WESTERN POWER DISTRIBUTION

Serving the Midlands, South West and Wales

Western Power Distribution

(South Wales) plc

Use of System Charging Statement

Effective from 1st April 2012

WPD (SOUTH WALES) PLC
AVONBANK, FEEDER RD, BRISTOL BS20 0TB
REGISTERED IN WALES NO: 2366985

WESTERN POWER DISTRIBUTION (SOUTH WALES) PLC
AVONBANK, FEEDER RD, BRISTOL, BS20 0TB
COFRESTRWYD YNG NGHYMRU RHIF 2366985

Contents

1. Introduction

1.1. This statement has been prepared in order to discharge Western Power Distribution (South Wales) 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 Long Run Incremental Charging Methodology (LRIC) 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

45

[1] Charges can be positive or negative.

1.5. For all other queries please contact our general enquiries telephone number: 0845 601 3341, 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:

- For NHH profile class 1 & 2 multi-rate and other off-peak tariffs, night is defined as any seven hours determined and agreed by WPD (South Wales) plc between 21.00 and 09.00 hours GMT. Currently agreed regimes (Standard Settlement Configurations) are listed in Schedule 1 and DUoS charges for these are based on Total kWh by Settlement Class. If other regimes are installed in a premise, WPD (South Wales) plc will charge DUoS based on a default regime of 00.30-07.30 GMT (TPR 00210) and these SSCs are listed in Schedule 2.
- For NHH profile class 3 & 4 multi-rate tariffs and other off-peak tariffs, night is defined as any seven hours determined and agreed by WPD (South Wales) plc between 21.00 and 09.00 hours GMT. Currently agreed regimes (Standard Settlement Configurations) are listed in Schedule 3 and DUoS charges for these are based on Total kWh by Settlement Class. If other regimes are installed in a premise, WPD (South Wales) plc will charge DUoS based on a default regime of 00.30-07.30 GMT (TPR 00210) and these SSCs are listed in Schedule 4.
- For NHH profile class 5 to 8 multi-rate tariffs and other off-peak tariffs, night is defined as a seven hour period normally starting at 00.30 hours clock time. If other regimes are installed in a premise, unless otherwise agreed WPD will charge DUoS based on a default regime of 00.30-07.30 clock time (TPR 00208) using the half-hourly kWh by settlement class.

- For profile class 1 to 8 customers on measurement class E, night is defined as units supplied between 00.30 and 07.30 clock time

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.

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[2] http://2010.energynetworks.org/storage/DNO CDCM SSC TPR decoding for unit rates version3.xlsx

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;
- 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	17:00 to 19:30	
Unit Rate 2: Amber	07:30 to 17:00	12:00 to 13:00
	19:30 to 22:00	16:00 to 21:00
Unit Rate 3: Green	00:00 to 07:30	00:00 to 12:00
	22:00 to 24:00	13:00 to 16:00
		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 17:00 and 19:30, Mon to Fri from 1st November to the last date in February excluding the period from 22nd December to 4th January inclusive.
- 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.

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[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

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

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

Where:

AI = Import consumption in kWh

RI = Reactive import in kVArh

RE = Reactive export in kVArh

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

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

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

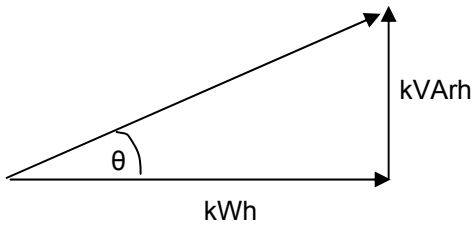
2.36. There is no minimum capacity threshold.

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'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 [DNO weblink].

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[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.

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[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 [nodal /network group] costs

