

Serving the Midlands, South West and Wales

### **Western Power Distribution**

(South West) plc

**Use of System Charging Statement** 

Effective from 1st April 2012

# **Contents**

1.	Introduction	3
2.	Charge Application and Definitions	5
	Supercustomer Billing and Payment	5
	Supercustomer Charges	5
	Site-Specific Billing and Payment	7
	Site-Specific Billed Charges	7
	Charges for Unmetered Supplies	8
	Use of System Charges Out of Area	9
	Application of Capacity Charges	9
	Chargeable Capacity	9
	Demand Chargeable Capacity	9
	Generation Chargeable Capacity	10
	Standby Capacity for Additional Security on Site	10
	Exceeded Capacity	10
	Minimum Capacity Levels	10
	Application of charges for excess reactive power	10
	Demand Chargeable Reactive Power	11
	Generation Chargeable Reactive Power	11
	Provision of billing data	12
	Licensed Distributor Network Operator (LDNO) charges	12
3.	Schedule of Charges for use of the distribution system	13
4.	Schedule of Line Loss Factors	14
	Role of Line Loss Factors in the Supply of Electricity	14
	Calculation of Line Loss Factors	14
	Line Loss Factor time periods	14
	Line Loss Factor tables	15
5.	Notes for Designated EHV Properties	16
	EDCM [nodal /network group] costs	16
	Demand Side Management	16
6.	Electricity Distribution Rebates	16
7.	Accounting and Administration Services	17
8.	Charges for electrical plant provided ancillary to the grant of Use of System	17
9.	Glossary of Terms	18
	nnex 1 - Schedule of Charges for the distribution of electricity under use of system to LV ad HV Designated Properties	23
	nnex 2 - Schedule of Charges for the distribution of electricity under use of system to	
	esignated EHV Properties (including LDNOs with Designated EHV Properties/end-	
	ers).	24
Ar	nnex 3 - Schedule of Charges for the distribution of electricity under use of system to	
	eserved/Additional LLFC Classes	32
Ar	nnex 4 - Charges applied to LDNOs with HV/LV end users	33
Ar	nnex 5 – Schedule of Line Loss Factors	38
Ar	nnex 6 - Un-scaled [nodal /network group] costs	44

#### 1. Introduction

1.1. This statement has been prepared in order to discharge Western Power Distribution (South West) plc's (WPD) obligation under Standard Licence Condition 14 of our Electricity Distribution Licence. It contains information on our charges<sup>1</sup> and charging principles for use of our Distribution System. It also contains information on our Line Loss Factors.

1.2. The charges in this statement are calculated using the Common Distribution Charging Methodology (CDCM) for LV/HV Designated Properties, the EHV Distribution Charging Methodology (EDCM) for the import charges for Designated EHV Properties and WPD's 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

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

1.5.	For all other queries please contact our general enquiries telephone number: 0845 601 2989, 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 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 will charge DUoS based on a default regime of 00.00-07.00 GMT (TPR 00206) 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 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 will charge DUoS based on a default regime of 00.00-07.00 GMT (TPR 00206) 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 23.30 hours clock time. If
    other regimes are installed in a premise, unless otherwise agreed WPD will charge DUoS
    based on a default regime of 23.30-06.30 clock time (TPR 00221) using the half-hourly kWh
    by settlement class.
  - For profile class 1 to 4 customers on measurement class E, night is defined as units supplied between 00.00 and 07.00 clock time.
  - For profile class 5 to 8 customers on measurement class E, night is defined as units supplied between 23.30 and 06.30 clock time.
- 2.10. To determine the appropriate charge rate for each SSC/TPR a lookup table is provided on the ENA website<sup>2</sup>.
- 2.11. The Domestic Off-Peak and Small Non-Domestic Off-Peak charges are supplementary to either an Unrestricted or a Two Rate charge.

6

<sup>&</sup>lt;sup>2</sup> 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 19:00	
unit rate 2: amber	07:30 to 17:00	16:30 to 19:30
	19:00 to 21:30	
unit rate 3: green	00:00 to 07:30	00:00 to 16:30
	21:30 to 24:00	19:30 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 19:00, Mon to Fri from 1<sup>st</sup> November to the last date in February excluding the period from 22<sup>nd</sup> December to 4<sup>th</sup> 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<sup>3</sup> and where operated in accordance with BSCP520<sup>4</sup>.
- 2.25. The time periods for the application of unit charges to connections which are pseudo HH metered are the same as those in paragraph 2.20.

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

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

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

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

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

### **Chargeable Capacity**

- 2.27. The Chargeable Capacity is, for each billing period, the highest of the MIC/MEC or the actual capacity, calculated as detailed below.
- 2.28. The MIC/MEC will be agreed with WPD at the time of connection or pursuant to a later change in requirements. Following such an agreement (be it at the time of connection or later) no reduction in MIC/MEC will be allowed for a period of one year. In the absence of an agreement the chargeable capacity, save for error or omission, will be based on the last MIC and/or MEC previously agreed by the distributor for the relevant premises' connection. A Customer can seek to agree or vary the MIC and/or MEC by contacting WPD using the contact details in paragraph 1.4.
- 2.29. Reductions to the MIC/MEC may only be permitted once in a 12 month period and no retrospective changes will be allowed. Where MIC/MEC is reduced the new lower level will be agreed with reference to the level of the Customer's maximum demand. It should be noted that where a new lower level is agreed the original capacity may not be available in the future without the need for network reinforcement and associated cost.

#### **Demand Chargeable Capacity**

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

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**

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

Where:

AE = Export Production in kWh

RI = Reactive import in kVArh

RE = Reactive export in kVArh

MEC = Maximum Export Capacity in kVA

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

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

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

#### **Exceeded Capacity**

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

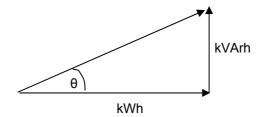
#### **Minimum Capacity Levels**

2.36. There is no minimum capacity threshold.

#### Application of charges for excess reactive power

- 2.37. The excess reactive power charge applies when a site's reactive power (measured in kVArh) exceeds 33% of total active power (measured in kWh) in any half-hourly period. This threshold is equivalent to an average power factor of 0.95 during the period. Any reactive units in excess of the 33% threshold are charged at the rate appropriate to the particular charge.
- 2.38. Power Factor is calculated as follows:

 $Cos \theta = Power Factor$ 



2.39. The chargeable reactive power is calculated as follows:

### **Demand Chargeable Reactive Power**

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

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**

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

Where:

AE = Active Export in kWh

RI = Reactive Import in kVArh

RE = Reactive Export in kVArh

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

#### Provision of billing data

- 2.46. Where HH metering data is required for Use of System charging and this is not provided through Settlement processes, such metering data shall be provided by the User of the system to WPD in respect of each calendar month within 5 working days of the end of that calendar month. The metering data shall identify the amount consumed and/or produced in each half hour of each day and shall separately identify active and reactive import and export. Metering data provided to WPD shall be consistent with that received through the metering equipment installed. Metering data shall be provided in an electronic format specified by WPD from time to time and in the absence of such specification, metering data shall be provided in a comma separated text file in the format of D0036 MRA data flow (as agreed with the DNO). The data shall be e-mailed to wpdduos@westernpower.co.uk.
- 2.47. WPD requires reactive consumption or production to be provided for all Measurement Class C (mandatory HH metered) sites and for Measurement Class E (elective HH metered sites). WPD reserves the right to levy a charge on Users who fail to provide such reactive data.

