17	8.17	
905	North Hykeham EFW	1.143		1.43	1.43	

LLFC	Tariff name	Unit charge p/kWh	Fixed charge for generation p/day	Export capacity p/kVA/day	Exceeded export capacity charge (p/kVA/day)	Unique Identifier
600	Railtrack Bytham (Export)					
601	Railtrack Grantham (Export)					1100050641453
602	Railtrack Staythorpe (Export)					1100050106971
603	Railtrack Retford (Export)					1100050314637
604	Railtrack Rugby (Export)					1130000029600
605	Railtrack Tamworth (Export)					1130000029619
606	Railtrack Wolverton (Export)					1130000029628
607	Acordis (Export)					1100050223110
608	QMC (Export)					1100050222446
609	ABR Foods (Export)					1100050222552
610	Rolls Royce Derby CHP Exp					1100050222428
611	Bentinck (Export)					1100770280291
612	Calvert Landfill (Export)					1100770095541 1130000014463

LLFC	Tariff name	Unit charge p/kWh	Fixed charge for generation p/day	Export capacity p/kVA/day	Exceeded export capacity charge (p/kVA/day)	Unique Identifier
613	Weldon Landfill (Export)					1100770104693
614	Goosy Lodge Power (Export)					1100770099927
615	Burton Wolds Wind Farm (Export)					1160000226336
616	Railtrack Bretton (Export)					
617	Bambers Farm Wind Farm Export					1100770683377
618	Vine House Wind Farm Export					1160000213610
619	Red House Wind Farm Export					1160000154160
620	Daneshill Landfill (Export)					1160000186560
621	Newton Longville (Export)					1160000745066
622	Hollies Wind Farm (Export)			0.65	0.65	1160000909840
629	Lynn (Export)					1130000044013
630	Inner Dowsing (Export)					1130000044031
631	Bicker Fen (Export)			0.60	0.60	1160000999046
632	Cov & Sol Waste (Export)					1100050222604

LLFC	Tariff name	Unit charge p/kWh	Fixed charge for generation p/day	Export capacity p/kVA/day	Exceeded export capacity charge (p/kVA/day)	Unique Identifier
633	Lindhurst Wind Farm (Export)			0.64	0.64	1160001253321
634	London Road CHP (Export)					1100050222473
635	Petsoe Wind Farm (Export)			0.60	0.60	1160001236229
636	Boots Thane Road (Export)					1100050222464
637	B&Q Manton (Export)					1160001059394
638	Low Spinney Wind Farm (Export)			0.70	0.70	1160001363380
639	SWINFORD WINDFARM (Export)			0.60	0.60	1160001457408
640	Asfordby Generation			0.47	0.47	1160001479030
641	Yelvertoft (Export)			0.55	0.55	
642	North Hykeham Export			0.55	0.55	

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

Western Pow	Western Power Distribution - East Midlands - Effective from April 2012 - FINAL 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	on-Domestic 90 5-8 1.063 0.014 253.83												
Notes:													

			HH Preserved	Charges/Addi	tional LLFC Classe	<b>es</b>			
	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	61	0	4.403	0.178	0.007	93.62	3.20	0.144	3.20
HV Sub Generation Non- Intermittent	978	0	-3.435	-0.241	-0.011	16.07		0.147	
HV Sub Generation Intermittent	976	0	-0.388			16.07		0.147	
Notes:									