5.1. The table in Annex 6 shows the un-scaled [nodal /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.

Term	Definition
GSP Group	Grid Supply Point Group; a distinct electrical system, that is supplied from one or more Grid Supply Points for which total supply into the GSP Group can be determined for each half-hour.
High Voltage (HV)	Nominal voltages of at least 1kV and less than 22kV
Host DNO	A distribution network operator that is responsible for a Distribution Services Area as defined in Standard conditions of the Electricity Distribution Licence
Intermediate LDNO	An embedded licenced distribution network operator that is responsible for a Distribution System between a Host DNO and another Embedded Distribution System.
Invalid Settlement Combination	A Settlement combination that is not recognised as a valid combination in Market Domain Data. 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 (South Wales) plc - Effective from April 2012 - 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	100, 105, 800, 860	1	2.770			3.72				n/a
Domestic Two Rate	101, 106, 801, 861,	2	3.111	0.227		3.72				n/a
Domestic Off Peak (related MPAN)	194, 843	2	0.232			0.00				
Small Non Domestic Unrestricted	200, 810, 862	3	2.226			6.17				n/a
Small Non Domestic Two Rate	201, 811, 863	4	2.839	0.264		6.17				n/a
Small Non Domestic Off Peak (related MPAN)	294	4	0.250			0.00				
LV Medium Non-Domestic	300	5-8	2.604	0.184		44.69				n/a
LV Sub Medium Non-Domestic	344	5-8	1.758	0.124		3.65				n/a
LV HH Metered	300	0	13.796	0.972	0.144	9.41	2.45	0.443	2.45	n/a
LV Sub HH Metered	344	0	13.778	0.934	0.141	6.80	2.93	0.386	2.93	n/a
HV HH Metered	400	0	10.169	0.662	0.098	75.82	2.95	0.299	2.95	n/a
NHH UMS	701	1&8	3.561							n/a
LV UMS (Pseudo HH Metered)	700	0	30.903	2.914	1.028					n/a
LV Generation NHH	697	8	-0.700							n/a
LV Sub Generation NHH	717	8	-0.643							n/a
LV Generation Intermittent	697	0	-0.700					0.231		n/a
LV Generation Non-Intermittent	603	0	-5.570	-0.550	-0.103			0.231		n/a
LV Sub Generation Intermittent	602	0	-0.643					0.202		n/a
LV Sub Generation Non-Intermittent	604	0	-5.099	-0.505	-0.097			0.202		n/a
HV Generation Intermittent	698	0	-0.425			32.59		0.162		n/a
HV Generation Non-Intermittent	606	0	-3.304	-0.334	-0.073	32.59		0.162		n/a

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 (South Wales) plc - Effective from April 2012 - 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**
507	ABB Cornelly	1.767	13.24	2.98	2.98	2100040067486
7163	Aberaman Park	0.366	18.61	3.19	3.19	n/a
0	Aberystwyth - Manweb	0.138		14.16	14.16	n/a
513	Alcoa	0.010		2.72	2.72	2199989616995
508	Bettws	0.049	2.41	2.67	2.67	New Connection
509	Blaen Bowi	0.856	1.79	2.87	2.87	2100040126342
547	Blaen Cregan	0.005	4.99	2.92	2.92	2100040495610
548	Blaengwen	0.144	436.96	2.76	2.76	2100040878007
511	Boc Margam		1,428.28	4.12	4.12	2199989610089, 2199989271918, 2199989271927, 2199989271936
533	Bridgend Paper Mill	0.073	101.35	4.32	4.32	2199989633174, 2199989633165, 2199989633183
7159	British Energy	0.196	6.37	2.01	2.01	n/a
549	Bryn Titli	2.502	27.41	6.88	6.88	2199989639264
593	Camford	1.492		7.61	7.61	2189999997503
520	Celsa 33 11	0.093	2,478.32	4.19	4.19	2189999999937

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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**
514	Celsa Rod Mills	0.405	4,120.95	4.96	4.96	2189999999928
7051	Centrica			3.87	3.87	n/a
517	Chevron		30,761.07	2.50	2.50	2189999998678
501	Corus Margam1 GRAN6A			1.81	1.81	2189999997595
501	Corus Margam2 CEFN6		2,179.57	2.59	2.59	2189999997600
505	Corus Orb	0.053	1,663.24	4.95	4.95	2189999999732, 2100040135899, 2100040135904
504	Corus Trostre	0.584		5.61	5.61	2189999999714, 2100040014545, 2100040007060, 2100040007130, 2100040007079, 2100040007088, 2100040007097, 2100040007120, 2100040007111, 2100040007102
571	Crymlin Burrows	0.096	112.91	3.02	3.02	2100040067538
532	DCWW Nantgaredig	0.552		5.04	5.04	2199989640232
538	DCWW Rover Way	0.199	128.37	6.71	6.71	2198765295402
536	Dow Corning		76.64	5.46	5.46	2199989353710, 2199989353701
572	Dyffryn Brodyn	0.569	2.60	3.24	3.24	2199989635669

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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**
545	Felindre		2,889.84	1.87	1.87	2100040769015, 2100040769033, 2100040769042
586	Ferndale Wind Farm	0.176	15.18	2.55	2.55	2100040989413
587	Fforchness		21.65	2.30	2.30	
512	Ford Bridgend		1,683.08	7.14	7.14	2199989610024
594	Hoover	3.958	128.37	11.45	11.45	2189999997025, 2189999997034, 2189999997043
529	Inco		485.43	5.15	5.15	2189999997309, 2189999997293, 2189999997284, 2189999997275
518	Interbrew Magor USKM	0.131	43.73	4.99	4.99	2189999996893, 2189999996884
522	Lafarge - Blue Circle		514.33	4.64	4.64	2199989628537
574	Llyn Brianne	0.632	287.13	2.14	2.14	2199989614809
575	Maerdy	0.129	2.25	2.29	2.29	
585	Maesgwyn		9.27	2.52	2.52	2100040960600
519	Mainline Pipelines	4.925	42.79	3.17	3.17	2199989611204
577	Margam Biomass	1.681	207.42	2.09	2.09	2100040719992
541	Milford Energy	4.925	36.31	2.57	2.57	2100041752410 2100041752420
510	Mir Steel		813.51	1.22	1.22	2199989614144