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

- 2.48. LDNO charges are applied to LDNOs who operate Embedded Networks within WPD's area.
- 2.49. The charge structure for LV and HV Designated Properties end users embedded in Networks operated by LDNOs will mirror the structure of the 'all-the-way' charge and is dependent upon the voltage of connection of each Embedded Network to the Host DNO's network. The same charge elements will apply as those that match the LDNO's end Customer charges.
- 2.50. The charge structure for Designated EHV Properties end-users embedded in Networks operated by LDNOs will be calculated individually using the EDCM.
- 2.51. For Nested Networks the Host DNO charges (or pays) the Nested LDNO on the basis of discounted charges for the voltage of connection of the Intermediate LDNO to the Host DNO, irrespective of the connection of the Nested LDNO to the Intermediate LDNO. Additional arrangements might exist between the Nested LDNO and the Intermediate LDNO; these arrangements are not covered in this statement.

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

- 3.1. Tables listing the charges for the distribution of electricity under use of system are published in annexes of this document.
- 3.2. These charges are also listed in a spreadsheet which is published with this statement and can be downloaded from [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<sup>5</sup> as it is distributed through the network.
- 4.2. This adjustment is made to ensure that energy bought or sold by a User, from/to a Customer, accounts for energy lost as part of distributing energy to and from the Customer's premises.
- 4.3. DNOs are responsible for calculating the Line Loss Factors (LLFs) and providing these factors to Elexon. Elexon manage the Balancing and Settlement Code. The code covers the governance and rules for the balancing and settlement arrangements.
- 4.4. Annex 5 provides the LLFs which must be used to adjust the Metering System volumes to take account of losses on the Distribution Network.

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

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

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

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

<sup>&</sup>lt;sup>5</sup> Energy can be lost for technical and non-technical reasons and losses normally occur by heat dissipation through power flowing in conductors and transformers. Losses can also reduce if a customer's action reduces power flowing in the distribution network. This might happen when a customer generates electricity and the produced energy is consumed locally.

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

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

#### 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 " <a href="www.elexon.co.uk/ELEXON">www.elexon.co.uk/ELEXON</a> Documents/trading_arrangements.pdf".				
CDCM	The Common Distribution Charging Methodology used for calculating charges to Designated Properties as required by standard licence condition 13A of the Electricity Distribution Licence.				
Customer	A person to whom a User proposers to supply, or for the time being supplies, electricity through an Exit Point, or from who, a User or any relevant exempt Supplier, is entitled to recover charges, compensation or an account of profits in respect of electricity supplied though an Exit Point.  Or  A person from whom a User purchases, or proposes to purchase, electricity, at an Entry Point (who may from time to time be supplied with electricity as a Customer of that User (or another electricity supplier) through an Exit Point).				
CVA	Central volume allocation in accordance with the BSC.				
Designated EHV Properties	As defined in standard condition 13B of the Electricity Distribution Licence.				
Designated Properties	As defined in standard condition 13A of the Electricity Distribution Licence				
Distributed Generator	A generator directly connected or embedded within the Distribution System.				
Distribution Connection and Use of System Agreement (DCUSA)	The Distribution Connection and Use of System Agreement (DCUSA) is a multi-party contract between the licensed electricity distributors, suppliers and generators of Great Britain.  It is a requirement that all licensed electricity distributors and suppliers become parties to the DCUSA.				
Electricity Distribution Licence	The Electricity Distribution Licence granted or treated as granted pursuant to section 6(1) of the Electricity Act 1989.				
Distribution Network Operator (DNO)	An Electricity Distributor who operates one of the fourteen Distribution Services Areas and in whose Electricity Distribution Licence the requirements of Section B of the standard conditions of that licence have effect.				
Distribution Services Area	The area specified by the Authority that a DNO as Distribution Services Provider will operate.				

Term	Definition					
Distribution Services Provider	An Electricity Distributor in whose Electricity Distribution Licence the requirements of Section B of the standard conditions of that licence have effect.					
	The system consisting (wholly or mainly) of:					
	<ul> <li>electric lines owned or operated by an authorised distributor that is used for the distribution of electricity from grid supply points or generation sets or other Entry Points to the points of delivery to Customers or Users; or</li> </ul>					
Distribution System	<ul> <li>any transmission licensee in its capacity as operator of that licensee's transmission system or the GB transmission system;</li> </ul>					
Cystem	<ul> <li>and includes any remote transmission assets (owned by a transmission licensee within England and Wales) that are operated by that authorised distributor and any electrical plant, electricity meters, and Metering Equipment owned or operated by it in connection with the distribution of electricity, but does not include any part of the GB transmission system.</li> </ul>					
EDCM	The EHV Distribution Charging Methodology used for calculating charges to Designated EHV Properties as required by standard licence condition 13B of the Electricity Distribution Licence					
Electricity Distributor	Any person who is authorised by an Electricity Distribution Licence to distribute electricity.					
Embedded LDNO	This refers to an LDNO operating a distribution network which is embedded within another distribution network.					
Embedded Network	An electricity Distribution System operated by an LDNO and embedded within another distribution network.					
Entry Point	A boundary point at which electricity is exported onto a Distribution System to a connected installation or to another Distribution System, not forming part of the total system ( boundary point and total system having the meaning given to those terms in the BSC)					
Exit Point	A point of connection at which a supply of electricity may flow from the Distribution System to the Customer's Installation or User's Installation or the Distribution System of another person.					
Extra High Voltage (EHV)	Nominal voltages of 22kV and above.					
Gas and Electricity Markets Authority (GEMA) (the Authority)	As established by the Utilities Act.					
Grid Supply Point	A metered connection between the National Grid Electricity Transmission (NGET) system and The licensee's Distribution System at which electricity flows to or from the Distribution System.					
GSP Group	Grid Supply Point Group; a distinct electrical system, that is supplied from one or more Grid Supply Points for which total supply into the GSP Group can be determined for each half-hour.					

