

SP Manweb

Use of System Charging Statement

INDICATIVE NOTICE

Effective from 1st April 2012

Version 1.0

This statement is in a form to be
Approved by the Gas and
Electricity Markets Authority.

Contents

1. Introduction	3
2. Charge Application and Definitions	5
Supercustomer Billing and Payment	5
Supercustomer Charges	5
Site-Specific Billing and Payment	6
Site-Specific Billed Charges	6
Charges for Unmetered Supplies	8
Use of System Charges Out of Area	8
Application of Capacity Charges	8
Chargeable Capacity	8
Demand Chargeable Capacity	8
Generation Chargeable Capacity	9
Standby Capacity for Additional Security on Site	9
Exceeded Capacity	9
Minimum Capacity Levels	10
Application of charges for excess reactive power	10
Demand Chargeable Reactive Power	10
Generation Chargeable Reactive Power	11
Provision of billing data	11
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 network group costs	16
Demand Side Management	16
6. Electricity Distribution Rebates	17
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
Annex 1 - Schedule of Charges for use of the Distribution System by LV and HV Designated Properties	1
Annex 2 - Schedule of Charges for use of the Distribution System by Designated EHV Properties (including LDNOs with Designated EHV Properties/end-users).	1
Annex 3 - Schedule of Charges for use of the Distribution System to Preserved/Additional LLFC Classes	1
Annex 4 - Charges applied to LDNOs with HV/LV end users	1
Annex 5 – Schedule of Line Loss Factors	1

1. Introduction

- 1.1. This statement has been prepared in order to discharge SP Manweb's obligation under Standard Licence Condition 14 of our Electricity Distribution Licence. It contains information on our charges¹ and charging principles for use of our Distribution System. It also contains information on our Line Loss Factors.
- 1.2. The charges in this statement are calculated using the Common Distribution Charging Methodology (CDCM) for LV/HV Designated Properties, the EHV Distribution Charging Methodology (EDCM) for the import charges for Designated EHV Properties and SP Manweb's charging methodology for the export charges for Designated EHV Properties. The application of charges to a premise can be referenced using the Line Loss Factor Class (LLFC) contained in the charge tables.
- 1.3. If you have any questions about this statement please contact us at the address shown below:
- SP Energy Networks, Regulation and Commercial
Prenton Way
Birkenhead, Merseyside
CH43 3ET
Email : commercial@scottishpower.com
Telephone 0151 609 2359
- 1.4. All enquiries regarding Connection Agreements should be addressed to:
- SP Energy Networks, Regulation and Commercial
Prenton Way
Birkenhead, Merseyside
CH43 3ET
Email : commercial@scottishpower.com
Telephone 0151 609 2022
- 1.5. All enquiries regarding Changes to Maximum Capacities should be addressed to:
- SP Energy Networks, Energy Income

¹ Charges can be positive or negative.

New Aldertson House
Dove Wynd
Strathclyde Business Park
Bellshill
ML4 3FF
Email : capacityq@scottishpower.com
Telephone 0141 614 1605

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 SP Manweb 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 SP Manweb 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. All Line Loss Factor Classes (LLFCs) are assigned at the sole discretion of SP Manweb. The charges in this document are shown exclusive of VAT. Invoices take account of previous Settlement runs and include VAT.

Supercustomer Charges

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

- 2.8. Valid Settlement Profile Class/Standard Settlement Configuration/Meter Timeswitch Code (PC/SSC/MTC) combinations for these LLFCs are detailed in Market Domain Data (MDD).
- 2.9. Where an MPAN has an Invalid Settlement Combination, the 'Domestic Unrestricted' fixed and unit charge will be applied as default until the invalid combination is corrected. Where there are multiple SSC-TPR combinations, the default 'Domestic Unrestricted' fixed and unit charge will be applied for each invalid TPR combination.
- 2.10. The time periods for the charge rates are as specified by the SSC. To determine the appropriate charge rate for each SSC/TPR a lookup table is provided on the ENA website².
- 2.11. The Domestic Off-Peak and Small Non-Domestic Off-Peak charges are supplementary to either an Unrestricted or a Two Rate charge.

Site-Specific Billing and Payment

- 2.12. Site-specific billing and payment applies to Metering Points registered as Half Hourly (HH) metered. The site-specific billing and payment approach to Use of System billing makes use of Half Hourly (HH) metering data received through Settlement.
- 2.13. Invoices are calculated on a periodic basis and sent to each User, for whom SP Manweb 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 SP Manweb. 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;

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

- 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.
- 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:
- Unit charges in the red time band apply – between 16:30 to 19:30, Mon to Fri including Bank Holidays
 - Unit charges in the amber time band apply – between 08:00 to 16:30, and 19:30 to 22:30, Mon to Fri including Bank Holidays and 16:00 to 20:00 Sat and Sun
 - Unit charges in the green time band apply – between 00:00 to 08:00 and 22:30 to 00:00, Mon to Fri including Bank Holidays, and 00:00 to 16:00 and 20:00 to 00:00 Sat and Sun
 - All times are UK clock time.
- 2.21. Designated EHV Properties as calculated using the EDCM will be allocated the relevant charge structure set out in Annex 2.
- 2.22. The time periods for the application of unit charges to Designated EHV Properties are as follows:
- Unit charges in the super red time band apply – between 16:30 and 19:30, Mon to Fri including Bank Holidays during Nov to Feb
 - 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 SP Manweb deems to be suitable as Unmetered Supplies as permitted in the Electricity (Unmetered Supply) Regulations 2001³ and where operated in accordance with BSCP520⁴.
- 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. SP Manweb 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 SP Manweb 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 SP Manweb 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

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

³ The Electricity (Unmetered Supply) Regulations 2001 available from <http://www.legislation.gov.uk/ukxi/2001/3263/made>

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

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

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

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

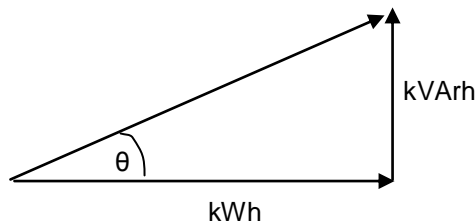
2.36. There is no minimum capacity threshold.

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:

$\cos \theta = \text{Power Factor}$



2.39. The chargeable reactive power is calculated as follows:

Demand Chargeable Reactive Power

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

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

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

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 SP Manweb 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 the Company shall be consistent with that received through the metering equipment installed. Metering data shall be provided in an electronic format specified by SP Manweb 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 SP Manweb). The data shall be e-mailed to mailto:uos_administrators2@scottishpower.com
- 2.47. SP Manweb 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). SP Manweb reserves the right to levy a charge on Users who fail to provide such reactive data. In order to estimate missing reactive data, a Power Factor of 0.9 lag will be applied to the active consumption in any half hour.