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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**
534	Momentive Chemicals		242.99	5.84	5.84	2189999997460, 2189999997683, 2189999997451
535	Monsanto	0.130	110.43	7.97	7.97	2189999998924 2199989663578 2189999998942 2189999998933
515	Murphy Oil	5.716	3,757.81	8.55	8.55	2199989638961 2199989638970
588	Mynydd Portref	0.143	23.31	2.63	2.63	New Connection
578	Newport Biomass	0.079	56.32	2.37	2.37	New Connection
589	Newton Down	2.205	11.29	3.01	3.01	New Connection
583	Parc Cynog	0.560	11.01	2.46	2.46	2198765146436
584	Parc Cynog (Pendine)	0.560	12.71	2.70	2.70	2100040841771
579	Pwllfa Gwatkin	0.109	12.47	1.79	1.79	2100040485950
622	QuinetiQ	2.187	42.79	16.58	16.58	2199989609970
542	SHLNG	5.708	10,579.62	9.02	9.02	2100040636538, 2100040653932
539	Simms metals		644.03	4.28	4.28	2100040302060
531	Swansea University	0.335	1,938.42	7.55	7.55	2199989628430
580	Taff Ely	0.143	3.27	2.55	2.55	2199989641937
546	Timet	0.010		6.03	6.03	2100040781360, 2100040781379
521	Tower	0.132	40.09	5.22	5.22	2199989613043

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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
581	Trecatti	1.604	22.68	2.32	2.32	2100040609516
625	Tregaron	1.856		2.38	2.38	2100040983990
620	University Hospital of Wales	3.396	85.58	4.15	4.15	2199989611348
528	Visteon UK Ltd	0.100	361.27	6.51	6.51	2199989610098
623	Western Coal	0.123		7.05	7.05	New Connection
582	Withy Hedges	12.650	3.96	2.62	2.62	2100040694060

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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
664	ABB Cornelly Export	N/A	N/A	N/A	N/A	2100040067477
674	Bettws Export	N/A	N/A	0.13	0.13	N/A
660	Blaen Bowi WF Export	N/A	N/A	2.26	2.26	2100040126333
663	Blaen Cregan WF Export	N/A	N/A	N/A	N/A	2100040495600
668	Blaengwen WF Exports	N/A	N/A	3.16	3.16	2100040878016
651	Bryn Titli WF Export	N/A	N/A	N/A	N/A	2199989632384
n/a	Centrica Barry Export	N/A	N/A	N/A	N/A	CVA
601	Corus Margam export	N/A	N/A	N/A	N/A	0
665	Crymlin Burrows Export	N/A	N/A	N/A	N/A	2100040067529
n/a	District Energy Aberdare	N/A	N/A	N/A	N/A	CVA
n/a	District Energy Solutia	N/A	N/A	N/A	N/A	CVA

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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**
636	Dow Corning Export	N/A	N/A	N/A	N/A	2189999997354
652	Dyffryn Brodyn WF Export	N/A	N/A	N/A	N/A	2189999997390
679	Ferndale Windfarm	N/A	N/A	0.82	0.82	2100040989431
685	Fforchness	N/A	N/A	2.93	2.93	N/A
633	Fort James Export	N/A	N/A	N/A	N/A	0
653	Llyn Briane Export	N/A	N/A	N/A	N/A	2199989612769
676	Maerdy Windfarm	N/A	N/A	1.68	1.68	N/A
684	Maesgwyn	N/A	N/A	0.27	0.27	2100040960619
661	Margam Biomass Export	N/A	N/A	0.07	0.07	2100040719983
678	Milford Energy	N/A	N/A	-4.43	-4.43	2100040752396 2100040752401
618	Murphy Oil	N/A	N/A	-4.04	-4.04	2100040867636 2100040867645
686	Mynydd Portref	N/A	N/A	3.38	3.38	N/A
677	Newport Biomass	N/A	N/A	0.35	0.35	N/A
687	Newton Down	N/A	N/A	0.58	0.58	N/A
667	Parc Cycog (Pendine WF) Exports	N/A	N/A	6.57	6.57	2100040841780
659	Parc Cynog WF Export	N/A	N/A	N/A	N/A	2198765142992
670	Pwlfa Watkin Export	N/A	N/A	N/A	N/A	2100040485940
	Solutia/Monsanto Exports	N/A	N/A	-0.96	-0.96	2100040890430 2100040890412 2100040890440 2100040890459
650	Taff Ely WF Export	N/A	N/A	N/A	N/A	2189999997345
621	Tower Export	N/A	N/A	N/A	N/A	2198765426182
662	Trecatti Export	N/A	N/A	-0.41	-0.41	2100040609507
658	Tregaron	N/A	N/A	1.43	1.43	2199989641360