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

Western Power I	Distribution	on - East Midla	ands - Effective	e from April 2	012 - FINAL LDN	IO Tariffs		
	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	1.382			2.66			
LDNO LV: Domestic Two Rate	2	1.727	0.041		2.66			
LDNO LV: Domestic Off Peak (related MPAN)	2	0.299						
LDNO LV: Small Non Domestic Unrestricted	3	1.213			3.58			
LDNO LV: Small Non Domestic Two Rate	4	1.332	0.035		3.58			
LDNO LV: Small Non Domestic Off Peak (related MPAN)	4	0.198						
LDNO LV: LV Medium Non-Domestic	5-8	1.262	0.031		22.32			
LDNO LV: LV HH Metered	0	5.909	0.407	0.024	6.66	1.58	0.225	1.58
LDNO LV: NHH UMS	1&8	1.776						
LDNO LV: LV UMS (Pseudo HH Metered)	0	18.203	1.774	0.491				
LDNO LV: LV Generation NHH	8	-0.771						
LDNO LV: LV Generation Intermittent	0	-0.771					0.272	
LDNO LV: LV Generation Non-Intermittent	0	-6.353	-0.592	-0.035			0.272	
LDNO HV: Domestic Unrestricted	1	0.997			1.92			
LDNO HV: Domestic Two Rate	2	1.246	0.029		1.92			
LDNO HV: Domestic Off Peak (related MPAN)	2	0.216						
LDNO HV: Small Non Domestic Unrestricted	3	0.875			2.58			
LDNO HV: Small Non Domestic Two Rate	4	0.961	0.025		2.58			
LDNO HV: Small Non Domestic Off Peak (related MPAN)	4	0.143						
LDNO HV: LV Medium Non-Domestic	5-8	0.910	0.022		16.09			
LDNO HV: LV HH Metered	0	4.261	0.294	0.017	4.81	1.14	0.162	1.14
LDNO HV: LV Sub HH Metered	0	4.883	0.299	0.016	6.80	2.19	0.187	2.19
LDNO HV: HV HH Metered	0	4.054	0.190	0.008	76.91	3.17	0.131	3.17
LDNO HV: NHH UMS	1&8	1.281						
LDNO HV: LV UMS (Pseudo HH Metered)	0	13.127	1.280	0.354				
LDNO HV: LV Generation NHH	8	-0.771						
LDNO HV: LV Sub Generation NHH	8	-0.664						
LDNO HV: LV Generation Intermittent	0	-0.771					0.272	

Western Power I	Distribution	on - East Midla	ands - Effective	e from April 2	012 - FINAL LDN	IO Tariffs		
	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 HV: LV Generation Non-Intermittent	0	-6.353	-0.592	-0.035			0.272	
LDNO HV: LV Sub Generation Intermittent	0	-0.664					0.246	
LDNO HV: LV Sub Generation Non-Intermittent	0	-5.522	-0.497	-0.029			0.246	
LDNO HV: HV Generation Intermittent	0	-0.482					0.195	
LDNO HV: HV Generation Non-Intermittent	0	-4.153	-0.328	-0.017			0.195	
LDNO HVplus: Domestic Unrestricted	1	0.838			1.62		0.000	
LDNO HVplus: Domestic Two Rate	2	1.048	0.025		1.62			
LDNO HVplus: Domestic Off Peak (related MPAN)	2	0.181						
LDNO HVplus: Small Non Domestic Unrestricted	3	0.736			2.17			
LDNO HVplus: Small Non Domestic Two Rate	4	0.808	0.021		2.17			
LDNO HVplus: Small Non Domestic Off Peak (related MPAN)	4	0.120						
LDNO HVplus: LV Medium Non-Domestic	5-8	0.765	0.019		13.54			
LDNO HVplus: LV Sub Medium Non-Domestic		0.763	0.018		5.72			
LDNO HVplus: HV Medium Non-Domestic		0.735	0.010		175.42			
LDNO HVplus: LV HH Metered	0	3.584	0.247	0.014	4.04	0.96	0.136	0.96
LDNO HVplus: LV Sub HH Metered	0	4.108	0.251	0.014	5.72	1.84	0.157	1.84
LDNO HVplus: HV HH Metered	0	3.410	0.160	0.007	64.70	2.67	0.110	2.67
LDNO HVplus: NHH UMS	1&8	1.077						
LDNO HVplus: LV UMS (Pseudo HH Metered)	0	11.042	1.076	0.298				
LDNO HVplus: LV Generation NHH	8	-0.474						
LDNO HVplus: LV Sub Generation NHH	8	-0.459						
LDNO HVplus: LV Generation Intermittent	0	-0.474					0.167	
LDNO HVplus: LV Generation Non-Intermittent	0	-3.905	-0.364	-0.022			0.167	
LDNO HVplus: LV Sub Generation Intermittent	0	-0.459					0.170	
LDNO HVplus: LV Sub Generation Non-Intermittent	0	-3.816	-0.343	-0.020			0.170	
LDNO HVplus: HV Generation Intermittent	0	-0.482			16.07		0.195	
LDNO HVplus: HV Generation Non-Intermittent	0	-4.153	-0.328	-0.017	16.07		0.195	
LDNO EHV: Domestic Unrestricted	1	0.728			1.40			
LDNO EHV: Domestic Two Rate	2	0.910	0.021		1.40			
LDNO EHV: Domestic Off Peak (related MPAN)	2	0.158						
LDNO EHV: Small Non Domestic Unrestricted	3	0.639			1.88			