Term	Definition					
High Voltage (HV)	Nominal voltages of at least 1kV and less than 22kV					
Host DNO	A distribution network operator that is responsible for a Distribution Services Area as defined in Standard conditions of the Electricity Distribution Licence					
Intermediate LDNO	An embedded licenced distribution network operator that is responsible for a Distribution System between a Host DNO and another Embedded Distribution System.					
Invalid Settlement Combination	A Settlement combination that is not recognised as a valid combination in Market Domain Data. <a href="http://mddonline.elexon.co.uk/default.aspx">http://mddonline.elexon.co.uk/default.aspx</a>					
kVA	Kilovolt amperes					
kVArh	Kilovolt ampere reactive hour					
kW	Kilowatt					
kWh	Kilowatt hour (equivalent to one "unit" of electricity)					
LDNO	Licensed Distribution Network Operator.					
Line Loss Factor Class (LLFC)	An identifier assigned to an SVA Metering System which is used to assign the LLF and Use of System Charges.					
Line Loss Factor (LLF)	The factor which is used in Settlement to adjust the Metering System volumes to take account of losses on the Distribution System.					
Low Voltage (LV)	Nominal voltages below 1kV					
Market Domain Data (MDD)	Market Domain Data is a central repository of reference data used by all Users involved in Settlement. It is essential to the operation of Supplier Volume Allocation (SVA) Trading Arrangements.					
Maximum Export Capacity (MEC)	The Maximum Export Capacity of apparent power expressed in kVA that has been agreed can flow through the Entry Point to the Distribution System from the Customer's installation as specified in the connection agreement.					
Maximum Import Capacity (MIC)	The Maximum Import Capacity of apparent power expressed in kVA that has been agreed can flow through the Exit Point from the Distribution System to the Customer's installation as specified in the connection agreement.					

Term	Definition					
	A classification of Metering Systems which indicates how Consumption is measured i.e.					
	Non Half Hourly Metering Equipment (equivalent to Measurement Class "A")					
Measurement Class	Non Half Hourly Unmetered Supplies (equivalent to Measurement Class "B")					
Class	Half Hourly Metering Equipment at above 100kW Premises (equivalent to Measurement Class "C")					
	Half Hourly Unmetered Supplies (equivalent to Measurement Class "D") Half Hourly Metering Equipment at below 100kW Premises (equivalent to Measurement Class "E").					
Metering Point	The point at which electricity is exported to or imported from the licensee's Distribution System is measured, is deemed to be measured, or is intended to be measured and which is registered pursuant to the provisions of the MRA. (For the purposes of this statement Grid Supply Points are not 'Metering Points')					
Metering System	Particular commissioned metering equipment installed for the purposes of measuring the quantities of Exports and Imports at the Boundary Point.					
MPAN	Metering Point Administration Number. A number relating to a Metering Point under the MRA.					
MRA	The Master Registration Agreement.					
MTC	Meter Timeswitch Codes (MTCs) are three digit codes allowing Suppliers to identify the metering installed in Customers' premises. They indicate whether the meter is single or multi rate, pre-payment or credit, or whether it is 'related' to another meter.					
Nested LDNO	A distribution system operator that is responsible for a Nested Network.					
Nested Networks	This refers to a situation where there is more than one level of Embedded Network and therefore nested distribution systems between LDNOs (e.g. Host DNO→intermediate LDNO→nested LDNO→Customer).					
Ofgem	Office of Gas and Electricity Markets – Ofgem is governed by GEMA and is responsible for the regulation of the distribution companies.					
Profile Class (PC)	A categorisation applied to NHH MPANs and used in Settlement to group customers with similar consumption patterns to enable the calculation of consumption profiles.					
Settlement	The determination and settlement of amounts payable in respect of charges (including reconciling charges) in accordance with the Balancing and Settlement Code					
Settlement Class (SC)	The combination of Profile Class, Line Loss Factor Class, Time Pattern Regime and Standard Settlement Configuration, by Supplier within GSP Group and used for Settlement.					

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

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

Western Power Distribution (South West) plc - Effective from April 2012 - LV/HV Charges										
DNOs paste value cells A16:I40 from CDCM 3701 into cells A4:J28	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	10, 20	1	2.754			4.07				n/a
Domestic Two Rate	30, 40	2	3.417	0.247		4.07				n/a
Domestic Off Peak (related MPAN)	430	2	0.227			0.00				n/a
Small Non Domestic Unrestricted	110	3	2.512			6.26				n/a
Small Non Domestic Two Rate	210	4	2.606	0.246		6.26				n/a
Small Non Domestic Off Peak (related MPAN)	251	4	0.233			0.00				n/a
LV Medium Non-Domestic	570	5-8	2.273	0.236		34.02				n/a
LV Sub Medium Non-Domestic	540	5-8	2.136	0.211		22.12				n/a
LV HH Metered	570	0	20.727	0.251	0.161	8.43	2.43	0.329	2.43	n/a
LV Sub HH Metered	540	0	18.692	0.149	0.114	6.09	2.73	0.269	2.73	n/a
HV HH Metered	510	0	15.398	0.063	0.068	67.97	2.08	0.208	2.08	n/a
NHH UMS	980	1&8	3.214							n/a
LV UMS (Pseudo HH Metered)	970	0	46.218	1.446	1.104					n/a
LV Generation NHH	581	8	-0.625							n/a
LV Sub Generation NHH	551	8	-0.577							n/a
LV Generation Intermittent	581	0	-0.625					0.141		n/a
LV Generation Non-Intermittent	527	0	-7.363	-0.260	-0.156			0.141		n/a
LV Sub Generation Intermittent	551	0	-0.577					0.121		n/a
LV Sub Generation Non-Intermittent	526	0	-6.902	-0.228	-0.142			0.121		n/a
HV Generation Intermittent	521	0	-0.354			29.21		0.088		n/a
HV Generation Non-Intermittent	524	0	-4.708	-0.083	-0.076	29.21		0.088		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).