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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**
619	Whitbread Magor Exports	N/A	N/A	N/A	N/A	2100040023638 2100040023647
666	Withyhedges Landfil Export	N/A	N/A	-2.88	-2.88	2100040694051

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

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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	400	5-8	1.873	0.133		137.21			
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	444	0	8.877	0.573	0.088	75.82	2.37	0.275	2.37
HV Sub Generation Non-Intermittent	607	0	-3.312	-0.335	-0.073	32.59		0.128	
HV Sub Generation Intermittent	605	0	-0.425	0.000	0.000	32.59		0.128	
Notes:									

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

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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	1.911			2.57			
LDNO LV: Domestic Two Rate	2	2.146	0.157		2.57			
LDNO LV: Domestic Off Peak (related MPAN)	2	0.160						
LDNO LV: Small Non Domestic Unrestricted	3	1.536			4.26			
LDNO LV: Small Non Domestic Two Rate	4	1.959	0.182		4.26			
LDNO LV: Small Non Domestic Off Peak (related MPAN)	4	0.172						
LDNO LV: LV Medium Non-Domestic	5-8	1.796	0.127		30.83			
LDNO LV: LV HH Metered	0	9.518	0.671	0.099	6.49	1.69	0.306	1.69
LDNO LV: NHH UMS	1&8	2.457						
LDNO LV: LV UMS (Pseudo HH Metered)	0	21.319	2.010	0.709				
LDNO LV: LV Generation NHH	8	-0.700						
LDNO LV: LV Generation Intermittent	0	-0.700					0.231	
LDNO LV: LV Generation Non-Intermittent	0	-5.570	-0.550	-0.103			0.231	
LDNO HV: Domestic Unrestricted	1	1.006			1.35			
LDNO HV: Domestic Two Rate	2	1.130	0.082		1.35			
LDNO HV: Domestic Off Peak (related MPAN)	2	0.084						
LDNO HV: Small Non Domestic Unrestricted	3	0.808			2.24			
LDNO HV: Small Non Domestic Two Rate	4	1.031	0.096		2.24			
LDNO HV: Small Non Domestic Off Peak (related MPAN)	4	0.091						
LDNO HV: LV Medium Non-Domestic	5-8	0.946	0.067		16.23			
LDNO HV: LV HH Metered	0	5.010	0.353	0.052	3.42	0.89	0.161	0.89
LDNO HV: LV Sub HH Metered	0	7.454	0.505	0.076	3.68	1.59	0.209	1.59
LDNO HV: HV HH Metered	0	6.535	0.425	0.063	48.72	1.90	0.192	1.90
LDNO HV: NHH UMS	1&8	1.293						

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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 UMS (Pseudo HH Metered)	0	11.223	1.058	0.373				
LDNO HV: LV Generation NHH	8	-0.700						
LDNO HV: LV Sub Generation NHH	8	-0.643						
LDNO HV: LV Generation Intermittent	0	-0.700					0.231	
LDNO HV: LV Generation Non-Intermittent	0	-5.570	-0.550	-0.103			0.231	
LDNO HV: LV Sub Generation Intermittent	0	-0.643					0.202	
LDNO HV: LV Sub Generation Non-Intermittent	0	-5.099	-0.505	-0.097			0.202	
LDNO HV: HV Generation Intermittent	0	-0.425					0.162	
LDNO HV: HV Generation Non-Intermittent	0	-3.304	-0.334	-0.073			0.162	
LDNO HVplus: Domestic Unrestricted	1	0.718			0.96			
LDNO HVplus: Domestic Two Rate	2	0.806	0.059		0.96			
LDNO HVplus: Domestic Off Peak (related MPAN)	2	0.060						
LDNO HVplus: Small Non Domestic Unrestricted	3	0.577			1.60			
LDNO HVplus: Small Non Domestic Two Rate	4	0.736	0.068		1.60			
LDNO HVplus: Small Non Domestic Off Peak (related MPAN)	4	0.065						
LDNO HVplus: LV Medium Non-Domestic	5-8	0.675	0.048		11.58			
LDNO HVplus: LV Sub Medium Non-Domestic		0.679	0.048		1.41			
LDNO HVplus: HV Medium Non-Domestic		0.859	0.061		62.93			
LDNO HVplus: LV HH Metered	0	3.576	0.252	0.037	2.44	0.64	0.115	0.64
LDNO HVplus: LV Sub HH Metered	0	5.320	0.361	0.054	2.63	1.13	0.149	1.13
LDNO HVplus: HV HH Metered	0	4.664	0.304	0.045	34.78	1.35	0.137	1.35
LDNO HVplus: NHH UMS	1&8	0.923						
LDNO HVplus: LV UMS (Pseudo HH Metered)	0	8.010	0.755	0.266				
LDNO HVplus: LV Generation NHH	8	-0.270						
LDNO HVplus: LV Sub Generation NHH	8	-0.295						

