WESTERN POWER DISTRIBUTION

Serving the Midlands, South West and Wales

Western Power Distribution

(West Midlands) plc

Use of System Charging Statement

Effective from 1st April 2012

WPD (WEST MIDLANDS) PLC
AVONBANK, FEEDER RD, BRISTOL BS20 0TB
REGISTERED IN ENGLAND AND WALES NO: 03600574

Contents

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[1] 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

[1] Charges can be positive or negative.

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

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[2].

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;

[2] 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** **21:00 to 24:00**	**00:00 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 1st 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[3] and where operated in accordance with BSCP520[4].

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

$$\text{Demand Chargeable Capacity} = \text{Max}(2 \times \sqrt{AI^2 + \max(RI, RE)^2}, MIC)$$

Where:

AI = Import consumption in kWh

RI = Reactive import in kVArh

RE = Reactive export in kVArh

[3] The Electricity (Unmetered Supply) Regulations 2001 available from http://www.legislation.gov.uk/uksi/2001/3263/made
[4] Balancing and Settlement Code Procedures on unmetered supplies 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

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

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.

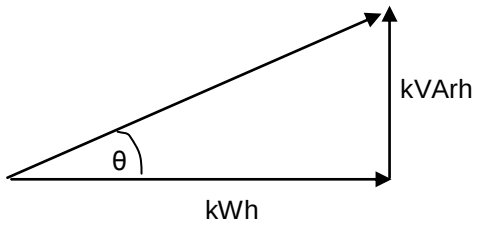
Application of charges for excess reactive power

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 θ = Power Factor



2.39. The chargeable reactive power is calculated as follows:

Demand Chargeable Reactive Power

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

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

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

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 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 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[5] 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 (http://www.elexon.co.uk/pages/losses.aspx) 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.

[5] 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, https://www.bsccentralservices.com/, 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 "www.elexon.co.uk/ELEXON 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	The system consisting (wholly or mainly) of: • electric lines owned or operated by an authorised distributor that is used for the distribution of electricity from grid supply points or generation sets or other Entry Points to the points of delivery to Customers or Users; or • any transmission licensee in its capacity as operator of that licensee's transmission system or the GB transmission system; • and includes any remote transmission assets (owned by a transmission licensee within England and Wales) that are operated by that authorised distributor and any electrical plant, electricity meters, and Metering Equipment owned or operated by it in connection with the distribution of electricity, but does not include any part of the GB transmission system.
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. http://mddonline.elexon.co.uk/default.aspx
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
Measurement Class	A classification of Metering Systems which indicates how Consumption is measured i.e. Non Half Hourly Metering Equipment (equivalent to Measurement Class "A") Non Half Hourly Unmetered Supplies (equivalent to Measurement Class "B") 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 Power Distribution - West 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	1.920			4.76				2,3
Domestic Two Rate	4	2	2.349	0.095		4.76				5,6,30
Domestic Off Peak (related MPAN)	34	2	0.190							35,36
Small Non Domestic Unrestricted	7	3	1.729			6.15				8,9,13,14,15,46, 47,49,107,108, 109
Small Non Domestic Two Rate	10	4	2.007	0.084		6.15				11,12,110,111, 112
Small Non Domestic Off Peak (related MPAN)	40	4	0.313							41,42
LV Medium Non-Domestic	21	5-8	1.783	0.073		35.86				20,22,25,26,27
LV Sub Medium Non-Domestic	19	5-8	1.221	0.044		10.13				
LV HH Metered	127	0	7.706	0.604	0.048	10.13	3.16	0.298	3.16	121,124,132
LV Sub HH Metered	128	0	7.110	0.497	0.029	10.13	4.16	0.234	4.16	
HV HH Metered	365	0	4.438	0.260	0.012	101.91	4.90	0.143	4.90	130
NHH UMS	85,86,87, 88,95, 96,97,98	1&8	2.500							
LV UMS (Pseudo HH Metered)	99	0	24.404	2.679	0.820					
LV Generation NHH	625	8	-0.692							
LV Sub Generation NHH	570	8	-0.583							
LV Generation Intermittent	571	0	-0.692					0.275		
LV Generation Non-Intermittent	573	0	-5.339	-0.584	-0.057			0.275		
LV Sub Generation Intermittent	572	0	-0.583					0.248		
LV Sub Generation Non-Intermittent	574	0	-4.540	-0.489	-0.044			0.248		