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			
612	Bradon Farm	1.340	61.06	1.84	1.84	2200032168607			
613	Carland Cross	0.585	0.53	1.55	1.55	2200040848888			
614	Cold Northcott	3.756	3.59	4.56	4.56	2200030511311			
615	Forestmoor 1	6.105		3.01	3.01	2200040863404			
616	Forestmoor 2	6.105		3.02	3.02	2200040863431			
617	Four Burrows	1.750	7.68	1.70	1.70	2200030109831			
619	St Breock	3.623	6.68	1.84	1.84	2200030112133			
625	Marsh Barton		6.54	3.24	3.24	2200031995530			
626	Connon Bridge	1.437	7.08	1.47	1.47	2200040571113			
627	Chelson	6.988	4.62	1.17	1.17	2200040979020			
628	Darracott	1.479	30.54	3.80	3.80	2200041957685			
629	Bears Down	1.195	2.66	1.62	1.62	2200040164245			
632	St Day	3.292	17.59	1.17	1.17	2200040473921			
633	Shooters Bottom	7.583	4.45	1.54	1.54	2200041499771			
634	Heathfield	3.426	5.66	1.68	1.68	2200041625596			
635	Goonhilly	2.403	14.38	2.39	2.39	2200041845860			
636	Delabole	3.689	1.80	3.41	3.41	2200041786674			
637	Fullabrook		236.34	1.53	1.53	2200041930489			

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
638	North Petherwin 33kV Gen	3.149	8.81	2.73	2.73	New connection
639	Luxulyan PV 33kV Gen	2.040	3.10	1.42	1.42	New connection
640	Rolls Royce TT	1.113	3285.59	1.18	1.18	2200040237104 2200030348639
642	Woodland Barton PV 33kV Gen	1.939	3.74	1.46	1.46	New Connection
643	Manor PV Farm 33kV	1.996	1.03	1.32	1.32	2200041978773
644	Churchtown Farm PV 33kV	18.352	1.06	1.34	1.34	2200041978852
645	Trenouth PV 33kV	1.201	7.33	1.43	1.43	2200041978791
647	Howton Farm PV 33kV		1.04	1.87	1.87	2200041979874
648	Chynoweth PV 33kV Gen	0.555	3.24	1.64	1.64	New Connection
650	BAE Systems		245.26	1.54	1.54	2200030346906 2200030346998
652	East Langford PV 33kV	2.985	1.35	2.21	2.21	2200041978728
653	NINNIS PV 33kV Gen	2.007	2.16	1.45	1.45	New Connection
654	Willsland PV 33kV Gen	2.167	1.04	2.30	2.30	New Connection
655	Eastcombe PV 33kV Gen	2.579	1.80	1.52	1.52	New Connection
660	DML - Central	3.609	5140.62	3.63	3.63	2200030348790
660	DML - North		1545.64	3.98	3.98	2200030349242
662	Causilgey PV 33kV Gen	1.729	0.98	1.73	1.73	New Connection

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
663	Beechgrove Farm PV 33kV	0.708	0.40	1.27	1.27	2200042042966
664	Isles of Scilly	27.452	15.51	1.54	1.54	2200041857484
665	BLACKDITCH 33kV	1.366	0.16	2.88	2.88	2200042019345
669	Avonmouth Docks	3.284	52.82	4.56	4.56	2200030348718
690	Norbora	0.578	172.93	8.36	8.36	2200030348620
692	SWW Tamar		1229.08	3.69	3.69	2200030349084 2200032161977
694	SWW Roadford	2.191	152.97	5.34	5.34	2200030349075 2200032161930
695	ST Regis	0.969	948.92	6.78	6.78	2200030348319 2200030348328
696	Tarmac	7.453	272.45	4.72	4.72	2200030347928
697	Abbeywood	0.915	72.37	2.62	2.62	2200030348026 2200030348035
698	HewlettPackard	1.467	72.37	4.69	4.69	2200030347101 2200032161995
699	Blagdon	9.983	36.18	4.15	4.15	2200030354118
700	BristolAirport	11.821	72.37	4.28	4.28	2200031997529 2200031997477
701	BGasHallen	5.443	1372.94	1.69	1.69	2200031846059
702	Portbury Dock	5.893	193.84	2.72	2.72	2200030349260
703	Whatley Quarry	12.022	36.18	5.10	5.10	2200030348470
704	FalmouthDocks	2.783	72.37	4.18	4.18	2200030349093 2200040240630

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
705	AstraZeneca	0.150	3696.27	2.57	2.57	2200040661200 2200040661219
706	DairyCrestDavidstow	9.457	871.82	4.52	4.52	2200040468930
707	Hemyock	5.935	1.72	1.38	1.38	2200041209970
709	Royal United Hospital	12.714	72.37	6.10	6.10	2200030346710 2200032196710
710	Imerys1(Blackpool)	1.909	72.37	3.42	3.42	2200032010850
710	Imerys3(Trebal)	1.714	878.71	3.73	3.73	2200032010879
710	Imerys4(Bugle)	1.863	78.23	2.92	2.92	2200030348382
710	Imerys5(Drinnick)	2.598	101.46	3.91	3.91	2200030348452
710	Imerys6(Par)	2.014	57.89	2.07	2.07	2200030348666
712	Hill Barton Business Pk	3.379		1.71	1.71	New Connection
713	Avonmouth BCC WF 33kV Gen	4.575	12.03	1.51	1.51	New Connection
714	Bodiniel PV Park 33kV Gen	3.605	1.42	1.95	1.95	New Connection
715	Garlenick WF 33kV	1.837	12.47	1.50	1.50	New Connection
716	Warleigh Barton PV 33kV Gen	1.193	0.71	1.47	1.47	New Connection
717	Winnards Perch PV 33kV Gen	1.194	1.17	1.57	1.57	New Connection
720	Airbus UK Ltd	3.140	144.73	2.96	2.96	2200030348986 2200032178340 2200032178368 2200032178377

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
						2200041226558 2200041226567
750	RR Power Development		2464.58	2.19	2.19	2200032138124
759	Langage	4.122	244.16	1.36	1.36	2200041527904
7158	Huntworth	1.371	2.32	1.75	1.75	n/a

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
666	BLACKDITCH 33kV	N/A	N/A	0.96	0.96	2200042019354
693	SWW Roadford	N/A	N/A	N/A	N/A	2200031824213
711	Imerys1(Blackpool)	N/A	N/A	N/A	N/A	2200031824542
711	Imerys3(Trebal)	N/A	N/A	N/A	N/A	2200031824738
711	Imerys4(Bugle)	N/A	N/A	N/A	N/A	2200030347690
711	Imerys5(Drinnick)	N/A	N/A	N/A	N/A	2200031824551
711	Imerys6(Par)	N/A	N/A	N/A	N/A	2200031824551

#### Western Power Distribution (South West) plc - Effective from April 2012 - EHV Export Charges Exceeded Fixed **Export** export Unit charge charge for Tariff name **Unique Identifier** capacity capacity LLFC generation p/kWh p/kVA/day charge p/day (p/kVA/day) 723 North Petherwin 33kV Gen N/A N/A 0.73 0.73 **New Connection** 724 Luxulyan PV 33kV Gen **New Connection** N/A N/A 0.57 0.57 725 Woodland Barton PV 33kV Gen **New Connection** N/A N/A 0.31 0.31 Manor PV Farm 33kV 726 N/A N/A 0.15 2200041978782 0.15 Churchtown Farm PV 33kV 727 N/A N/A -0.20 -0.20 2200041978861 728 Trenouth PV 33kV N/A 2200041978807 N/A 2.33 2.33 732 Howton Farm PV 33kV 2200041979883 N/A N/A 0.18 0.18 Chynoweth PV 33kV Gen **New Connection** 733 N/A N/A 0.95 0.95 CARLAND CROSS 33kV 734 N/A N/A 1.27 1.27 2200031664357 735 East Langford PV 33kV N/A N/A 0.14 0.14 2200041978737 **New Connection** 736 NINNIS PV 33kV Gen N/A N/A 0.25 0.25 737 Willsland PV 33kV Gen N/A **New Connection** N/A 0.18 0.18 738 Eastcombe PV 33kV Gen N/A N/A **New Connection** 0.25 0.25 Marsh Barton Exports N/A N/A N/A 741 2200032024222 N/A