Licensed Distributor Network Operator (LDNO) charges

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

3. Schedule of Charges for use of the Distribution System

- 3.1. Tables listing the charges for the distribution of electricity under use of system are published in annexes of this document.
- 3.2. These charges are also listed in a spreadsheet which is published with this statement and can be downloaded from <http://www.scottishpower.com/ConnectionsUseMetering.htm>
- 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 SP Manweb 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 SP Manweb area.

4. Schedule of Line Loss Factors

Role of Line Loss Factors in the Supply of Electricity

- 4.1. Electricity entering or exiting the DNOs' networks is adjusted to take account of energy which is lost⁵ as it is distributed through the network.
- 4.2. This adjustment is made to ensure that energy bought or sold by a User, from/to a Customer, accounts for energy lost as part of distributing energy to and from the Customer's premises.
- 4.3. DNOs are responsible for calculating the Line Loss Factors (LLFs) and providing these factors to Elexon. Elexon manage the Balancing and Settlement Code. The code covers the governance and rules for the balancing and settlement arrangements.
- 4.4. Annex 5 provides the LLFs which must be used to adjust the Metering System volumes to take account of losses on the Distribution Network.

Calculation of Line Loss Factors

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

Line Loss Factor time periods

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

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

Line Loss Factor tables

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

5. Notes for Designated EHV Properties

EDCM network group costs

- 5.1. The table in Annex 6 shows the un-scaled network group costs used to calculate the current EDCM charges.
- 5.2. These are illustrative of the modelled costs at the time that this statement was published. A new connection will result in changes to current network utilisations which will then form the basis of future prices, i.e. the charge determined in this statement will not necessarily be the charge in subsequent years because of the interaction between new and existing network connections.

Demand Side Management

- 5.3. For those premises where use of system is charged under the EDCM, some customers may be able to benefit from entering into a Demand Side Management ("DSM") Agreement with SP Manweb.
- 5.4. The DSM Agreement will be based upon a contractual commitment by the customer to materially reduce their MIC in certain time periods (which shall be determined by SP Manweb) in return for reduced Use of System Charges. Where a DSM Agreement is entered into, the applicable demand capacity costs will be based on the MIC minus the capacity subject to interruption.
- 5.5. EDCM customers wishing further details and/or wishing to enquire whether they can take advantage of a DSM Agreement should contact in the first instance:

The Distribution Policy Team
Regulation & Commercial
SP Manweb Plc
Dove Wynd
Strathclyde Business Park
Bellshill
ML4 3FF
Email: commercial@sppowersystem.com
Telephone: 0141 614 0008
Fax: 0141 614 1663

6. Electricity Distribution Rebates

- 6.1. SP Manweb 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

- 7.1. None.

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

- 8.1. 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 proposes to supply, or for the time being supplies, electricity through an Exit Point, or from whom, a User or any relevant exempt Supplier, is entitled to recover charges, compensation or an account of profits in respect of electricity supplied through 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: <ul style="list-style-type: none"> • 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

SP Manweb plc - Effective from April 2012 - INDICATIVE LV/HV Charges										
	Open LLFCs	PCs	Unit rate 1 p/kWh	Unit rate 2 p/kWh	Unit rate 3 p/kWh	Fixed charge p/MPAN/day	Capacity charge p/kVA/day	Reactive power charge p/kVArh	Excess Capacity charge (p/kVA)	Closed LLFCs
Domestic Unrestricted	101, 102	1	3.025			3.55				
Domestic Two Rate	103, 105, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 131, 132, 133, 134, 147, 148, 149, 150	2	3.780	0.362		3.55				145, 146
Domestic Off Peak (related MPAN)	104, 106, 130, 153, 155	2	0.327							135, 136, 137, 138, 140, 141, 142, 143
Small Non Domestic Unrestricted	201, 202, 203, 209	3	2.718			4.51				207
Small Non Domestic Two Rate	205, 211, 231, 232	4	2.919	0.214		4.51				208, 210
Small Non Domestic Off Peak (related MPAN)	212	4	0.246							233, 234, 235, 236, 237
LV Medium Non-Domestic	401, 402	5-8	3.095	0.206		22.20				
LV Sub Medium Non-Domestic	403, 404	5-8	2.731	0.179		28.53				
HV Medium Non-Domestic										405
LV HH Metered	511, 591	0	12.378	0.907	0.155	17.35	2.34	0.665	2.34	501
LV Sub HH Metered	513, 592	0	10.506	0.591	0.117	6.12	4.86	0.504	4.86	503
HV HH Metered	515, 593	0	8.076	0.363	0.082	92.72	3.72	0.353	3.72	505
HV Sub HH Metered										507, 517, 594
NHH UMS	900, 901, 902, 903, 904, 905, 906, 907	1&8	2.370							912, 913
LV UMS (Pseudo HH Metered)	910	0	15.630	1.587	0.523					
LV Generation NHH	781, 782, 783, 784, 785	8	(1.153)							
LV Sub Generation NHH	780	8	(1.030)							
LV Generation Intermittent	786, 787	0	(1.153)					0.433		
LV Generation Non-Intermittent	791, 795	0	(8.529)	(0.844)	(0.125)			0.433		
LV Sub Generation Intermittent	788, 789	0	(1.030)					0.403		
LV Sub Generation Non-Intermittent	792, 796	0	(7.729)	(0.729)	(0.110)			0.403		
HV Generation Intermittent	770, 771	0	(0.664)			67.71		0.307		
HV Generation Non-Intermittent	793, 797	0	(5.514)	(0.356)	(0.065)	67.71		0.307		
HV Sub Generation Non-Intermittent	794, 798	0	(5.216)	(0.309)	(0.060)	67.71		0.226		
HV Sub Generation Intermittent	772, 773	0	(0.616)			67.71		0.226		