Western Power Distribution - West 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
HV Generation Intermittent	575	0	-0.379			17.50		0.203		
HV Generation Non-Intermittent	577	0	-3.046	-0.309	-0.020	17.50		0.203		

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

Western Power Distribution - West Midlands - Effective from April 2012 - FINAL EDCM Import 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
702	Tyseley Waste (Import)			2.34	2.34	1423197100003
704	Takao Europe (Import)		220.53	1.87	1.87	1423674500009
707	Uni of Birmingham (Import)		13938.84	3.63	3.63	1430000001342 1430000001351
709	Severn Trent Water (Wyelands) (Import)		2116.15	1.51	1.51	1426644200003
710	Wolverhampton Waste Services (Import)		25.31	1.56	1.56	1425993500002
711	Stoke CHP (Import)		254.81	2.17	2.17	1421696500001 1430000000906
712	WBB Minerals (Import)		324.85	1.24	1.24	1428483000001 1429586500003
713	Cauldon Cement (Import)		243.45	3.77	3.77	1422804000005

Western Power Distribution - West Midlands - Effective from April 2012 - FINAL EDCM Import 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**
714	Abson Gas Compressor Station (Import)		29.15	1.76	1.76	1412791203000
715	Ervin Amasteel (Import)		1908.19	3.34	3.34	1422108000000
716	Hanford Waste Services (Import)		22.27	1.54	1.54	1426793500003
717	NR Kidsgrove (Import)		14176.32	3.27	3.27	1422664500000 1425861000001
718	NR Stafford (Import)		4775.16	4.21	4.21	1421664500008 1426342000002
719	NR Washwood Heath (Import)		6906.37	3.34	3.34	1423124100000 1428564500005
720	NR Winson Green (Import)		2340.20	5.36	5.36	1420286500000
721	NR Smethwick (Import)		18020.70	1.75	1.75	1423566000006
722	NR Willenhall (Import)		3232.17	1.98	1.98	1424136000004
723	Northwick Import		135.85	1.72	1.72	1460002256025 1460002083346
724	Inco Alloys (Import)	11.659	524.49	5.33	5.33	1430000027786 1430000027795 1430000027800 1430000027810 1430000027829 1430000027838 1430000027847 1430000027856
725	Swancote Import		9.50	1.24	1.24	1460002258662
730	Quatt (Import)	1.577		3.18	3.18	1423464500000, 1429264500000
740	Knypersley (Import)	0.927	64.25	2.86	2.86	1425886500002
742	Simplex (Import)		131.12	2.51	2.51	1420114000000 1429414500005
744	Star Aluminium (Import)		981.92	2.72	2.72	1428882200005

Western Power Distribution - West Midlands - Effective from April 2012 - FINAL EDCM Import 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**
747	Goodyear		1383.48	3.74	3.74	1422949000004
800	Heartlands Power Ltd / Fort Dunlop (Import)			2.52	2.52	

Western Power Distribution - West Midlands - Effective from April 2012 - FINAL EHV Export Charges						
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**
703	Tyseley Waste Export					1430000005417
708	Uni of Birmingham Export					1430000001360
731	Quatt Export					1422464500009, 1421464500007
732	Wolverhampton WS Export					1424993500000
733	Stoke CHP Export					1430000000915 1430000000924
734	Hanford Waste Services Export					1425793500001
735	NR Kidsgrove Export					1430000033051 1430000033060

Western Power Distribution - West Midlands - Effective from April 2012 - FINAL EHV Export Charges						
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**
736	NR Stafford Export					1430000033103
737	NR Winson Green Export					1430000033121
738	NR Smethwick Export					1430000033089
739	NR Willenhall Export					1430000033112
741	NR Nechells/Washwood Heath Export					1430000033070 1430000044090
745	Redditch Gas Turbine Export					1430000021836
746	Knypersley Export					1426886500004
747	Goodyear					1422949000004
748	Northwick Export			0.55	0.55	1460002256034 1460002083355
749	Swancote Energy Export			0.55	0.55	1460002258671

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

Western Power Distribution - West 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	322, 323	5-8	0.882	0.014		276.60			
Notes:									