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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 HVplus: LV Generation Intermittent	0	-0.270					0.089	
LDNO HVplus: LV Generation Non-Intermittent	0	-2.151	-0.212	-0.040			0.089	
LDNO HVplus: LV Sub Generation Intermittent	0	-0.295					0.093	
LDNO HVplus: LV Sub Generation Non-Intermittent	0	-2.339	-0.232	-0.044			0.093	
LDNO HVplus: HV Generation Intermittent	0	-0.425			32.59		0.162	
LDNO HVplus: HV Generation Non-Intermittent	0	-3.304	-0.334	-0.073	32.59		0.162	
LDNO EHV: Domestic Unrestricted	1	0.576			0.77			
LDNO EHV: Domestic Two Rate	2	0.647	0.047		0.77			
LDNO EHV: Domestic Off Peak (related MPAN)	2	0.048						
LDNO EHV: Small Non Domestic Unrestricted	3	0.463			1.28			
LDNO EHV: Small Non Domestic Two Rate	4	0.591	0.055		1.28			
LDNO EHV: Small Non Domestic Off Peak (related MPAN)	4	0.052						
LDNO EHV: LV Medium Non-Domestic	5-8	0.542	0.038		9.30			
LDNO EHV: LV Sub Medium Non-Domestic		0.545	0.038		1.13			
LDNO EHV: HV Medium Non-Domestic		0.689	0.049		50.51			
LDNO EHV: LV HH Metered	0	2.870	0.202	0.030	1.96	0.51	0.092	0.51
LDNO EHV: LV Sub HH Metered	0	4.270	0.289	0.044	2.11	0.91	0.120	0.91
LDNO EHV: HV HH Metered	0	3.743	0.244	0.036	27.91	1.09	0.110	1.09
LDNO EHV: NHH UMS	1&8	0.741						
LDNO EHV: LV UMS (Pseudo HH Metered)	0	6.429	0.606	0.214				
LDNO EHV: LV Generation NHH	8	-0.217						
LDNO EHV: LV Sub Generation NHH	8	-0.237						
LDNO EHV: LV Generation Intermittent	0	-0.217					0.072	
LDNO EHV: LV Generation Non-Intermittent	0	-1.726	-0.170	-0.032			0.072	
LDNO EHV: LV Sub Generation Intermittent	0	-0.237					0.074	
LDNO EHV: LV Sub Generation Non-Intermittent	0	-1.877	-0.186	-0.036			0.074	

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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: HV Generation Intermittent	0	-0.341			26.15		0.130	
LDNO EHV: HV Generation Non-Intermittent	0	-2.652	-0.268	-0.059	26.15		0.130	
LDNO 132kV/EHV: Domestic Unrestricted	1	0.480			0.64			
LDNO 132kV/EHV: Domestic Two Rate	2	0.539	0.039		0.64			
LDNO 132kV/EHV: Domestic Off Peak (related MPAN)	2	0.040						
LDNO 132kV/EHV: Small Non Domestic Unrestricted	3	0.386			1.07			
LDNO 132kV/EHV: Small Non Domestic Two Rate	4	0.492	0.046		1.07			
LDNO 132kV/EHV: Small Non Domestic Off Peak (related MPAN)	4	0.043						
LDNO 132kV/EHV: LV Medium Non-Domestic	5-8	0.451	0.032		7.75			
LDNO 132kV/EHV: LV Sub Medium Non-Domestic		0.454	0.032		0.94			
LDNO 132kV/EHV: HV Medium Non-Domestic		0.574	0.041		42.08			
LDNO 132kV/EHV: LV HH Metered	0	2.391	0.168	0.025	1.63	0.42	0.077	0.42
LDNO 132kV/EHV: LV Sub HH Metered	0	3.558	0.241	0.036	1.76	0.76	0.100	0.76
LDNO 132kV/EHV: HV HH Metered	0	3.119	0.203	0.030	23.25	0.90	0.092	0.90
LDNO 132kV/EHV: NHH UMS	1&8	0.617						
LDNO 132kV/EHV: LV UMS (Pseudo HH Metered)	0	5.357	0.505	0.178				
LDNO 132kV/EHV: LV Generation NHH	8	-0.181						
LDNO 132kV/EHV: LV Sub Generation NHH	8	-0.197						
LDNO 132kV/EHV: LV Generation Intermittent	0	-0.181					0.060	
LDNO 132kV/EHV: LV Generation Non-Intermittent	0	-1.438	-0.142	-0.027			0.060	
LDNO 132kV/EHV: LV Sub Generation Intermittent	0	-0.197					0.062	
LDNO 132kV/EHV: LV Sub Generation Non-Intermittent	0	-1.564	-0.155	-0.030			0.062	
LDNO 132kV/EHV: HV Generation Intermittent	0	-0.284			21.79		0.108	
LDNO 132kV/EHV: HV Generation Non-Intermittent	0	-2.209	-0.223	-0.049	21.79		0.108	
LDNO 132kV: Domestic Unrestricted	1	0.279			0.37			