Western Power I	Distribution	on - East Midla	ands - Effective	e from April 2	012 - FINAL LDN	IO Tariffs		
	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 EHV: Small Non Domestic Two Rate	4	0.702	0.018		1.88			
LDNO EHV: Small Non Domestic Off Peak (related MPAN)	4	0.104						
LDNO EHV: LV Medium Non-Domestic	5-8	0.665	0.016		11.75			
LDNO EHV: LV Sub Medium Non-Domestic		0.663	0.015		4.97			
LDNO EHV: HV Medium Non-Domestic		0.638	0.008		152.31			
LDNO EHV: LV HH Metered	0	3.112	0.215	0.012	3.51	0.83	0.118	0.83
LDNO EHV: LV Sub HH Metered	0	3.566	0.218	0.012	4.97	1.60	0.137	1.60
LDNO EHV: HV HH Metered	0	2.961	0.139	0.006	56.17	2.32	0.095	2.32
LDNO EHV: NHH UMS	1&8	0.935						
LDNO EHV: LV UMS (Pseudo HH Metered)	0	9.587	0.935	0.259				
LDNO EHV: LV Generation NHH	8	-0.411						
LDNO EHV: LV Sub Generation NHH	8	-0.398						
LDNO EHV: LV Generation Intermittent	0	-0.411					0.145	
LDNO EHV: LV Generation Non-Intermittent	0	-3.390	-0.316	-0.019			0.145	
LDNO EHV: LV Sub Generation Intermittent	0	-0.398					0.148	
LDNO EHV: LV Sub Generation Non-Intermittent	0	-3.313	-0.298	-0.017			0.148	
LDNO EHV: HV Generation Intermittent	0	-0.418			13.95		0.169	
LDNO EHV: HV Generation Non-Intermittent	0	-3.606	-0.285	-0.015	13.95		0.169	
LDNO 132kV/EHV: Domestic Unrestricted	1	0.680			1.31			
LDNO 132kV/EHV: Domestic Two Rate	2	0.849	0.020		1.31			
LDNO 132kV/EHV: Domestic Off Peak (related MPAN)	2	0.147						
LDNO 132kV/EHV: Small Non Domestic Unrestricted	3	0.597			1.76			
LDNO 132kV/EHV: Small Non Domestic Two Rate	4	0.655	0.017		1.76			
LDNO 132kV/EHV: Small Non Domestic Off Peak (related MPAN)	4	0.098						
LDNO 132kV/EHV: LV Medium Non-Domestic	5-8	0.621	0.015		10.98			
LDNO 132kV/EHV: LV Sub Medium Non-Domestic		0.619	0.014		4.64			
LDNO 132kV/EHV: HV Medium Non-Domestic		0.596	0.008		142.23			
LDNO 132kV/EHV: LV HH Metered	0	2.906	0.200	0.012	3.28	0.78	0.111	0.78
LDNO 132kV/EHV: LV Sub HH Metered	0	3.330	0.204	0.011	4.64	1.50	0.128	1.50
LDNO 132kV/EHV: HV HH Metered	0	2.765	0.129	0.006	52.46	2.16	0.089	2.16
LDNO 132kV/EHV: NHH UMS	1&8	0.873						