#### Western Power Distribution (South West) plc - Effective from April 2012 - EHV Export Charges Exceeded Fixed **Export** export Unit charge charge for Tariff name capacity capacity **Unique Identifier** LLFC generation p/kWh p/kVA/day charge p/day (p/kVA/day) **New Connection** 744 Causilgey PV 33kV Gen N/A N/A 0.04 0.04 745 Beechgrove Farm PV 33kV N/A N/A 0.07 0.07 2200042042975 751 **RR Power Development Exports** N/A N/A N/A N/A 2200032050436 CONNON BRIDGE LANDFILL 33kV 752 N/A N/A 0.07 0.07 2200040571122 753 CHELSON GENERATOR 33kV N/A N/A -3.37 -3.37 2200040979039 DARRACOTT MOOR WF 33kV N/A N/A 2200041253506 754 0.68 0.68 757 ST DAY LANDFILL 33kV 2200040473940 N/A N/A -0.26 -0.26 Shooters Bottom Windfarm 33kV 758 N/A N/A -0.21 -0.21 2200041499762 760 **HEATHFIELD Landfill 33kV** N/A N/A -14.06 -14.06 2200041625587 761 GOONHILLY WF 33kV N/A N/A 1.81 1.81 2200041845850 762 **DELABOLE WF 33kV** 2200041786683 N/A N/A 0.71 0.71 763 **FULLABROOK WF 132kV** N/A 2200041930498 N/A 1.75 1.75 764 Bears Down Exports N/A N/A N/A N/A 2200040164254 Bradon Farm Exports N/A N/A N/A 765 2200032168616 N/A

#### Western Power Distribution (South West) plc - Effective from April 2012 - EHV Export Charges Exceeded Fixed Export export Unit charge charge for **LLFC Tariff name Unique Identifier** capacity capacity generation p/kWh p/kVA/day charge p/day (p/kVA/day) 767 Cold Northcott Exports N/A N/A N/A N/A 2200031822971 768 Forest Moor 1 Exports N/A N/A N/A N/A 2200040863399 769 Forest Moor 2 Exports N/A N/A N/A N/A 2200040863422 770 Four Burrows Exports N/A N/A N/A N/A 2200031823558 772 Isles of Scilly Exports 2200031825680 N/A N/A N/A N/A 775 St Breock Exports N/A N/A N/A N/A 2200031823530 776 Avonmouth BCC WF 33kV Gen **New Connection** N/A N/A -0.33 -0.33 Bodiniel PV Park 33kV Gen N/A **New Connection** 777 N/A 0.10 0.10 778 Garlenick WF 33kV N/A N/A **New Connection** 1.07 1.07 779 Warleigh Barton PV 33kV Gen **New Connection** N/A N/A 0.19 0.19 Winnards Perch PV 33kV Gen **New Connection** 780 N/A N/A 2.89 2.89 7158 **Huntworth Generator** N/A N/A N/A N/A N/A

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

Western P	Western Power Distribution (South West) 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	edium Non-Domestic 510 5-8 2.089 0.126 122.30										
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	522	0	14.083	0.030	0.052	67.97	1.48	0.176	1.48		
HV Sub Generation Non- Intermittent	525	0	-4.396	-0.066	-0.067	29.21		0.063			
HV Sub Generation Intermittent	523	0	-0.324			29.21		0.063			
Notes:											

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

Western Power Distribution (South West) 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	1.768			2.61				
LDNO LV: Domestic Two Rate	2	2.194	0.159		2.61				
LDNO LV: Domestic Off Peak (related MPAN)	2	0.146							
LDNO LV: Small Non Domestic Unrestricted	3	1.613			4.02				
LDNO LV: Small Non Domestic Two Rate	4	1.673	0.158		4.02				
LDNO LV: Small Non Domestic Off Peak (related MPAN)	4	0.150							
LDNO LV: LV Medium Non-Domestic	5-8	1.459	0.152		21.84				
LDNO LV: LV HH Metered	0	13.307	0.161	0.103	5.41	1.56	0.211	1.56	
LDNO LV: NHH UMS	1&8	2.063							
LDNO LV: LV UMS (Pseudo HH Metered)	0	29.672	0.928	0.709					
LDNO LV: LV Generation NHH	8	-0.625							
LDNO LV: LV Generation Intermittent	0	-0.625					0.141		
LDNO LV: LV Generation Non-Intermittent	0	-7.363	-0.260	-0.156			0.141		
LDNO HV: Domestic Unrestricted	1	1.029			1.52				
LDNO HV: Domestic Two Rate	2	1.277	0.092		1.52				
LDNO HV: Domestic Off Peak (related MPAN)	2	0.085							
LDNO HV: Small Non Domestic Unrestricted	3	0.939			2.34				
LDNO HV: Small Non Domestic Two Rate	4	0.974	0.092		2.34				
LDNO HV: Small Non Domestic Off Peak (related MPAN)	4	0.087							
LDNO HV: LV Medium Non-Domestic	5-8	0.850	0.088		12.72				
LDNO HV: LV HH Metered	0	7.747	0.094	0.060	3.15	0.91	0.123	0.91	
LDNO HV: LV Sub HH Metered	0	11.216	0.089	0.068	3.65	1.64	0.161	1.64	
LDNO HV: HV HH Metered	0	10.864	0.044	0.048	47.96	1.47	0.147	1.47	
LDNO HV: NHH UMS	1&8	1.201							
LDNO HV: LV UMS (Pseudo HH Metered)	0	17.275	0.540	0.413					
LDNO HV: LV Generation NHH	8	-0.625							
LDNO HV: LV Sub Generation NHH	8	-0.577							