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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: Domestic Two Rate	2	0.313	0.023		0.37			
LDNO 132kV: Domestic Off Peak (related MPAN)	2	0.023						
LDNO 132kV: Small Non Domestic Unrestricted	3	0.224			0.62			
LDNO 132kV: Small Non Domestic Two Rate	4	0.286	0.027		0.62			
LDNO 132kV: Small Non Domestic Off Peak (related MPAN)	4	0.025						
LDNO 132kV: LV Medium Non-Domestic	5-8	0.262	0.019		4.50			
LDNO 132kV: LV Sub Medium Non-Domestic		0.264	0.019		0.55			
LDNO 132kV: HV Medium Non-Domestic		0.334	0.024		24.46			
LDNO 132kV: LV HH Metered	0	1.390	0.098	0.015	0.95	0.25	0.045	0.25
LDNO 132kV: LV Sub HH Metered	0	2.068	0.140	0.021	1.02	0.44	0.058	0.44
LDNO 132kV: HV HH Metered	0	1.813	0.118	0.017	13.52	0.53	0.053	0.53
LDNO 132kV: NHH UMS	1&8	0.359						
LDNO 132kV: LV UMS (Pseudo HH Metered)	0	3.114	0.294	0.104				
LDNO 132kV: LV Generation NHH	8	-0.105						
LDNO 132kV: LV Sub Generation NHH	8	-0.115						
LDNO 132kV: LV Generation Intermittent	0	-0.105					0.035	
LDNO 132kV: LV Generation Non-Intermittent	0	-0.836	-0.083	-0.015			0.035	
LDNO 132kV: LV Sub Generation Intermittent	0	-0.115					0.036	
LDNO 132kV: LV Sub Generation Non-Intermittent	0	-0.909	-0.090	-0.017			0.036	
LDNO 132kV: HV Generation Intermittent	0	-0.165			12.67		0.063	
LDNO 132kV: HV Generation Non-Intermittent	0	-1.284	-0.130	-0.028	12.67		0.063	
LDNO 0000: Domestic Unrestricted	1	0.080			0.11			
LDNO 0000: Domestic Two Rate	2	0.090	0.007		0.11			
LDNO 0000: Domestic Off Peak (related MPAN)	2	0.007						
LDNO 0000: Small Non Domestic Unrestricted	3	0.064			0.18			
LDNO 0000: Small Non Domestic Two Rate	4	0.082	0.008		0.18			

Western Power Distribution (South Wales) plc - Effective from April 2012 - 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: Small Non Domestic Off Peak (related MPAN)	4	0.007						
LDNO 0000: LV Medium Non-Domestic	5-8	0.075	0.005		1.29			
LDNO 0000: LV Sub Medium Non-Domestic		0.075	0.005		0.16			
LDNO 0000: HV Medium Non-Domestic		0.095	0.007		6.99			
LDNO 0000: LV HH Metered	0	0.397	0.028	0.004	0.27	0.07	0.013	0.07
LDNO 0000: LV Sub HH Metered	0	0.591	0.040	0.006	0.29	0.13	0.017	0.13
LDNO 0000: HV HH Metered	0	0.518	0.034	0.005	3.86	0.15	0.015	0.15
LDNO 0000: NHH UMS	1&8	0.103						
LDNO 0000: LV UMS (Pseudo HH Metered)	0	0.890	0.084	0.030				
LDNO 0000: LV Generation NHH	8	-0.030						
LDNO 0000: LV Sub Generation NHH	8	-0.033						
LDNO 0000: LV Generation Intermittent	0	-0.030					0.010	
LDNO 0000: LV Generation Non-Intermittent	0	-0.239	-0.024	-0.004			0.010	
LDNO 0000: LV Sub Generation Intermittent	0	-0.033					0.010	
LDNO 0000: LV Sub Generation Non-Intermittent	0	-0.260	-0.026	-0.005			0.010	
LDNO 0000: HV Generation Intermittent	0	-0.047			3.62		0.018	
LDNO 0000: HV Generation Non-Intermittent	0	-0.367	-0.037	-0.008	3.62		0.018	