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

SP Manweb plc - Effective from April 2012 - INDICATIVE 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)	Connection Charge (p/day)	Metering Charge (p/day)	Communication Charges (p/day)	Unique Identifier
803	Shell Stanlow		675.66	3.18	3.18	18,991.23			
804	Ford Motor Company	0.576	5,227.03	6.13	6.13	17,025.77	1,430.14		
805	Associated Octel		12,093.06	5.79	5.79	49,068.19			
806	Bridgewater Paper		2,670.50	1.32	1.32				
807	Vauxhall Motors		8,730.06	3.97	3.97				
808	Corus Colors		23,085.27	5.43	5.43	3,368.01			
809	Urenco			4.61	4.61				
810	Ineos Chlor Ltd (Lostock)		9,117.96	3.95	3.95	35,270.73			
812	Knauf Insulation	0.575	1,018.75	8.63	8.63	3,110.85			
813	Air Products		230.52	8.88	8.88	938.67			
814	Shell Chemicals		1,018.75	9.22	9.22	4,355.80			
815	GrowHow		5,227.62	9.31	9.31				
816	Castle Cement		572.58	4.02	4.02	1,049.15			
817	Kronospan	3.227	535.40	12.82	14.93	3,706.78			
818	Royal Ordnance		966.70	7.51	7.51	5,905.24			
819	Albion Inorganic	2.470	229.66	1.86	1.86				
821	BHP		1,753.87	3.44	3.44	6,901.97			
822	Hole House Farm		5,731.45	5.21	5.21				
824	Port of Liverpool		6.70	2.03	2.03				
827	Kimberley Clark		432.08	9.57	9.57				
828	Amegni		4.77	4.70	4.70				
829	Salt Union		1,277.34	2.16	2.16		542.47		
831	Ineos Chlor Ltd (Percival Lane)		249.76	11.66	11.66				
833	Toyota		1,698.40	4.14	4.14	3,141.51			
834	Warringham Gas Storage		994.18	5.93	5.93	2,186.08			
835	Arpley Landfill	2.300	13.17	3.46	3.46				
836	Ancor	4.520	1,206.52	9.36	9.36				
838	Cemmaes C		5.70	6.57	6.57				
839	PG Strand Gate	0.003	1,662.35	4.96	4.96				
840	Moel Maelogan (A)		13.22	3.77	3.77				
841	Moel Maelogan (B)		6.65	3.77	3.77				
842	North Hoyle		325.27	1.90	1.90				
843	Cefn Croyes (3)		164.23	1.92	1.92			2,197.01	
844	Cefn Croyes (4)		169.06	1.90	1.90			2,197.01	
845	Tir Mostyn		427.96	3.20	3.20				
846	Mynydd Clogau	4.086	11.11	7.25	7.25				
847	Granox	0.677	188.06	3.44	3.44				
849	Braich Ddu		26.22	6.59	6.59				
851	Moel Maelogan 2		3.92	3.63	3.63				
852	MDHC	0.322	1,542.65	4.40	4.40				
854	Wem Ddu		30.63	6.41	6.41				
856	Rhyl Flats		99.85	2.12	2.12				
865	Cemmaes B		6.47	6.89	6.89				
866	Penthyddlan	4.061	9.06	8.16	8.16				
867	Llidywaun	7.713	8.46	7.89	7.89				
868	Rhyd y Groes		52.26	10.07	10.07				
869	Llangwyrfon		16.26	2.63	2.63		542.47		

870	Storenergy (Lostock)		886.39	6.55	6.55				
871	Rheidol		48.53	2.38	2.38				
872	Carno B		118.88	4.59	4.59				
873	Carno A		42.19	4.84	4.84				
874	Trysgwyn		17.49	10.23	10.23				
875	Llanabo		8.68	10.29	10.29				
877	Quinn Glass		2,429.04	11.58	11.58				
878	Liverpool International Business Park	0.282	2,539.12	3.73	3.73				
887	Mynyddi Gorduu		111.96	2.33	2.33				
898	PG Winnington		670.97	2.99	2.99				
921	Network Rail (Crewe)		5,487.73	4.76	4.76				
922	Network Rail (Speke)		2,002.59	6.87	6.87				
923	Network Rail (Bankhall)	0.300	870.03	6.77	6.77				
924	Network Rail (Bromborough)	0.416	556.78	10.83	10.83				
925	Network Rail (Shore Road)	0.315	3,249.40	7.71	7.71				
	Shotton Paper		6,906.49	1.62	1.62	24,263.05			
	Burbo Bank		5,496.94						
	Risley			10.02	10.02				
	Bold			1.52	1.52				
	Dolgarrog PS			9.33	9.33				
	Rheidol PS			3.81	3.81				
	Maentwrog PS			6.69	6.69				
300	Royal London & Mutual Insur Society Ltd	2.271	351.10	1.88	1.88				
301	Amerdale Ltd	0.261	351.10	5.05	5.05				
302	United Biscuits (Uk) Ltd	0.003	351.10	5.97	5.97				
303	Bibbys	2.497	351.10	7.15	7.15				
304	Bruntwood Limited	0.436	351.10	4.75	4.75				
305	L'pool Daily Post & Echo	0.448	351.10	5.11	5.11				
306	University Of Liverpool	0.448	351.10	5.27	5.27				
307	West Development Agency	1.221	351.10	2.22	2.22				
308	New Capital Developments Limited	0.313	351.10	8.34	8.34				
309	Chiron Vaccines Ltd	0.576	351.10	2.61	2.61				
310	Maro Developments Limited	4.875	351.10	6.90	6.90				
311	Dalkia Energy & Technical Services	4.589	351.10	3.78	3.78				
312	United Utilities Water Plc	4.519	351.10	9.12	9.12				
313	H H Robertson	1.448	351.10	4.51	4.51				
314	SCA Limited	1.506	351.10	7.52	7.52				
315	United Utilities Water Plc - Sutton Hall	1.537	351.10	7.99	7.99				
316	Dairy Crest Ltd	9.455	351.10	4.77	4.77				
317	Tetra Pak Manufacturing Uk Ltd	7.937	351.10	5.53	5.53				
318	Hydro Aluminium Deeside Ltd	10.007	351.10	5.63	5.63				
319	British Polythene Industries Plc	1.312	351.10	8.04	8.04				
320	Stanton Land And Marine Ltd	5.512	1,364.39	3.25	3.25				
321	Bombardier Transportation Uk Ltd	0.530	2,026.59	8.65	8.65				
322	Bentley Motor Cars Ltd	0.567	526.65	5.72	5.72				
323	Tarmac Limited	2.003	175.55	3.91	3.91				
324	Scottish Power Plc - Unit 40 Mochdre	11.197	351.10	10.41	10.41				
325	SCA Limited	2.191	351.10	8.79	8.79				
326	Somerfield Plc	3.835	351.10	4.40	4.40				
327	Midland Bank	2.489	351.10	10.40	10.40				
328	Alliance & Leicester Plc	2.515	351.10	7.82	7.82				
329	Dairy Crest Ltd	0.233	351.10	3.92	3.92				
330	Yorkshire Copper Tube Ltd	0.253	2,377.69	4.81	4.81				
331	Kodak Ltd	0.239	351.10	1.97	1.97				
332	Delphi Lockheed Automotive Limited	0.243	351.10	3.92	3.92				
333	Thyssen Krupp (Group)	0.213	351.10	3.91	3.91				
334	CP Kelco UK Ltd	0.225	351.10	2.20	2.20				
335	Seaforth Cornmill	0.003	351.10	5.18	5.18				
336	King Sturge Ltd	2.702	351.10	5.26	5.26				