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	366	0	4.703	0.304	0.012	101.91	4.17	0.163	4.17
HV Sub Generation Non-Intermittent	578	0	-3.189	-0.326	-0.021	17.50		0.128	
HV Sub Generation Intermittent	576	0	-0.398			17.50		0.128	
Notes:									

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

Western Power Distribution - West 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 LV: Domestic Unrestricted	1	1.327			3.29			
LDNO LV: Domestic Two Rate	2	1.624	0.066		3.29			
LDNO LV: Domestic Off Peak (related MPAN)	2	0.131						
LDNO LV: Small Non Domestic Unrestricted	3	1.195			4.25			
LDNO LV: Small Non Domestic Two Rate	4	1.387	0.058		4.25			
LDNO LV: Small Non Domestic Off Peak (related MPAN)	4	0.216						
LDNO LV: LV Medium Non-Domestic	5-8	1.232	0.050		24.79			
LDNO LV: LV HH Metered	0	5.326	0.417	0.033	7.00	2.18	0.206	2.18
LDNO LV: NHH UMS	1&8	1.728						
LDNO LV: LV UMS (Pseudo HH Metered)	0	16.867	1.852	0.567				
LDNO LV: LV Generation NHH	8	-0.692						
LDNO LV: LV Generation Intermittent	0	-0.692					0.275	
LDNO LV: LV Generation Non-Intermittent	0	-5.339	-0.584	-0.057			0.275	
LDNO HV: Domestic Unrestricted	1	0.936			2.32			
LDNO HV: Domestic Two Rate	2	1.145	0.046		2.32			
LDNO HV: Domestic Off Peak (related MPAN)	2	0.093						
LDNO HV: Small Non Domestic Unrestricted	3	0.843			3.00			
LDNO HV: Small Non Domestic Two Rate	4	0.979	0.041		3.00			
LDNO HV: Small Non Domestic Off Peak (related MPAN)	4	0.153						
LDNO HV: LV Medium Non-Domestic	5-8	0.869	0.036		17.49			
LDNO HV: LV HH Metered	0	3.758	0.295	0.023	4.94	1.54	0.145	1.54
LDNO HV: LV Sub HH Metered	0	5.179	0.362	0.021	7.38	3.03	0.170	3.03
LDNO HV: HV HH Metered	0	3.675	0.215	0.010	84.39	4.06	0.118	4.06
LDNO HV: NHH UMS	1&8	1.219						
LDNO HV: LV UMS (Pseudo HH Metered)	0	11.900	1.306	0.400				
LDNO HV: LV Generation NHH	8	-0.692						
LDNO HV: LV Sub Generation NHH	8	-0.583						

Western Power Distribution - West 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 HV: LV Generation Intermittent	0	-0.692					0.275	
LDNO HV: LV Generation Non-Intermittent	0	-5.339	-0.584	-0.057			0.275	
LDNO HV: LV Sub Generation Intermittent	0	-0.583					0.248	
LDNO HV: LV Sub Generation Non-Intermittent	0	-4.540	-0.489	-0.044			0.248	
LDNO HV: HV Generation Intermittent	0	-0.379					0.203	
LDNO HV: HV Generation Non-Intermittent	0	-3.046	-0.309	-0.020			0.203	
LDNO HVplus: Domestic Unrestricted	1	0.808			2.00		0.000	
LDNO HVplus: Domestic Two Rate	2	0.989	0.040		2.00			
LDNO HVplus: Domestic Off Peak (related MPAN)	2	0.080						
LDNO HVplus: Small Non Domestic Unrestricted	3	0.728			2.59			
LDNO HVplus: Small Non Domestic Two Rate	4	0.845	0.035		2.59			
LDNO HVplus: Small Non Domestic Off Peak (related MPAN)	4	0.132						
LDNO HVplus: LV Medium Non-Domestic	5-8	0.751	0.031		15.10			
LDNO HVplus: LV Sub Medium Non-Domestic		0.768	0.028		6.37			
LDNO HVplus: HV Medium Non-Domestic		0.631	0.010		197.77			
LDNO HVplus: LV HH Metered	0	3.245	0.254	0.020	4.27	1.33	0.125	1.33
LDNO HVplus: LV Sub HH Metered	0	4.472	0.313	0.018	6.37	2.62	0.147	2.62
LDNO HVplus: HV HH Metered	0	3.173	0.186	0.009	72.87	3.50	0.102	3.50
LDNO HVplus: NHH UMS	1&8	1.053						
LDNO HVplus: LV UMS (Pseudo HH Metered)	0	10.276	1.128	0.345				
LDNO HVplus: LV Generation NHH	8	-0.435						
LDNO HVplus: LV Sub Generation NHH	8	-0.417						
LDNO HVplus: LV Generation Intermittent	0	-0.435					0.173	
LDNO HVplus: LV Generation Non-Intermittent	0	-3.358	-0.367	-0.036			0.173	
LDNO HVplus: LV Sub Generation Intermittent	0	-0.417					0.177	
LDNO HVplus: LV Sub Generation Non-Intermittent	0	-3.246	-0.350	-0.031			0.177	
LDNO HVplus: HV Generation Intermittent	0	-0.379			17.50		0.203	
LDNO HVplus: HV Generation Non-Intermittent	0	-3.046	-0.309	-0.020	17.50		0.203	
LDNO EHV: Domestic Unrestricted	1	0.654			1.62			
LDNO EHV: Domestic Two Rate	2	0.800	0.032		1.62			
LDNO EHV: Domestic Off Peak (related MPAN)	2	0.065						