Western Power I	Distribution	on - East Midla	ands - Effective	e from April 2	012 - FINAL LDN	IO Tariffs		
	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/EHV: LV UMS (Pseudo HH Metered)	0	8.953	0.873	0.241				
LDNO 132kV/EHV: LV Generation NHH	8	-0.384						
LDNO 132kV/EHV: LV Sub Generation NHH	8	-0.372						
LDNO 132kV/EHV: LV Generation Intermittent	0	-0.384					0.136	
LDNO 132kV/EHV: LV Generation Non-Intermittent	0	-3.166	-0.295	-0.017			0.136	
LDNO 132kV/EHV: LV Sub Generation Intermittent	0	-0.372					0.138	
LDNO 132kV/EHV: LV Sub Generation Non- Intermittent	0	-3.094	-0.278	-0.016			0.138	
LDNO 132kV/EHV: HV Generation Intermittent	0	-0.391			13.03		0.158	
LDNO 132kV/EHV: HV Generation Non-Intermittent	0	-3.367	-0.266	-0.014	13.03		0.158	
LDNO 132kV: Domestic Unrestricted	1	0.507			0.98			
LDNO 132kV: Domestic Two Rate	2	0.634	0.015		0.98			
LDNO 132kV: Domestic Off Peak (related MPAN)	2	0.110						
LDNO 132kV: Small Non Domestic Unrestricted	3	0.445			1.31			
LDNO 132kV: Small Non Domestic Two Rate	4	0.489	0.013		1.31			
LDNO 132kV: Small Non Domestic Off Peak (related MPAN)	4	0.073						
LDNO 132kV: LV Medium Non-Domestic	5-8	0.463	0.011		8.19			
LDNO 132kV: LV Sub Medium Non-Domestic		0.462	0.011		3.46			
LDNO 132kV: HV Medium Non-Domestic		0.444	0.006		106.08			
LDNO 132kV: LV HH Metered	0	2.168	0.149	0.009	2.44	0.58	0.082	0.58
LDNO 132kV: LV Sub HH Metered	0	2.484	0.152	0.008	3.46	1.12	0.095	1.12
LDNO 132kV: HV HH Metered	0	2.062	0.097	0.004	39.13	1.61	0.066	1.61
LDNO 132kV: NHH UMS	1&8	0.651						
LDNO 132kV: LV UMS (Pseudo HH Metered)	0	6.678	0.651	0.180				
LDNO 132kV: LV Generation NHH	8	-0.287						
LDNO 132kV: LV Sub Generation NHH	8	-0.278						
LDNO 132kV: LV Generation Intermittent	0	-0.287					0.101	
LDNO 132kV: LV Generation Non-Intermittent	0	-2.361	-0.220	-0.013			0.101	
LDNO 132kV: LV Sub Generation Intermittent	0	-0.278					0.103	
LDNO 132kV: LV Sub Generation Non-Intermittent	0	-2.308	-0.208	-0.012			0.103	
LDNO 132kV: HV Generation Intermittent	0	-0.291			9.72		0.118	
LDNO 132kV: HV Generation Non-Intermittent	0	-2.511	-0.198	-0.010	9.72		0.118	

Western Power Distribution - East Midlands - Effective from April 2012 - FINAL LDNO Tariffs										
	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 0000: Domestic Unrestricted	1	0.176			0.34					
LDNO 0000: Domestic Two Rate	2	0.220	0.005		0.34					
LDNO 0000: Domestic Off Peak (related MPAN)	2	0.038								
LDNO 0000: Small Non Domestic Unrestricted	3	0.155			0.46					
LDNO 0000: Small Non Domestic Two Rate	4	0.170	0.004		0.46					
LDNO 0000: Small Non Domestic Off Peak (related MPAN)	4	0.025								
LDNO 0000: LV Medium Non-Domestic	5-8	0.161	0.004		2.84					
LDNO 0000: LV Sub Medium Non-Domestic		0.160	0.004		1.20					
LDNO 0000: HV Medium Non-Domestic		0.154	0.002		36.86					
LDNO 0000: LV HH Metered	0	0.753	0.052	0.003	0.85	0.20	0.029	0.20		
LDNO 0000: LV Sub HH Metered	0	0.863	0.053	0.003	1.20	0.39	0.033	0.39		
LDNO 0000: HV HH Metered	0	0.717	0.034	0.001	13.60	0.56	0.023	0.56		
LDNO 0000: NHH UMS	1&8	0.226								
LDNO 0000: LV UMS (Pseudo HH Metered)	0	2.320	0.226	0.063						
LDNO 0000: LV Generation NHH	8	-0.100								
LDNO 0000: LV Sub Generation NHH	8	-0.096								
LDNO 0000: LV Generation Intermittent	0	-0.100					0.035			
LDNO 0000: LV Generation Non-Intermittent	0	-0.821	-0.076	-0.005			0.035			
LDNO 0000: LV Sub Generation Intermittent	0	-0.096					0.036			
LDNO 0000: LV Sub Generation Non-Intermittent	0	-0.802	-0.072	-0.004			0.036			
LDNO 0000: HV Generation Intermittent	0	-0.101			3.38		0.041			
LDNO 0000: HV Generation Non-Intermittent	0	-0.873	-0.069	-0.004	3.38		0.041			