Western Power Distribution (South West) 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 Generation Intermittent	0	-0.625					0.141		
LDNO HV: LV Generation Non-Intermittent	0	-7.363	-0.260	-0.156			0.141		
LDNO HV: LV Sub Generation Intermittent	0	-0.577					0.121		
LDNO HV: LV Sub Generation Non-Intermittent	0	-6.902	-0.228	-0.142			0.121		
LDNO HV: HV Generation Intermittent	0	-0.354					0.088		
LDNO HV: HV Generation Non-Intermittent	0	-4.708	-0.083	-0.076			0.088		
LDNO HVplus: Domestic Unrestricted	1	0.806			1.19				
LDNO HVplus: Domestic Two Rate	2	1.000	0.072		1.19				
LDNO HVplus: Domestic Off Peak (related MPAN)	2	0.066							
LDNO HVplus: Small Non Domestic Unrestricted	3	0.735			1.83				
LDNO HVplus: Small Non Domestic Two Rate	4	0.763	0.072		1.83				
LDNO HVplus: Small Non Domestic Off Peak (related MPAN)	4	0.068							
LDNO HVplus: LV Medium Non-Domestic	5-8	0.665	0.069		9.96				
LDNO HVplus: LV Sub Medium Non-Domestic		1.004	0.099		10.40				
LDNO HVplus: HV Medium Non-Domestic		1.154	0.070		67.58				
LDNO HVplus: LV HH Metered	0	6.068	0.073	0.047	2.47	0.71	0.096	0.71	
LDNO HVplus: LV Sub HH Metered	0	8.785	0.070	0.054	2.86	1.28	0.126	1.28	
LDNO HVplus: HV HH Metered	0	8.509	0.035	0.038	37.56	1.15	0.115	1.15	
LDNO HVplus: NHH UMS	1&8	0.941							
LDNO HVplus: LV UMS (Pseudo HH Metered)	0	13.530	0.423	0.323					
LDNO HVplus: LV Generation NHH	8	-0.294							
LDNO HVplus: LV Sub Generation NHH	8	-0.319							
LDNO HVplus: LV Generation Intermittent	0	-0.294					0.066		
LDNO HVplus: LV Generation Non-Intermittent	0	-3.460	-0.122	-0.073			0.066		
LDNO HVplus: LV Sub Generation Intermittent	0	-0.319					0.067		
LDNO HVplus: LV Sub Generation Non-Intermittent	0	-3.814	-0.126	-0.078			0.067		
LDNO HVplus: HV Generation Intermittent	0	-0.354			29.21		0.088		
LDNO HVplus: HV Generation Non-Intermittent	0	-4.708	-0.083	-0.076	29.21		0.088		
LDNO EHV: Domestic Unrestricted	1	0.627			0.93				
LDNO EHV: Domestic Two Rate	2	0.778	0.056		0.93				
LDNO EHV: Domestic Off Peak (related MPAN)	2	0.052							

Western Power Distribution (South West) 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: Small Non Domestic Unrestricted	3	0.572			1.43				
LDNO EHV: Small Non Domestic Two Rate	4	0.594	0.056		1.43				
LDNO EHV: Small Non Domestic Off Peak (related MPAN)	4	0.053							
LDNO EHV: LV Medium Non-Domestic	5-8	0.518	0.054		7.75				
LDNO EHV: LV Sub Medium Non-Domestic		0.781	0.077		8.09				
LDNO EHV: HV Medium Non-Domestic		0.898	0.054		52.58				
LDNO EHV: LV HH Metered	0	4.721	0.057	0.037	1.92	0.55	0.075	0.55	
LDNO EHV: LV Sub HH Metered	0	6.835	0.054	0.042	2.23	1.00	0.098	1.00	
LDNO EHV: HV HH Metered	0	6.620	0.027	0.029	29.22	0.89	0.089	0.89	
LDNO EHV: NHH UMS	1&8	0.732							
LDNO EHV: LV UMS (Pseudo HH Metered)	0	10.527	0.329	0.251					
LDNO EHV: LV Generation NHH	8	-0.229							
LDNO EHV: LV Sub Generation NHH	8	-0.248							
LDNO EHV: LV Generation Intermittent	0	-0.229					0.052		
LDNO EHV: LV Generation Non-Intermittent	0	-2.692	-0.095	-0.057			0.052		
LDNO EHV: LV Sub Generation Intermittent	0	-0.248					0.052		
LDNO EHV: LV Sub Generation Non-Intermittent	0	-2.967	-0.098	-0.061			0.052		
LDNO EHV: HV Generation Intermittent	0	-0.275			22.73		0.068		
LDNO EHV: HV Generation Non-Intermittent	0	-3.663	-0.065	-0.059	22.73		0.068		
LDNO 132kV/EHV: Domestic Unrestricted	1	0.479			0.71				
LDNO 132kV/EHV: Domestic Two Rate	2	0.594	0.043		0.71				
LDNO 132kV/EHV: Domestic Off Peak (related MPAN)	2	0.039							
LDNO 132kV/EHV: Small Non Domestic Unrestricted	3	0.437			1.09				
LDNO 132kV/EHV: Small Non Domestic Two Rate	4	0.453	0.043		1.09				
LDNO 132kV/EHV: Small Non Domestic Off Peak (related MPAN)	4	0.041							
LDNO 132kV/EHV: LV Medium Non-Domestic	5-8	0.395	0.041		5.92				
LDNO 132kV/EHV: LV Sub Medium Non-Domestic		0.597	0.059		6.18				
LDNO 132kV/EHV: HV Medium Non-Domestic		0.686	0.041		40.16				
LDNO 132kV/EHV: LV HH Metered	0	3.606	0.044	0.028	1.47	0.42	0.057	0.42	
LDNO 132kV/EHV: LV Sub HH Metered	0	5.220	0.042	0.032	1.70	0.76	0.075	0.76	
LDNO 132kV/EHV: HV HH Metered	0	5.056	0.021	0.022	22.32	0.68	0.068	0.68	