Western Power Distribution - West 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 EHV: Small Non Domestic Unrestricted	3	0.589			2.09			
LDNO EHV: Small Non Domestic Two Rate	4	0.683	0.029		2.09			
LDNO EHV: Small Non Domestic Off Peak (related MPAN)	4	0.107						
LDNO EHV: LV Medium Non-Domestic	5-8	0.607	0.025		12.21			
LDNO EHV: LV Sub Medium Non-Domestic		0.621	0.022		5.15			
LDNO EHV: HV Medium Non-Domestic		0.510	0.008		159.90			
LDNO EHV: LV HH Metered	0	2.624	0.206	0.016	3.45	1.08	0.101	1.08
LDNO EHV: LV Sub HH Metered	0	3.616	0.253	0.015	5.15	2.12	0.119	2.12
LDNO EHV: HV HH Metered	0	2.566	0.150	0.007	58.92	2.83	0.083	2.83
LDNO EHV: NHH UMS	1&8	0.851						
LDNO EHV: LV UMS (Pseudo HH Metered)	0	8.308	0.912	0.279				
LDNO EHV: LV Generation NHH	8	-0.352						
LDNO EHV: LV Sub Generation NHH	8	-0.337						
LDNO EHV: LV Generation Intermittent	0	-0.352					0.140	
LDNO EHV: LV Generation Non-Intermittent	0	-2.715	-0.297	-0.029			0.140	
LDNO EHV: LV Sub Generation Intermittent	0	-0.337					0.143	
LDNO EHV: LV Sub Generation Non-Intermittent	0	-2.625	-0.283	-0.025			0.143	
LDNO EHV: HV Generation Intermittent	0	-0.306			14.15		0.164	
LDNO EHV: HV Generation Non-Intermittent	0	-2.463	-0.250	-0.016	14.15		0.164	
LDNO 132kV/EHV: Domestic Unrestricted	1	0.626			1.55			
LDNO 132kV/EHV: Domestic Two Rate	2	0.766	0.031		1.55			
LDNO 132kV/EHV: Domestic Off Peak (related MPAN)	2	0.062						
LDNO 132kV/EHV: Small Non Domestic Unrestricted	3	0.564			2.01			
LDNO 132kV/EHV: Small Non Domestic Two Rate	4	0.655	0.027		2.01			
LDNO 132kV/EHV: Small Non Domestic Off Peak (related MPAN)	4	0.102						
LDNO 132kV/EHV: LV Medium Non-Domestic	5-8	0.582	0.024		11.70			
LDNO 132kV/EHV: LV Sub Medium Non-Domestic		0.595	0.021		4.94			
LDNO 132kV/EHV: HV Medium Non-Domestic		0.488	0.008		153.19			
LDNO 132kV/EHV: LV HH Metered	0	2.513	0.197	0.016	3.30	1.03	0.097	1.03
LDNO 132kV/EHV: LV Sub HH Metered	0	3.464	0.242	0.014	4.94	2.03	0.114	2.03
LDNO 132kV/EHV: HV HH Metered	0	2.458	0.144	0.007	56.44	2.71	0.079	2.71