Annex 5 – Schedule of Line Loss Factors

Western Power Distribution (South Wales) plc - Effective from April 2012 - LLF Time Periods				
Time periods	**Period 1**	**Period 2**	**Period 3**	**Period 4**
Monday to Friday Mar to Oct			00:30 - 07:30	00:00 - 00:30 07:30 - 24:00
Monday to Friday Nov to Feb	16:00 – 19:00	07:30 – 16:00	00:30 - 07:30	00:00 - 00:30 19:00 - 24:00
Saturday and Sunday All Year			00:30 - 07:30	00:00 - 00:30 07:30 - 24:00
Notes	All the above times are in UK Clock time			

Generic Demand and Generation LLFs					
Metered voltage, respective periods and associated LLFCs					
Metered Voltage	**Period 1**	**Period 2**	**Period 3**	**Period 4**	**Associated LLFC**
Low Voltage Network	1.084	1.078	1.069	1.073	100, 101, 105, 106, 194, 200, 201, 294, 300, 697, 700, 701, 800, 801, 810, 811, 843, 860, 861, 862, 863
Low Voltage Substation	1.062	1.059	1.056	1.057	344, 602, 603, 604, 717
High Voltage Network	1.046	1.043	1.034	1.039	400, 606, 698
High Voltage Substation	1.031	1.030	1.026	1.028	444, 605, 607
33kV connected	1.023	1.021	1.017	1.020	596, 699
66kV connected	1.034	1.034	1.039	1.039	n/a
66/HV connected	1.044	1.043	1.049	1.049	n/a
132/33kV connected	1.014	1.014	1.013	1.013	n/a
132/66kV connected	1.014	1.014	1.012	1.013	n/a
132/HV connected	1.016	1.015	1.014	1.015	n/a
132kV connected	1.009	1.008	1.006	1.008	n/a

EHV Site Specific LLFs					
Demand					
Site	**Period 1**	**Period 2**	**Period 3**	**Period 4**	**Associated LLFC**
ABB Cornelly	1.000	1.000	1.000	1.000	507
Alcoa	1.002	1.002	1.012	1.002	513
Alpha Steel	1.000	1.000	1.000	1.000	510
ASW 33kV	1.017	1.018	1.018	1.018	520
ASW Rod Mill	1.008	1.007	1.008	1.008	514
Bettws	1.009	1.008	1.006	1.008	508

EHV Site Specific LLFs					
Demand					
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Blaen Bowi	1.023	1.021	1.017	1.020	509
Blaen Cregan	1.000	1.000	1.000	1.000	547
Blaengwen Wind Farm	1.009	1.008	1.006	1.008	548
Blue Circle	1.001	1.001	1.002	1.002	522
BOC Margam	1.001	1.001	1.001	1.001	511
Bryn Titli Wind Farm	1.000	1.000	1.000	1.000	549
Camford Pressings	1.031	1.030	1.026	1.028	593
Chevron	1.004	1.004	1.004	1.004	517
Corus Margam	1.001	1.001	1.001	1.001	501
Corus Orb	1.005	1.005	1.005	1.005	505
Corus Trostre	1.009	1.009	1.009	1.009	504
Crymlin Burrows	1.007	1.007	1.007	1.007	571
DCWW Nantgarredig	1.140	1.111	1.112	1.109	532
DCWW Rover Way	1.006	1.006	1.006	1.006	538
Dow Corning	1.003	1.003	1.003	1.003	536
Dyffryn Brodyn Wind Farm	1.000	1.000	1.000	1.000	572
Felindre	1.004	1.009	1.003	1.005	545
Ferndale	1.023	1.021	1.017	1.020	586
Fforchness	1.034	1.034	1.039	1.039	587
Fochriw	1.023	1.021	1.017	1.020	573
Ford Bridgend	1.006	1.006	1.005	1.006	512
Ford Swansea	1.012	1.012	1.012	1.012	528
Fort James	1.017	1.017	1.017	1.017	533
Hoover	1.031	1.030	1.026	1.028	594
Inco	1.004	1.004	1.004	1.004	529
Llyn Brianne	1.000	1.000	1.000	1.000	574