#### **Annex 5 – Schedule of Line Loss Factors**

Western Power Distribution - East Midlands - Effective from April 2012 - FINAL LLF Time Periods							
Time periode	Period 3	Period 4					
Time periods	Night	Peak	Semi-Peak	Other			
Monday to Friday Mar to Oct	00:30 - 07:30			07:30 – 00:30			
Monday to Friday Nov to Feb	00:30 - 07:30	16:00 – 19:00	07:30 - 16:00 19:00 - 20:00	20:00 – 00:30			
Saturday and Sunday All Year	00:30 - 07:30			07:30 – 00:30			
Notes	All the above times are in UK Clock time						

Generic Demand and Generation LLFs						
	Metered voltage, respective periods and associated LLFCs					
Metered Voltage	Period 1	Period 2	Period 3	Period 4	Associated LLFC	
Low Voltage Network	1.071	1.118	1.104	1.084	1,2,3,4,5,6,7,8,9,10,11,13,16,19,22,25,28,31, 34,37,40,43,46,49,52,58,80,81,82,83,84,85, 100,101,102,103,104,105,106,107,108,109, 110,111,112,800,801,802,803,804,805,821, 900, 901, 970, 971, 972, 973, 974, 986, 987, 990, 993, 994, 995	
Low Voltage Substation	1.071	1.118	1.104	1.084	59	

#### **Generic Demand and Generation LLFs**

### Metered voltage, respective periods and associated LLFCs

Metered Voltage	Period 1	Period 2	Period 3	Period 4	Associated LLFC
High Voltage Network	1.031	1.047	1.043	1.036	60,90,91,92,93,94,95,96,97,98,99,113,114, 115,116,117,118,119,120,121,122,123,124, 125,126,127,128,129,130,131,132, 929, 975, 976, 977, 978, 991, 996, Glutton Bridge Interconnector
High Voltage Substation	1.021	1.029	1.027	1.023	061,608,632,636,637,661,662,663,664,665,666,667,668,669,670,671,672,673,674,675,676,677,678,679,680,681,682,683,684,685,686,687,688,689,690,691,692,693,694,695,696,697,698,699,700,831,832,833,834,869,871,872,873,874,875,876,877,878,879,880,881,882,883,884,885,886,887,888,889,890,891,892,893,894,930,931,932,933,934,935,936,937,938,939,940,941,942,943,944,945,946,947,948,949
33kV Generic	1.003	1.006	1.006	1.004	604,611,633,635,638,639,640,641,642,643, 644,645,646,647,648,649,650,651,652,653,6 54,655,656,657,658,659, 660,838,845,849,851,870,895,896,897,898,8 99,902,903,904,905,906,907,908,909,910,91 1,912,913,914,915,916, 917,918,919,920,921,922,923,924,925,997