Western Power Distribution (South West) 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/EHV: NHH UMS	1&8	0.559						
LDNO 132kV/EHV: LV UMS (Pseudo HH Metered)	0	8.040	0.252	0.192				
LDNO 132kV/EHV: LV Generation NHH	8	-0.175						
LDNO 132kV/EHV: LV Sub Generation NHH	8	-0.189						
LDNO 132kV/EHV: LV Generation Intermittent	0	-0.175					0.039	
LDNO 132kV/EHV: LV Generation Non-Intermittent	0	-2.056	-0.073	-0.044			0.039	
LDNO 132kV/EHV: LV Sub Generation Intermittent	0	-0.189					0.040	
LDNO 132kV/EHV: LV Sub Generation Non- Intermittent	0	-2.266	-0.075	-0.047			0.040	
LDNO 132kV/EHV: HV Generation Intermittent	0	-0.210			17.36		0.052	
LDNO 132kV/EHV: HV Generation Non-Intermittent	0	-2.798	-0.049	-0.045	17.36		0.052	
LDNO 132kV: Domestic Unrestricted	1	0.333			0.49			
LDNO 132kV: Domestic Two Rate	2	0.414	0.030		0.49			
LDNO 132kV: Domestic Off Peak (related MPAN)	2	0.027						
LDNO 132kV: Small Non Domestic Unrestricted	3	0.304			0.76			
LDNO 132kV: Small Non Domestic Two Rate	4	0.315	0.030		0.76			
LDNO 132kV: Small Non Domestic Off Peak (related MPAN)	4	0.028						
LDNO 132kV: LV Medium Non-Domestic	5-8	0.275	0.029		4.12			
LDNO 132kV: LV Sub Medium Non-Domestic		0.415	0.041		4.30			
LDNO 132kV: HV Medium Non-Domestic		0.477	0.029		27.94			
LDNO 132kV: LV HH Metered	0	2.509	0.030	0.019	1.02	0.29	0.040	0.29
LDNO 132kV: LV Sub HH Metered	0	3.632	0.029	0.022	1.18	0.53	0.052	0.53
LDNO 132kV: HV HH Metered	0	3.518	0.014	0.016	15.53	0.48	0.048	0.48
LDNO 132kV: NHH UMS	1&8	0.389						
LDNO 132kV: LV UMS (Pseudo HH Metered)	0	5.594	0.175	0.134				
LDNO 132kV: LV Generation NHH	8	-0.121						
LDNO 132kV: LV Sub Generation NHH	8	-0.132						
LDNO 132kV: LV Generation Intermittent	0	-0.121					0.027	
LDNO 132kV: LV Generation Non-Intermittent	0	-1.431	-0.051	-0.030			0.027	
LDNO 132kV: LV Sub Generation Intermittent	0	-0.132					0.028	
LDNO 132kV: LV Sub Generation Non-Intermittent	0	-1.577	-0.052	-0.032			0.028	
LDNO 132kV: HV Generation Intermittent	0	-0.146			12.08		0.036	

Western Power Distribution (South West) 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: HV Generation Non-Intermittent	0	-1.946	-0.034	-0.031	12.08		0.036	
LDNO 0000: Domestic Unrestricted	1	0.138			0.20			
LDNO 0000: Domestic Two Rate	2	0.171	0.012		0.20			
LDNO 0000: Domestic Off Peak (related MPAN)	2	0.011						
LDNO 0000: Small Non Domestic Unrestricted	3	0.126			0.31			
LDNO 0000: Small Non Domestic Two Rate	4	0.131	0.012		0.31			
LDNO 0000: Small Non Domestic Off Peak (related MPAN)	4	0.012						
LDNO 0000: LV Medium Non-Domestic	5-8	0.114	0.012		1.71			
LDNO 0000: LV Sub Medium Non-Domestic		0.172	0.017		1.78			
LDNO 0000: HV Medium Non-Domestic		0.198	0.012		11.58			
LDNO 0000: LV HH Metered	0	1.040	0.013	0.008	0.42	0.12	0.017	0.12
LDNO 0000: LV Sub HH Metered	0	1.506	0.012	0.009	0.49	0.22	0.022	0.22
LDNO 0000: HV HH Metered	0	1.458	0.006	0.006	6.44	0.20	0.020	0.20
LDNO 0000: NHH UMS	1&8	0.161						
LDNO 0000: LV UMS (Pseudo HH Metered)	0	2.319	0.073	0.055				
LDNO 0000: LV Generation NHH	8	-0.050						
LDNO 0000: LV Sub Generation NHH	8	-0.055						
LDNO 0000: LV Generation Intermittent	0	-0.050					0.011	
LDNO 0000: LV Generation Non-Intermittent	0	-0.593	-0.021	-0.013			0.011	
LDNO 0000: LV Sub Generation Intermittent	0	-0.055					0.011	
LDNO 0000: LV Sub Generation Non-Intermittent	0	-0.654	-0.022	-0.013			0.011	
LDNO 0000: HV Generation Intermittent	0	-0.061			5.01		0.015	
LDNO 0000: HV Generation Non-Intermittent	0	-0.807	-0.014	-0.013	5.01		0.015	

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

Western Power Distribution (South West) plc - Effective from April 2012 - LLF Time Periods									
Time periods	Period 1	Period 2	Period 3	Period 4					
Time periode									
Monday to Friday Mar to Oct			00:00 - 06:30 23:30 - 24:00	06:30 - 23:30					
Monday to Friday Nov to Feb	16:00 - 19:00	06:30 - 16:00	00:00 - 06:30 23:30 - 24:00	19:00 - 23:30					
Saturday and Sunday All Year			00:00 - 06:30 23:30 - 24:00	06:30 - 23:30					
Notes	All the above t	imes 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										
EHV 132kV	1.012	1.011	1.008	1.01	n/a					
EHV 132/33kV	1.017	1.015	1.013	1.014	n/a					
EHV 132/HV	1.019	1.017	1.014	1.015	n/a					
33kV	1.032	1.028	1.022	1.025	670, 671					
EHV 33/HV	1.042	1.038	1.031	1.034	522, 523, 525					
HV	1.065	1.058	1.046	1.051	510, 521, 524					
LV	1.087	1.080	1.072	1.075	010, 020, 030, 040, 110, 210, 251, 430, 527, 570, 581, 970, 980					
LV substation	1.078	1.072	1.065	1.068	526, 540, 551					

		EHV Site	e Specific LLI	-s		
Demand						
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC	
Astra Zeneca Hallen	1.042	1.038	1.031	1.034	705	
Avonmouth BCC Wind Farm	1.032	1.028	1.022	1.025	713	
Babcock Marine	1.019	1.019	1.019	1.019	660	
BAE Filton	1.042	1.045	1.043	1.042	720	
Bears Down	1.000	1.000	1.000	1.000	629	
Blackditch	1.032	1.028	1.022	1.025	665	
Bodiniel PV Park	1.032	1.028	1.022	1.025	714	
Bradon Farm	1.000	1.073	1.073	1.073	612	
Breechgrove	1.032	1.028	1.022	1.025	663	
Bristol Energy	1.002	1.003	1.002	1.003	750	
Bristol International Airport	1.042	1.038	1.031	1.034	700	
Bristol Port Co. Royal Portbury Docks	1.042	1.038	1.031	1.034	702	