337	News International Plc	0.244	351.10	3.31	3.31				
338	Essex International Limited	3.134	351.10	5.30	5.30				
339	Elizabeth I Law Courts	0.412	351.10	2.98	2.98				
340	Downing Property Services Ltd	0.440	351.10	4.80	4.80				
341	MDHB Canada Dock	2.283	351.10	4.80	4.80				
342	Powergen Uk Plc	0.843	351.10	1.50	1.50				
343	Liverpool Airport	0.318	351.10	8.47	8.47				
344	Hp Chemie Pelzer Uk Ltd	0.302	351.10	4.98	4.98				
345	Novelis Uk Ltd	4.973	351.10	5.42	5.42				
346	Eastern Electricity Plc - Crossfields	4.937	526.65	5.25	5.25				
347	Eastern Electricity Plc - Baronet Works	4.863	3,566.53	7.06	7.06				
348	Unifrax Ltd	3.689	351.10	5.73	5.73				
349	Scottish Power Plc - Delta Metals	3.923	351.10	7.24	7.24				
350	M Baker Recycling Limited	3.819	351.10	7.98	7.98				
351	BOC Limited	3.878	351.10	7.53	7.53				
352	Daresbury Laboratory		351.10	4.60	4.60				
353	Gypsum		4,404.28	9.95	9.95				
354	Dyson Group Plc	0.893	351.10	7.38	7.38				
355	Marley Plumbing & Drainage Group	0.893	2,728.78	4.59	4.59				
356	Rockwood Additives Ltd	0.785	351.10	3.49	3.49				
357	Airbus Uk Ltd	0.691	351.10	7.37	7.37				
358	Greif Uk Ltd	0.780	351.10	7.09	7.09				
359	BP International Limited	0.691	351.10	3.48	3.48				
360	Shell UK Limited	0.835	351.10	6.53	6.53				
361	Owens Corning Building Products UK Ltd	0.679	351.10	9.77	9.77				
362	Cadbury Schweppes Plc	12.065	351.10	9.13	9.13				
363	Kelloggs Company Of Great Britain Ltd	9.595	351.10	7.08	7.08				
364	Lane Properties Llp	9.235	1,364.39	1.52	1.52				
365	Scottish Power Plc D40784 - Bicc Wrexham	9.849	351.10	6.48	6.48				
366	Bank	3.567	351.10	6.28	6.28				
367	Element Six Production Ltd	0.724	351.10	1.93	1.93				
368	Barry Callebaut (Uk) Ltd	3.782	351.10	5.82	5.82				
369	Caparo Steel Products Ltd	10.744	351.10	4.99	4.99				
370	Thermal Ceramics Ltd	1.565	351.10	2.60	2.60				
371	Powergen Plc - MDHB Egerton Dock	5.729	351.10	4.01	4.01				
372	Shell Uk Limited	6.149	351.10	4.94	4.94				
373	Wax GMBH	1.758	351.10	4.03	4.03				
374	Burtens Foods Ltd	1.674	351.10	4.85	4.85				
375	Unilever Uk Central Resources Ltd	1.339	351.10	5.30	5.30				
376	Federal Mogul (UK) Ltd (Cooper (GB) Ltd)	1.440	351.10	7.98	7.98				
377	Nestle UK Ltd	1.350	351.10	2.61	2.61				
378	A&P Falmouth Ltd	5.452	2,377.69	4.90	4.90				
379	Barclays Bank Plc	3.006	351.10	10.59	10.59				
380	Harman Technology Limited	3.094	351.10	5.64	5.64				
381	Twyfords Bathrooms	2.793	351.10	7.39	7.39				
382	Morning Foods Limited	0.579	351.10	8.15	8.15				
383	Group - Fisons	2.984	351.10	4.34	4.34				
384	N W F Ltd	2.829	351.10	14.73	14.73				
385	Linpac Wcb	3.191	351.10	6.07	6.07				
386	Britton Group Plc	3.202	351.10	10.36	10.36				
387	Synthite	2.131	351.10	10.04	10.04				

388	Novar Plc	1.733	351.10	6.14	6.14				
389	Health Supplies - Bangor Hospital	1.962	351.10	6.86	6.86				
391	Bourne Leisure Limited	6.915	351.10	4.43	4.43				
392	Rehau Ltd	6.392	351.10	8.96	8.96				
393	University Of Wales	0.604	351.10	16.06	16.06				
394	Smiths Group Plc		351.10	3.52	3.52				
395	Yardley Plastic	0.233	351.10	6.26	6.26				
396	Ineos Chlor Ltd	1.114	351.10	4.10	4.10				
397	Tulip International Ltd	1.403	351.10	4.17	4.17				
398	Unilever Research	1.321	351.10	6.02	6.02				
399	Export Portfolio		1,364.39	2.11	2.11				
450	Decoma-Merplas	0.616	351.10	8.78	8.78				
451	Sonae UK Limited	0.251	4,755.37	5.29	5.29				
452	Powergen Plc (026 Man 01) - Gilbrook Dock	1.735	351.10	6.19	6.19				
453	United Utilities Water Plc - Woodside	5.850	2,377.69	4.66	4.66				
454	United Utilities Water Plc - Bromborough	1.399	2,377.69	4.63	4.63				
455	S Norton & Co. Ltd	2.273	2,377.69	2.66	2.66				
456	MOD	0.689	351.10	6.44	6.44				
457	Healthcare Distribution		351.10	5.13	5.13				
458	Aluminium Powder Company	11.705	351.10	10.90	10.90				
459	Chiron Vaccines Ltd	0.554	2,377.69	3.88	3.88				
460	ESP	0.419	351.10	3.13	3.13				
461	Mr Kenyon - Mann Island	0.434	351.10	1.86	1.86				
462	Liverpool Area Health Teaching Hospital	0.491	1,188.84	2.99	2.99				
463	United Utilities Water Plc - Sandon Dock	2.505	585.16	4.54	4.54				
464	United Utilities Water Plc Gateworth Sewage	4.858	313.96	2.90	2.90				
465	United Utilities Water Plc - Huntington	3.670	141.14	9.14	9.14				
466	United Utilities Water Plc - Shell Green	0.903	1,426.61	5.49	5.49				
467	Eli Lilly & Co	0.700	2,908.63	3.91	3.91				
468	Pilkington Glass Greengate	3.676	1,559.30	4.34	4.34				
469	Pilkington Glass Cowley Hill Works	3.666	1,158.36	3.29	3.29				
470	Scottish Power Plc - Safeway	4.833	351.10	10.07	10.07				
471	Meadow Foods Ltd	3.618	351.10	4.78	4.78				
472	Hospitals NHS Trust	1.465	351.10	6.39	6.39				
473	Conway & Denbighshire Nhs Trust	3.851	351.10	8.15	8.15				
474	Distribution Centre - Morrisons	3.333	351.10	6.67	6.67				
475	Block 3 Mann Island	0.434	175.55	1.86	1.86				
476	Power Systems - Pilks Ho	3.858	351.10	4.12	4.12				
477	Mod - Raf Valley	11.678	351.10	10.52	10.52				
478	Mod - Shawbury	11.086	175.55	18.74	18.74				
479	Crewe Station	0.567	351.10	7.83	7.83				
480	Merseyside Passenger Transport Authority	2.375	351.10	3.73	3.73				
481	Mackamax Primary		175.55	4.21	4.21				
482	Whiston Hospital	0.844	351.10	6.86	6.86				
483	Maw Green 2	0.536	10.64	1.52	1.52				
484	Pilkington Glass Watson Street Works	3.973	1,188.84	2.18	2.18				