EHV Site Specific LLFs					
Demand					
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Maerdy	1.023	1.021	1.017	1.020	575
Maesgwyn	1.009	1.008	1.006	1.008	585
Mainline Pipelines	1.019	1.019	1.019	1.019	519
Margam Biomass	1.000	1.000	1.000	1.000	577
Milford Energy	1.011	1.011	1.010	1.010	541
MOD Qinetiq	1.031	1.030	1.026	1.028	622
Momentive Chemicals	1.005	1.005	1.005	1.005	534
Murphy Oil	1.019	1.019	1.020	1.020	515
Mynydd Portref	1.023	1.021	1.017	1.020	588
Newport Biomass	1.009	1.008	1.006	1.008	578
Newton Down	1.023	1.021	1.017	1.020	589
Pant y Wal	1.009	1.008	1.006	1.008	590
Parc Cynog	1.023	1.021	1.017	1.020	583
Parc Cynog (Pendine)	1.023	1.021	1.017	1.020	584
Pwllfa Watkin EHV	1.000	1.000	1.000	1.000	579
Simms Metals	1.002	1.002	1.002	1.002	539
Solutia	1.006	1.006	1.006	1.006	535
South Hook	1.013	1.013	1.012	1.012	542
Swansea University	1.011	1.013	1.011	1.012	531
Taff Ely Wind Farm	1.000	1.000	1.000	1.000	580
Timet	1.004	1.004	1.005	1.005	546
Tower	1.050	1.039	1.042	1.048	521
Trecatti	1.000	1.000	1.000	1.000	581
Tregaron	1.031	1.030	1.026	1.028	625
University Hospital of Wales	1.031	1.030	1.026	1.028	620
Western Coal	1.023	1.021	1.017	1.020	623

EHV Site Specific LLFs					
Demand					
Site	**Period 1**	**Period 2**	**Period 3**	**Period 4**	**Associated LLFC**
Whitbread Magor	1.005	1.005	1.005	1.005	518
Whitehead Works	1.006	1.006	1.005	1.006	544
Withyhedges Landfill	1.000	1.000	1.000	1.000	582

EHV Site Specific LLFs					
Generation					
Site	**Period 1**	**Period 2**	**Period 3**	**Period 4**	**Associated LLFC**
ABB Cornelly Export	1.019	1.021	1.000	1.021	664
Bettws Export	1.009	1.008	1.006	1.008	674
Blaen Bowi Export	1.129	1.126	1.130	1.130	660
Blaen Cregan Export	1.009	1.009	1.011	1.012	663
Blaengwen Wind Farm Export	1.009	1.008	1.006	1.008	668
Bryn Titli Wind Farm Export	1.137	1.138	1.139	1.139	651
Centrica Barry Standby	1.000	1.000	1.000	1.000	7055
Centrica Barry Export	0.997	0.997	0.998	0.997	7051
Corus Margam Export	1.000	1.000	1.000	1.001	601
Crymlin Burrows Export	1.026	1.026	1.026	1.026	665
District Energy Aberdare	1.018	1.020	1.023	1.019	7163
District Energy Solutia	1.005	1.005	1.006	1.005	7159
Dow Corning Export	1.003	1.003	1.003	1.003	636
Dyffryn Brodyn Wind Farm Export	1.144	1.143	1.143	1.146	652
Ferndale Export	1.023	1.021	1.017	1.020	679
Fforchness Export	1.034	1.034	1.039	1.039	685

EHV Site Specific LLFs					
Generation					
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Fochriw Export	1.023	1.021	1.017	1.020	675
Fort James Export	1.000	1.000	1.000	1.000	633
Llyn Brianne Export	1.131	1.131	1.145	1.148	653
Maerdy Export	1.023	1.021	1.017	1.020	676
Maesgwyn Export	1.009	1.008	1.006	1.008	684
Margam Biomass Export	0.997	0.997	0.997	0.998	661
Milford Energy Export	1.016	1.015	1.014	1.015	678
Murphy Oil	1.016	1.015	1.014	1.015	618
Mynydd Portref Export	1.023	1.021	1.017	1.020	686
Newport Biomass Export	1.009	1.008	1.006	1.008	677
Newton Down Export	1.023	1.021	1.017	1.020	687
Pant y Wal Export	1.009	1.008	1.006	1.008	649
Parc Cynog (Pendine) Export	1.023	1.021	1.017	1.020	667
Parc Cynog Export	1.121	1.121	1.119	1.119	659
Pwllfa Watkin Export	1.032	1.034	1.032	1.032	670
Solutia Export	1.016	1.015	1.014	1.015	617
Taff Ely Wind Farm Export	1.030	1.030	1.031	1.031	650
Tower Export	1.000	1.000	1.000	1.000	621
Trecatti Export	1.042	1.041	1.041	1.042	662
Tregaron Export	1.031	1.030	1.026	1.028	658
Whitbread Magor Export	1.006	1.006	1.007	1.007	619
Withyhedges Landfill Export	1.056	1.057	1.057	1.057	666

Annex 6 - Un-scaled [nodal /network group] costs

Please see Schedule of Charges and Other Tables, Annex 6 nodal Prices LRIC.