#### **EHV Site Specific LLFs** Demand Site Period 1 Period 2 Period 3 Period 4 **Associated LLFC** 1.022 Railtrack Bytham (Import) 1.015 1.030 1.029 824 Railtrack Grantham 1.017 825 1.012 1.019 1.020 (Import) Railtrack Staythorpe 1.000 1.001 1.001 1.000 826 (Import) Railtrack Retford (Import) 1.005 1.009 1.013 1.011 827 Railtrack Rugby (Import) 1.018 1.026 1.022 828 1.026 Railtrack Tamworth 1.005 1.009 1.006 829 1.007 (Import) Railtrack Wolverton 1.010 1.016 1.016 1.015 830 (Import) Bombardier (Import) 1.010 1.022 1.015 835 1.020 British Steel (Import) 1.007 0.992 0.993 836 0.999 Acordis (Import) 0.998 1.004 1.000 837 1.003 GEC Alsthom (Import) 1.009 1.025 1.026 1.017 839 St Gobain (Import) 840 1.004 1.018 1.017 1.010 Toyota (Import) 1.003 1.004 1.003 841 1.005 1.001 1.003 1.002 RR AB&E (Import) 1.003 842 843 RR Sinfin C (Import) 1.002 1.002 1.002 1.002 844 ABR Foods (Import) 1.012 1.003 1.016 0.991 1.016 1.020 846 Castle Cement (Import) 1.023 1.017 1.043 Rugby Cement (Import) 1.034 1.045 1.049 847 1.009 Cov & Sol Waste (Import) 1.004 1.006 848 1.010 Asfordby 132kv 1.000 1.001 1.001 1.000 852 853 Calvert Landfill (Import) 1.017 1.000 1.017 1.017 Weldon Landfill (Import) 0.981 854 1.018 0.970 1.017 Goosy Lodge Power 1.010 1.000 1.110 1.017 855 (Import) BAR Honda (Import) 1.036 1.044 856 1.051 1.051 Burton Wolds Wind Farm

1.054

1.040

(Import)

1.063

857

1.048

#### **EHV Site Specific LLFs** Demand **Associated LLFC** Site Period 1 Period 2 Period 3 Period 4 1.005 Railtrack Bretton (Import) 1.002 1.009 1.008 858 Bambers Farm Wind 1.001 859 1.053 1.068 1.109 Farm Import Vine House Wind Farm 1.019 1.010 1.029 1.038 860 Import Red House Wind Farm 1.052 1.012 1.080 1.076 861 Import Daneshill Landfill (Import) 1.013 1.028 1.039 1.018 862 Corby Power (Import) 1.014 1.008 1.016 1.000 863 Newton Longville (Import) 1.018 1.026 1.010 1.028 864 Hollies Wind Farm 1.030 865 1.014 1.009 1.010 (Import) Lynn (Import) 0.978 1.013 866 0.986 0.989 Inner Dowsing (Import) 1.084 1.085 1.102 1.127 867 Bicker Fen (Import) 1.038 1.075 1.058 1.070 868

EHV Site Specific LLFs						
Generation						
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC	
Railtrack Bytham (Export)	1.000	1.000	1.000	1.000	600	
Railtrack Grantham (Export)	1.000	1.000	1.000	1.005	601	
Railtrack Staythorpe (Export)	1.000	1.000	1.000	1.000	602	
Railtrack Retford (Export)	1.000	1.000	1.000	1.000	603	
Railtrack Tamworth (Export)	1.004	1.008	1.007	1.006	605	
Railtrack Wolverton (Export)	1.002	1.003	1.004	1.003	606	
Acordis (Export)	0.999	1.002	1.003	1.000	607	
ABR Foods (Export)	1.004	0.988	0.995	0.990	609	

EHV Site Specific LLFs					
Generation					
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Rolls Royce Derby CHP Exp	0.999	1.000	1.000	1.000	610
Calvert Landfill (Export)	0.994	1.002	1.002	1.002	612
Weldon Landfill (Export)	1.006	0.991	0.998	0.993	613
Goosy Lodge Power (Export)	0.997	1.003	1.003	1.002	614
Burton Wolds Wind Farm (Export)	1.005	1.002	1.003	1.003	615
Railtrack Bretton (Export)	1.000	1.000	1.000	1.000	616
Bambers Farm Wind Farm Export	0.970	0.970	0.971	0.990	617
Vine House Wind Farm Export	1.002	1.011	1.008	1.005	618
Red House Wind Farm Export	1.014	1.032	1.025	1.019	619
Daneshill Landfill (Export)	1.011	1.024	1.022	1.016	620
Newton Longville (Export)	1.009	1.015	1.015	1.014	621
Hollies Wind Farm (Export)	0.961	0.956	0.956	0.970	622
Lynn (Export)	0.972	0.970	0.971	0.977	629
Inner Dowsing (Export)	0.976	0.973	0.974	0.982	630
Bicker Fen (Export)	1.011	1.023	1.018	1.013	631
London Road CHP (Export)	1.006	1.014	1.013	1.009	634

### Annex 6 - Un-scaled network group costs

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Please see WPD – EM – Schedule of Charges and Other Tables, Annex 6 nodal Prices FCP.