SP Manweb plc - Effective from April 2012 - INDICATIVE EHV Export Charges

LLFC	Tariff name	Sole Asset Charge p/day	Export capacity p/kVA/day	Exceeded export capacity charge (p/kVA/day)	Excess Reactive Power charge (p/kVarh)	Unique Identifier
603	Shell Stanlow				0.13	
604	Port of Liverpool	2,682.70	0.55	0.55	0.13	
606	Bridgewater Paper				0.13	
611	Moel Maelogan 2	615.63	1.09	1.09	0.13	
619	Albion Inorganic				0.13	
621	BHP				0.13	
628	Amegni	997.27	0.60	0.60	0.13	
629	Salt Union				0.13	
635	Arpley Landfill				0.13	
638	Cemmaes C				0.13	
639	PG Strand Gate				0.13	
640	Moel Maelogan A				0.13	
641	Moel Maelogan B				0.13	
642	North Hoyle				0.13	
643	Cefn Croes 3				0.13	
644	Cefn Croes 4				0.13	
645	Tir Mostyn				0.13	
646	Mynydd Clogau				0.13	
647	Granox				0.13	
649	Braich Ddu				0.13	
654	Wern Ddu	3,997.05	1.09	1.09	0.13	
656	Rhyl Flats	24,569.39	1.09	1.09	0.13	
665	Cemmaes B				0.13	
666	Penthyddlan				0.13	
667	Llidyrtwaun				0.13	
668	Rhyd y Groes				0.13	
669	Llangwyrton				0.13	
671	Rheidol				0.13	
672	Carno B				0.13	
673	Carno A				0.13	
674	Trysglwyn				0.13	
675	Llanabo				0.13	
687	Mynydd Gorddu				0.13	
691	Network Rail (Crewe)	12,735.47	0.55	0.55	0.13	
682	Network Rail (Speke)	5,090.79	0.55	0.55	0.13	
698	PG Winnington				0.13	
	Shotton Paper				0.13	
	Burbo Bank				0.13	

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

SP Manweb plc - Effective from April 2012 - INDICATIVE LV/HV Tariffs									
NHH Preserved Charges/Additional LLFC Classes									
	Closed LLFCs	PCs	Unit rate 1 p/kWh	Unit rate 2 p/kWh	Unit rate 3 p/kWh	Fixed charge p/MPAN/day			
Domestic Two Rate	145, 146	2	3.780	0.362		3.55			
Domestic Off-Peak (Related MPAN)	135, 136, 137, 138,	2	0.327	.		.			
Small Non-Domestic Unrestricted	207	3	2.718	.		4.51			
Small Non-Domestic Two Rate	208, 210	4	2.919	0.214		4.51			
Small Non-Domestic Off peak (related MPAN)	233, 234, 235, 236,	4	0.246	.		.			
HV Medium Non-Domestic	405	5-8	1.834	0.106		365.41			
NHH UMS	912, 913	8	2.370						
Notes:	<p>Unit time periods are as specified in the SSC.</p> <p>SP Manweb uses a default tariff for invalid settlement combinations these will be charged at the Domestic Unrestricted Rates.</p> <p>The Domestic and Non-Domestic Off Peak (related MPAN) tariffs are supplementary to a standard published tariff and therefore only available under these conditions.</p> <p>Preserved tariffs are only available to existing supplies, subject to certain conditions:</p> <p>a) Suppliers may not normally transfer a meter point from one preserved tariff to another preserved tariff;</p> <p>b) If a supply under a preserved tariff should cease, other than on change of tenancy, the preserved tariff may not normally be restored;</p> <p>c) Any additional load required to be supplied on the preserved tariff must be within the existing supply capacity.</p>								
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)
LV HH Metered	501	0	12.378	0.907	0.155	17.35	2.34	0.665	2.34
LV Sub HH Metered	503	0	10.506	0.591	0.117	6.12	4.86	0.504	4.86
HV HH Metered	505	0	8.076	0.363	0.082	92.72	3.72	0.353	3.72
HV Sub HH Metered	507, 517, 594	0	6.377	0.183	0.055	199.77	4.04	0.253	4.04
Notes:	<p>Time Periods</p> <p>The time periods for each unit rate where applicable area as follows:</p> <p>Unit charges in the red time band apply – between 16:30 to 19:30, Mon to Fri including Bank Holidays</p> <p>Unit charges in the amber time band apply – between 08:00 to 16:30 and 19:30 to 22:30, Mon to Fri including Bank Holidays and 16:00 to 20:00 Sat and Sun</p> <p>Unit charges in the green time band apply – between 00:00 to 08:00 and 22:30 to 00:00, Mon to Fri including Bank Holidays, and 00:00 to 16:00 and 20:00 to 00:00 Sat and Sun</p> <p>All times are UK clock-time.</p> <p>Preserved tariffs are only available to existing supplies, subject to certain conditions:</p> <p>a) Suppliers may not normally transfer a meter point from one preserved tariff to another preserved tariff;</p> <p>b) If a supply under a preserved tariff should cease, other than on change of tenancy, the preserved tariff may not normally be restored;</p> <p>c) Any additional load required to be supplied on the preserved tariff must be within the existing supply capacity</p>								