# **EHV Site Specific LLFs**

### Demand

Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Bristol Port Company Avonmouth Docks	1.042	1.038	1.031	1.034	669
Bristol Water Blagdon Pumpin Station	1.042	1.038	1.031	1.034	699
British Gas Hallen	1.042	1.038	1.031	1.034	701
Broadpath Landfill	1.042	1.038	1.031	1.034	707
Carland Cross	1.000	1.000	1.000	1.000	613
Causilgey	1.032	1.028	1.022	1.025	662
Chelson Generator	1.000	1.000	1.000	1.000	627
Churchtown Farm (Hayle)	1.032	1.028	1.022	1.025	644
Chynoweth Farm (Truro)	1.032	1.028	1.022	1.025	648
Cold Northcott	1.000	1.000	1.000	1.000	614
Connon Bridge Landfill	1.000	1.000	1.000	1.000	626
Dairy Crest Davidstow	1.042	1.038	1.031	1.034	706
Darracott	1.032	1.028	1.022	1.025	628
Delabole	1.032	1.028	1.022	1.025	636
East Langford (Kilkhampton)	1.032	1.028	1.022	1.025	652
Eastcombe Farm	1.032	1.028	1.022	1.025	655
Exeter Power	1.012	1.012	1.012	1.012	625
Forest Moor Wind 1	1.000	1.000	1.000	1.000	615
Forest Moor Wind 2	1.000	1.000	1.000	1.000	616
Four Burrows	1.000	1.000	1.000	1.000	617
Fullabrook	1.012	1.011	1.008	1.010	637
Garlenick Wind Farm	1.032	1.028	1.022	1.025	715
Goonhilly	1.032	1.028	1.022	1.025	635
Heathfield	1.000	1.000	1.000	1.000	634
Hewlett Packard	1.042	1.038	1.031	1.034	698
Hill Barton Business Park	1.042	1.038	1.031	1.034	712
Howton Farm (Saltash)	1.032	1.028	1.022	1.025	647
Imerys	1.016	1.016	1.016	1.016	710
Isles of Scilly	1.042	1.038	1.031	1.034	664

## **EHV Site Specific LLFs**

### Demand

Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Langage	1.032	1.028	1.022	1.025	759
Manor Farm (St Austell)	1.032	1.028	1.022	1.025	643
MOD Abbeywood	1.042	1.038	1.031	1.034	697
Newlyn Downs (Carland Cross)	1.032	1.028	1.022	1.025	649
Nexfor Ltd (Caberboard)	1.038	1.038	1.038	1.038	690
Ninnis Farm	1.032	1.028	1.022	1.025	653
North Petherwin	1.032	1.028	1.022	1.025	638
ROF Puriton	1.041	1.041	1.041	1.041	650
Rolls Royce Filton TT	1.000	1.000	1.020	1.020	640
RUH	1.042	1.038	1.031	1.034	709
Sewage Treatment Works at Falmouth Docks	1.042	1.038	1.031	1.034	704
Shooter's Bottom	1.000	1.000	1.000	1.000	633
St Breock	1.000	1.000	1.000	1.000	619
St Regis, Watchet	1.024	1.024	1.025	1.025	695
SWW Roadford	1.035	1.035	1.031	1.031	694
SWW Tamar	1.077	1.077	1.077	1.077	692
Tarmac, Stancombe Quarry	1.030	1.039	1.030	1.033	696
Trenouth Farm (Padstow)	1.032	1.028	1.022	1.025	645
Trenoweth Farm Luxulyan	1.032	1.028	1.022	1.025	639
Untd Mns Redruth St Day	1.000	1.000	1.000	1.000	632
Warleigh Barton PV	1.032	1.028	1.022	1.025	716
Whatley Quarry	1.042	1.038	1.031	1.034	703
Willsland	1.032	1.028	1.022	1.025	654
Winnard's Perch PV	1.032	1.028	1.022	1.025	717
Woodland Barton Farm Roche	1.032	1.028	1.022	1.025	642

		EHV Site	e Specific LLI	Fs	
			eneration		
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Avonmouth BCC Wind Farm Export	1.032	1.028	1.022	1.025	776
Bear's Down Export	1.037	1.034	1.038	1.038	764
Blackditch Export	1.032	1.028	1.022	1.025	666
Bodiniel PV Park Export	1.032	1.028	1.022	1.025	777
Bradon Farm Export	1.045	1.061	1.000	1.060	765
Breechgrove Export	1.032	1.028	1.022	1.025	745
Bridgwater District Energy	1.020	1.020	1.000	1.019	7158
Bristol Energy Export	1.002	1.004	1.000	1.004	751
Carland Cross Export	1.036	1.031	1.037	1.036	766
Causilgey Export	1.032	1.028	1.022	1.025	744
Chelson Generator Export	1.028	1.028	1.027	1.027	753
Churchtown Farm (Hayle) Export	1.032	1.028	1.022	1.025	727
Chynoweth Farm (Truro) Export	1.032	1.028	1.022	1.025	733
Cold Northcott Export	1.066	1.062	1.072	1.069	767
Connon Bridge Landfill Export	1.056	1.056	1.055	1.055	752
Darracott Export	1.032	1.028	1.022	1.025	754
Delabole Export	1.032	1.028	1.022	1.025	762
East Langford (Kilkhampton) Export	1.032	1.028	1.022	1.025	735
Eastcombe Farm Export	1.032	1.028	1.022	1.025	738
Exeter Power Export	1.004	1.009	1.000	1.011	741
Forest Moor Wind 1 Export	1.060	1.060	1.064	1.064	768
Forest Moor Wind 2 Export	1.064	1.064	1.065	1.065	769
Four Burrows Export	1.039	1.039	1.045	1.045	770
Fullabrook Export	1.012	1.011	1.008	1.010	763
Garlenick Wind Farm Export	1.032	1.028	1.022	1.025	778
Goonhilly Export	1.032	1.028	1.022	1.025	761

		EHV Site	Specific LLI	Fs	
		Ge	eneration		
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Heathfield Export	1.035	1.034	1.034	1.034	760
Hill Barton Business Park Export	1.042	1.038	1.031	1.034	746
Howton Farm (Saltash) Export	1.032	1.028	1.022	1.025	732
Imerys Export	1.027	1.030	1.028	1.027	711
Isles of Scilly Export	1.042	1.038	1.031	1.034	772
Manor Farm (St Austell) Export	1.032	1.028	1.022	1.025	726
Newlyn Downs (Carland Cross) Export	1.032	1.028	1.022	1.025	734
Ninnis Farm Export	1.032	1.028	1.022	1.025	736
North Petherwin Export	1.032	1.028	1.022	1.025	723
RUH Export	1.042	1.038	1.031	1.034	722
Shooter's Bottom Export	1.033	1.032	1.032	1.032	758
St Breock Export	1.034	1.035	1.035	1.035	775
SWW Roadford Export	1.000	1.000	1.000	1.000	693
Trenouth Farm (Padstow) Export	1.032	1.028	1.022	1.025	728
Trenoweth Farm Luxulyan Export	1.032	1.028	1.022	1.025	724
Untd Mns Redruth St Day Export	1.035	1.035	1.035	1.035	757
Warleigh Barton PV Export	1.032	1.028	1.022	1.025	779
Willsland Export	1.032	1.028	1.022	1.025	737
Winnard's Perch PV Export	1.032	1.028	1.022	1.025	780
Woodland Barton Farm Roche Export	1.032	1.028	1.022	1.025	725

Annex 6 - Un-scaled [nodal /network group] costs Please see Schedule of Charges and Other Tables, Annex 6 nodal Prices LRIC.