Western Power Distribution - West 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 132kV/EHV: NHH UMS	1&8	0.815						
LDNO 132kV/EHV: LV UMS (Pseudo HH Metered)	0	7.960	0.874	0.267				
LDNO 132kV/EHV: LV Generation NHH	8	-0.337						
LDNO 132kV/EHV: LV Sub Generation NHH	8	-0.323						
LDNO 132kV/EHV: LV Generation Intermittent	0	-0.337					0.134	
LDNO 132kV/EHV: LV Generation Non-Intermittent	0	-2.601	-0.285	-0.028			0.134	
LDNO 132kV/EHV: LV Sub Generation Intermittent	0	-0.323					0.137	
LDNO 132kV/EHV: LV Sub Generation Non-Intermittent	0	-2.514	-0.271	-0.024			0.137	
LDNO 132kV/EHV: HV Generation Intermittent	0	-0.294			13.56		0.157	
LDNO 132kV/EHV: HV Generation Non-Intermittent	0	-2.359	-0.239	-0.015	13.56		0.157	
LDNO 132kV: Domestic Unrestricted	1	0.414			1.03			
LDNO 132kV: Domestic Two Rate	2	0.507	0.021		1.03			
LDNO 132kV: Domestic Off Peak (related MPAN)	2	0.041						
LDNO 132kV: Small Non Domestic Unrestricted	3	0.373			1.33			
LDNO 132kV: Small Non Domestic Two Rate	4	0.433	0.018		1.33			
LDNO 132kV: Small Non Domestic Off Peak (related MPAN)	4	0.068						
LDNO 132kV: LV Medium Non-Domestic	5-8	0.385	0.016		7.74			
LDNO 132kV: LV Sub Medium Non-Domestic		0.394	0.014		3.27			
LDNO 132kV: HV Medium Non-Domestic		0.323	0.005		101.36			
LDNO 132kV: LV HH Metered	0	1.663	0.130	0.010	2.19	0.68	0.064	0.68
LDNO 132kV: LV Sub HH Metered	0	2.292	0.160	0.009	3.27	1.34	0.075	1.34
LDNO 132kV: HV HH Metered	0	1.626	0.095	0.004	37.35	1.80	0.052	1.80
LDNO 132kV: NHH UMS	1&8	0.540						
LDNO 132kV: LV UMS (Pseudo HH Metered)	0	5.267	0.578	0.177				
LDNO 132kV: LV Generation NHH	8	-0.223						
LDNO 132kV: LV Sub Generation NHH	8	-0.214						
LDNO 132kV: LV Generation Intermittent	0	-0.223					0.089	
LDNO 132kV: LV Generation Non-Intermittent	0	-1.721	-0.188	-0.018			0.089	
LDNO 132kV: LV Sub Generation Intermittent	0	-0.214					0.091	
LDNO 132kV: LV Sub Generation Non-Intermittent	0	-1.664	-0.179	-0.016			0.091	
LDNO 132kV: HV Generation Intermittent	0	-0.194			8.97		0.104	

Western Power Distribution - West 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 132kV: HV Generation Non-Intermittent	0	-1.561	-0.158	-0.010	8.97		0.104	
LDNO 0000: Domestic Unrestricted	1	0.087			0.22			
LDNO 0000: Domestic Two Rate	2	0.106	0.004		0.22			
LDNO 0000: Domestic Off Peak (related MPAN)	2	0.009						
LDNO 0000: Small Non Domestic Unrestricted	3	0.078			0.28			
LDNO 0000: Small Non Domestic Two Rate	4	0.091	0.004		0.28			
LDNO 0000: Small Non Domestic Off Peak (related MPAN)	4	0.014						
LDNO 0000: LV Medium Non-Domestic	5-8	0.081	0.003		1.62			
LDNO 0000: LV Sub Medium Non-Domestic		0.082	0.003		0.68			
LDNO 0000: HV Medium Non-Domestic		0.068	0.001		21.24			
LDNO 0000: LV HH Metered	0	0.349	0.027	0.002	0.46	0.14	0.013	0.14
LDNO 0000: LV Sub HH Metered	0	0.480	0.034	0.002	0.68	0.28	0.016	0.28
LDNO 0000: HV HH Metered	0	0.341	0.020	0.001	7.83	0.38	0.011	0.38
LDNO 0000: NHH UMS	1&8	0.113						
LDNO 0000: LV UMS (Pseudo HH Metered)	0	1.104	0.121	0.037				
LDNO 0000: LV Generation NHH	8	-0.047						
LDNO 0000: LV Sub Generation NHH	8	-0.045						
LDNO 0000: LV Generation Intermittent	0	-0.047					0.019	
LDNO 0000: LV Generation Non-Intermittent	0	-0.361	-0.039	-0.004			0.019	
LDNO 0000: LV Sub Generation Intermittent	0	-0.045					0.019	
LDNO 0000: LV Sub Generation Non-Intermittent	0	-0.349	-0.038	-0.003			0.019	
LDNO 0000: HV Generation Intermittent	0	-0.041			1.88		0.022	
LDNO 0000: HV Generation Non-Intermittent	0	-0.327	-0.033	-0.002	1.88		0.022	