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

SP Manweb plc - Effective from April 2012 - INDICATIVE 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/kVAh	Excess Capacity charge (p/kVA)
LDNO LV: Domestic Unrestricted	1	2.059			2.42			
LDNO LV: Domestic Two Rate	2	2.573	0.246		2.42			
LDNO LV: Domestic Off Peak (related MPAN)	2	0.223						
LDNO LV: Small Non Domestic Unrestricted	3	1.850			3.07			
LDNO LV: Small Non Domestic Two Rate	4	1.987	0.146		3.07			
LDNO LV: Small Non Domestic Off Peak (related MPAN)	4	0.167						
LDNO LV: LV Medium Non-Domestic	5-8	2.107	0.140		15.11			
LDNO LV: LV HH Metered	0	8.425	0.617	0.106	11.81	1.59	0.453	1.59
LDNO LV: NHH UMS	1&8	1.613						
LDNO LV: LV UMS (Pseudo HH Metered)	0	10.639	1.080	0.356				
LDNO LV: LV Generation NHH	8	(1.153)						
LDNO LV: LV Generation Intermittent	0	(1.153)					0.433	
LDNO LV: LV Generation Non-Intermittent	0	(8.529)	(0.844)	(0.125)			0.433	
LDNO HV: Domestic Unrestricted	1	1.229			1.44			
LDNO HV: Domestic Two Rate	2	1.536	0.147		1.44			
LDNO HV: Domestic Off Peak (related MPAN)	2	0.133						
LDNO HV: Small Non Domestic Unrestricted	3	1.104			1.83			
LDNO HV: Small Non Domestic Two Rate	4	1.186	0.087		1.83			
LDNO HV: Small Non Domestic Off Peak (related MPAN)	4	0.100						
LDNO HV: LV Medium Non-Domestic	5-8	1.257	0.084		9.02			
LDNO HV: LV HH Metered	0	5.028	0.368	0.063	7.05	0.95	0.270	0.95
LDNO HV: LV Sub HH Metered	0	6.602	0.371	0.074	3.85	3.05	0.317	3.05
LDNO HV: HV HH Metered	0	5.665	0.255	0.058	65.04	2.61	0.248	2.61
LDNO HV: NHH UMS	1&8	0.963						
LDNO HV: LV UMS (Pseudo HH Metered)	0	6.349	0.645	0.212				
LDNO HV: LV Generation NHH	8	(1.153)						
LDNO HV: LV Sub Generation NHH	8	(1.030)						
LDNO HV: LV Generation Intermittent	0	(1.153)					0.433	
LDNO HV: LV Generation Non-Intermittent	0	(8.529)	(0.844)	(0.125)			0.433	
LDNO HV: LV Sub Generation Intermittent	0	(1.030)					0.403	
LDNO HV: LV Sub Generation Non-Intermittent	0	(7.729)	(0.729)	(0.110)			0.403	
LDNO HV: HV Generation Intermittent	0	(0.664)					0.307	
LDNO HV: HV Generation Non-Intermittent	0	(5.514)	(0.356)	(0.065)			0.307	
LDNO HVplus: Domestic Unrestricted	1	0.957			1.12			
LDNO HVplus: Domestic Two Rate	2	1.195	0.114		1.12			
LDNO HVplus: Domestic Off Peak (related MPAN)	2	0.103						
LDNO HVplus: Small Non Domestic Unrestricted	3	0.859			1.43			
LDNO HVplus: Small Non Domestic Two Rate	4	0.923	0.068		1.43			
LDNO HVplus: Small Non Domestic Off Peak (related MPAN)	4	0.078						
LDNO HVplus: LV Medium Non-Domestic	5-8	0.979	0.065		7.02			
LDNO HVplus: LV Sub Medium Non-Domestic		1.336	0.088		13.96			
LDNO HVplus: HV Medium Non-Domestic		1.001	0.058		199.51			
LDNO HVplus: LV HH Metered	0	3.914	0.287	0.049	5.49	0.74	0.210	0.74
LDNO HVplus: LV Sub HH Metered	0	5.139	0.289	0.057	2.99	2.38	0.247	2.38
LDNO HVplus: HV HH Metered	0	4.409	0.198	0.045	50.62	2.03	0.193	2.03
LDNO HVplus: NHH UMS	1&8	0.749						

LDNO HVplus: LV UMS (Pseudo HH Metered)	0	4.942	0.502	0.165				
LDNO HVplus: LV Generation NHH	8	(0.564)						
LDNO HVplus: LV Sub Generation NHH	8	(0.562)						
LDNO HVplus: LV Generation Intermittent	0	(0.564)					0.212	
LDNO HVplus: LV Generation Non-Intermittent	0	(4.172)	(0.413)	(0.061)			0.212	
LDNO HVplus: LV Sub Generation Intermittent	0	(0.562)					0.220	
LDNO HVplus: LV Sub Generation Non-Intermittent	0	(4.220)	(0.398)	(0.060)			0.220	
LDNO HVplus: HV Generation Intermittent	0	(0.664)			67.71		0.307	
LDNO HVplus: HV Generation Non-Intermittent	0	(5.514)	(0.356)	(0.065)	67.71		0.307	
LDNO EHV: Domestic Unrestricted	1	0.691			0.81			
LDNO EHV: Domestic Two Rate	2	0.863	0.083		0.81			
LDNO EHV: Domestic Off Peak (related MPAN)	2	0.075						
LDNO EHV: Small Non Domestic Unrestricted	3	0.621			1.03			
LDNO EHV: Small Non Domestic Two Rate	4	0.667	0.049		1.03			
LDNO EHV: Small Non Domestic Off Peak (related MPAN)	4	0.056						
LDNO EHV: LV Medium Non-Domestic	5-8	0.707	0.047		5.07			
LDNO EHV: LV Sub Medium Non-Domestic		0.965	0.063		10.08			
LDNO EHV: HV Medium Non-Domestic		0.723	0.042		144.11			
LDNO EHV: LV HH Metered	0	2.827	0.207	0.035	3.96	0.53	0.152	0.53
LDNO EHV: LV Sub HH Metered	0	3.712	0.209	0.041	2.16	1.72	0.178	1.72
LDNO EHV: HV HH Metered	0	3.185	0.143	0.032	36.57	1.47	0.139	1.47
LDNO EHV: NHH UMS	1&8	0.541						
LDNO EHV: LV UMS (Pseudo HH Metered)	0	3.570	0.362	0.119				
LDNO EHV: LV Generation NHH	8	(0.407)						
LDNO EHV: LV Sub Generation NHH	8	(0.406)						
LDNO EHV: LV Generation Intermittent	0	(0.407)					0.153	
LDNO EHV: LV Generation Non-Intermittent	0	(3.014)	(0.298)	(0.044)			0.153	
LDNO EHV: LV Sub Generation Intermittent	0	(0.406)					0.159	
LDNO EHV: LV Sub Generation Non-Intermittent	0	(3.048)	(0.288)	(0.043)			0.159	
LDNO EHV: HV Generation Intermittent	0	(0.480)			48.91		0.222	
LDNO EHV: HV Generation Non-Intermittent	0	(3.983)	(0.257)	(0.047)	48.91		0.222	
LDNO 132kV/EHV: Domestic Unrestricted	1	0.509			0.60			
LDNO 132kV/EHV: Domestic Two Rate	2	0.636	0.061		0.60			
LDNO 132kV/EHV: Domestic Off Peak (related MPAN)	2	0.055						
LDNO 132kV/EHV: Small Non Domestic Unrestricted	3	0.457			0.76			
LDNO 132kV/EHV: Small Non Domestic Two Rate	4	0.491	0.036		0.76			
LDNO 132kV/EHV: Small Non Domestic Off Peak (related MPAN)	4	0.041						
LDNO 132kV/EHV: LV Medium Non-Domestic	5-8	0.521	0.035		3.73			
LDNO 132kV/EHV: LV Sub Medium Non-Domestic		0.711	0.047		7.42			
LDNO 132kV/EHV: HV Medium Non-Domestic		0.533	0.031		106.12			
LDNO 132kV/EHV: LV HH Metered	0	2.082	0.153	0.026	2.92	0.39	0.112	0.39
LDNO 132kV/EHV: LV Sub HH Metered	0	2.734	0.154	0.030	1.59	1.26	0.131	1.26
LDNO 132kV/EHV: HV HH Metered	0	2.345	0.105	0.024	26.93	1.08	0.103	1.08
LDNO 132kV/EHV: NHH UMS	1&8	0.399						
LDNO 132kV/EHV: LV UMS (Pseudo HH Metered)	0	2.629	0.267	0.088				
LDNO 132kV/EHV: LV Generation NHH	8	(0.300)						
LDNO 132kV/EHV: LV Sub Generation NHH	8	(0.299)						
LDNO 132kV/EHV: LV Generation Intermittent	0	(0.300)					0.113	
LDNO 132kV/EHV: LV Generation Non-Intermittent	0	(2.219)	(0.220)	(0.033)			0.113	
LDNO 132kV/EHV: LV Sub Generation Intermittent	0	(0.299)					0.117	
LDNO 132kV/EHV: LV Sub Generation Non-Intermittent	0	(2.245)	(0.212)	(0.032)			0.117	
LDNO 132kV/EHV: HV Generation Intermittent	0	(0.353)			36.01		0.163	
LDNO 132kV/EHV: HV Generation Non-Intermittent	0	(2.933)	(0.189)	(0.035)	36.01		0.163	
LDNO 132kV: Domestic Unrestricted	1	0.232			0.27			
LDNO 132kV: Domestic Two Rate	2	0.290	0.028		0.27			

LDNO 132kV: Domestic Off Peak (related MPAN)	2	0.025						
LDNO 132kV: Small Non Domestic Unrestricted	3	0.209			0.35			
LDNO 132kV: Small Non Domestic Two Rate	4	0.224	0.016		0.35			
LDNO 132kV: Small Non Domestic Off Peak (related MPAN)	4	0.019						
LDNO 132kV: LV Medium Non-Domestic	5-8	0.238	0.016		1.70			
LDNO 132kV: LV Sub Medium Non-Domestic		0.324	0.021		3.39			
LDNO 132kV: HV Medium Non-Domestic		0.243	0.014		48.45			
LDNO 132kV: LV HH Metered	0	0.951	0.070	0.012	1.33	0.18	0.051	0.18
LDNO 132kV: LV Sub HH Metered	0	1.248	0.070	0.014	0.73	0.58	0.060	0.58
LDNO 132kV: HV HH Metered	0	1.071	0.048	0.011	12.29	0.49	0.047	0.49
LDNO 132kV: NHH UMS	1&8	0.182						
LDNO 132kV: LV UMS (Pseudo HH Metered)	0	1.200	0.122	0.040				
LDNO 132kV: LV Generation NHH	8	(0.137)						
LDNO 132kV: LV Sub Generation NHH	8	(0.137)						
LDNO 132kV: LV Generation Intermittent	0	(0.137)					0.051	
LDNO 132kV: LV Generation Non-Intermittent	0	(1.013)	(0.100)	(0.015)			0.051	
LDNO 132kV: LV Sub Generation Intermittent	0	(0.137)					0.053	
LDNO 132kV: LV Sub Generation Non-Intermittent	0	(1.025)	(0.097)	(0.015)			0.053	
LDNO 132kV: HV Generation Intermittent	0	(0.161)			16.44		0.075	
LDNO 132kV: HV Generation Non-Intermittent	0	(1.339)	(0.086)	(0.016)	16.44		0.075	
LDNO 0000: Domestic Unrestricted	1	-			-			
LDNO 0000: Domestic Two Rate	2	-			-			
LDNO 0000: Domestic Off Peak (related MPAN)	2	-			-			
LDNO 0000: Small Non Domestic Unrestricted	3	-			-			
LDNO 0000: Small Non Domestic Two Rate	4	-			-			
LDNO 0000: Small Non Domestic Off Peak (related MPAN)	4	-			-			
LDNO 0000: LV Medium Non-Domestic	5-8	-			-			
LDNO 0000: LV Sub Medium Non-Domestic		-			-			
LDNO 0000: HV Medium Non-Domestic		-			-			
LDNO 0000: LV HH Metered	0	-	-	-	-	-	-	-
LDNO 0000: LV Sub HH Metered	0	-	-	-	-	-	-	-
LDNO 0000: HV HH Metered	0	-	-	-	-	-	-	-
LDNO 0000: NHH UMS	1&8	-						
LDNO 0000: LV UMS (Pseudo HH Metered)	0	-	-	-				
LDNO 0000: LV Generation NHH	8	-			-			
LDNO 0000: LV Sub Generation NHH	8	-			-			
LDNO 0000: LV Generation Intermittent	0	-			-		-	
LDNO 0000: LV Generation Non-Intermittent	0	-			-		-	
LDNO 0000: LV Sub Generation Intermittent	0	-			-		-	
LDNO 0000: LV Sub Generation Non-Intermittent	0	-			-		-	
LDNO 0000: HV Generation Intermittent	0	-			-		-	
LDNO 0000: HV Generation Non-Intermittent	0	-			-		-	