Annex 5 – Schedule of Line Loss Factors

Western Power Distribution - West Midlands - Effective from April 2012 - FINAL LLF Time Periods				
Time periods	**Period 1**	**Period 2**	**Period 3**	**Period 4**
	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	1.052	1.077	1.069	1.06	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 19, 20, 21, 22, 24, 25, 26, 27, 30, 34, 35, 36, 40, 41, 42, 46, 47, 49, 85, 86, 87, 88, 95, 96, 97, 98, 99, 107, 108, 109, 110, 111, 112, 121, 124, 127, 128, 129, 132, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 326, 570, 571, 572, 573, 574, 620, 625, 626, Fort Dunlop LV Import
Low Voltage Substation	1.052	1.077	1.069	1.060	128

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	1.044	1.041	1.035	23, 130, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 322, 323, 365, 367, 575, 576, 577, 578, Stanner Interconnector, Havannah Mills Switching Station
High Voltage Substation	1.021	1.027	1.026	1.023	366, 724, 727, 730, 731, 740, 742, 743, 744, 745, 746, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822
33kV Generic	1.004	1.006	1.006	1.005	723,725,726,728,729, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784

EHV Site Specific LLFs					
Demand					
Site	**Period 1**	**Period 2**	**Period 3**	**Period 4**	**Associated LLFC**
Tyseley Waste Import	1.001	1.001	1.001	1.001	702
Takao Europe Import	1.013	1.024	1.017	1.017	704
Uni of Birmingham Import	1.001	1.003	1.003	1.002	707
South Staffs Water Import	1.048	1.101	1.075	1.051	709
Wolverhampton WS Import	1.000	1.001	1.001	1.000	710
Stoke CHP Import	1.002	1.001	1.003	1.002	711
WBB Minerals Import	1.015	1.027	1.029	1.023	712
Cauldon Cement Import	1.027	1.023	1.024	1.028	713
Abson Gas Compressor Station Import	1.015	1.017	1.018	1.019	714

EHV Site Specific LLFs					
Demand					
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Ervin Amasteel Import	1.002	1.002	1.002	1.002	715
Hanford Waste Services Import	1.008	1.004	1.007	1.008	716
NR Kidsgrove Import	1.008	1.015	1.014	1.012	717
NR Stafford Import	1.007	1.012	1.011	1.010	718
NR Nechells/Washwood Heath Import	1.002	1.002	1.002	1.002	719
NR Winson Green Import	1.001	1.002	1.002	1.001	720
NR Smethwick Import	1.000	1.000	1.000	1.000	721
NR Willenhall Import	1.001	1.001	1.001	1.001	722

EHV Site Specific LLFs					
Generation					
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Tyseley Waste Export	1.000	1.001	1.001	1.000	703
Uni of Birmingham Export	1.000	1.000	1.000	1.000	708
Wolverhampton WS Export	1.000	1.000	1.000	1.000	732
Stoke CHP Export	0.997	0.998	0.998	0.997	733
Hanford Waste Services Export	0.993	0.996	0.996	0.993	734
NR Kidsgrove Export	1.002	1.003	1.003	1.002	735
NR Stafford Export	1.001	1.001	1.001	1.001	736
NR Winson Green Export	1.000	1.001	1.001	1.001	737
NR Smethwick Export	1.000	1.000	1.000	1.000	738
NR Willenhall Export	1.000	1.000	1.000	1.000	739
NR Nechells/Washwood Heath Export	1.000	1.000	1.000	1.000	741

Annex 6 - Un-scaled network group costs

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