Annex 5 – Schedule of Line Loss Factors

SP Manweb plc - Effective from April 2012 - INDICATIVE LLF Time Periods					
Time periods	Period 1	Period 2	Period 3	Period 4	
Monday to Friday Apr - Oct and Mar	23:30 – 07:30	07:30 – 23:30			
Monday to Friday Nov to Feb	23:30 – 07:30	20:00 – 23:30	07:30 – 16:00 19:00 – 20:00	16:00 – 19:00	
Saturday and Sunday All Year	23:30 – 07:30	07:30 – 23:30			
Notes	All the above times are in UK Clock time				
Generic Demand and Generation LLFs					
Metered voltage, respective periods and associated LLFCs					
Metered Voltage	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Low Voltage Network	1.091	1.112	1.128	1.151	101, 102, 103, 104, 105, 106, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 130, 131, 132, 133, 134, 135, 136, 137, 138, 140, 141, 142, 143, 145, 146, 147, 148, 149, 150, 153, 155, 201, 202, 203, 205, 211, 212, 231, 232, 233, 234, 235, 236, 237, 401, 402, 501, 511, 591, 781, 782, 783, 784, 785, 786, 787, 791, 795, 900, 901, 902, 903, 904, 905, 906, 907, 910, 912, 913
Low Voltage Substation	1.057	1.062	1.068	1.075	207, 208, 209, 210, 403, 404, 503, 513, 592, 780, 788, 789, 792, 796
High Voltage Network	1.033	1.040	1.046	1.051	405, 505, 515, 593, 770, 771, 793, 797
High Voltage Substation	1.025	1.028	1.031	1.034	300 TO 399 INCLUSIVE, 450 TO 484 INCLUSIVE, 772, 773, 794, 798
33kV Generic (demand)	1.012	1.013	1.014	1.015	
33kV Generic (generation)	1.017	1.019	1.022	1.024	
132kV Generic (demand)	1.004	1.005	1.006	1.007	
132kV Generic (generation)	1.000	1.000	1.000	1.000	

EHV Site Specific LLFs					
Demand					
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Shell Stanlow	1.039	1.041	1.041	1.041	803
Ford Motor Company	1.068	1.073	1.074	1.081	804
Associated Octel	1.039	1.041	1.041	1.046	805
Bridgewater Paper	1.051	1.050	1.058	1.050	806
Vauxhall Motors	1.026	1.028	1.027	1.031	807
Corus Colors	1.010	1.018	1.016	1.020	808
Urenco	1.028	1.028	1.028	1.030	809
Ineos Chlor Ltd (Lostock)	1.022	1.062	1.057	1.055	810
Knauf Insulation	1.053	1.063	1.062	1.067	812
Air Products	1.041	1.043	1.043	1.046	813
Shell Chemicals	1.039	1.042	1.040	1.044	814
GrowHow	1.043	1.045	1.044	1.048	815
Castle Cement	1.019	1.026	1.021	1.033	816
Kronospan	1.037	1.053	1.083	1.072	817
Royal Ordnance	1.052	1.065	1.068	1.078	818
Albion Inorganic	1.042	1.070	1.064	1.089	819
BHP	1.033	1.056	1.050	1.065	821
Hole House Farm	1.017	1.019	1.022	1.024	822
Port of Liverpool	1.034	1.040	1.039	1.027	824
Kimberley Clark	1.046	1.087	1.062	1.082	827
Amegni	1.011	1.026	1.017	1.047	828
Salt Union	1.060	1.067	1.065	1.069	829
Ineos Chlor Ltd (Percival Lane)	1.065	1.066	1.064	1.071	831
Toyota	1.019	1.070	1.069	1.076	833
Warmingham Gas Storage	1.054	1.074	1.073	1.086	834
Arpley Landfill	1.000	1.051	1.036	1.000	835
Amcor	1.021	1.030	1.025	1.038	836
Cemmaes C	1.043	1.051	1.100	1.089	838
PG Strand Gate	1.030	1.041	1.037	1.037	839
Moel Maelogan (A)	1.015	1.015	1.017	1.023	840
Moel Maelogan (B)	1.015	1.015	1.017	1.023	841
North Hoyle	1.019	1.037	1.031	1.048	842
Cefn Croyes (3)	1.068	1.064	1.066	1.083	843
Cefn Croyes (4)	1.068	1.064	1.066	1.083	844
Tir Mostyn	1.024	1.056	1.053	1.057	845
Mynydd Clogau	1.006	1.038	1.031	1.051	846
Granox	1.012	1.021	1.018	1.026	847
Braich Ddu	1.017	1.007	1.078	1.013	849
Stublach	1.018	1.029	1.021	1.043	850
Moel Maelogan 2	1.015	1.015	1.017	1.023	851
MDHC	1.065	1.068	1.067	1.073	852
Wern Ddu	1.017	1.019	1.022	1.024	854
Rhyl Flats	1.009	1.009	1.008	1.017	856
Cemmaes B	1.043	1.051	1.100	1.089	865
Penrhyddlan	1.020	1.051	1.055	1.082	866

Llidartywaun	1.008	1.038	1.046	1.067	867
Rhyd y Groes	1.010	1.007	1.013	1.011	868
Llangwyrfon	1.024	1.038	1.029	1.059	869
Storenergy (Lostock)	1.004	1.005	1.006	1.007	870
Rheidol	1.003	1.007	1.009	1.023	871
Carno B	1.011	1.026	1.017	1.047	872
Carno A	1.011	1.026	1.017	1.047	873
Trysglwyn	1.011	1.020	1.028	1.053	874
Llanabo	1.010	1.011	1.014	1.018	875
Quinn Glass	1.040	1.042	1.042	1.046	877
Liverpool International Business Park	1.065	1.069	1.068	1.076	878
Mynydd Gorduu	1.037	1.056	1.012	1.083	887
PG Winnington	1.067	1.065	1.059	1.000	898
Network Rail (Crewe)	1.039	1.049	1.051	1.058	921
Network Rail (Speke)	1.079	1.073	1.072	1.077	922
Network Rail (Bankhall)	1.065	1.070	1.069	1.076	923
Network Rail (Bromborough)	1.042	1.047	1.045	1.053	924
Network Rail (Shore Road)	1.039	1.043	1.042	1.047	925
Shotton Paper	1.000	0.999	1.000	0.999	
Burbo Bank	0.998	1.000	0.999	1.000	
Risley	1.029	1.039	1.038	1.034	
Bold	1.042	1.050	1.061	1.124	
Dolgarrog PS	0.984	0.929	0.986	0.991	
Rheidol PS	0.989	0.990	0.987	0.985	
Maentwrog PS	0.925	0.930	0.972	0.959	

EHV Site Specific LLFs					
Generation					
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Shell Stanlow	1.025	1.030	1.030	1.032	603
Port of Liverpool	1.003	1.005	1.003	1.006	604
Bridgewater Paper	1.003	1.003	1.011	1.013	606
Moel Maelogan 2	0.962	0.966	0.969	0.975	611
Albion Inorganic	1.022	1.034	1.041	1.017	619
BHP	1.021	1.041	1.036	1.057	621
Amegni	0.993	1.005	0.997	1.018	628
Salt Union	1.031	1.033	1.032	0.981	629
Arpley Landfill	1.004	1.034	1.031	1.022	635
Cemmaes C	0.961	0.955	0.970	0.960	638
PG Strand Gate	0.989	0.996	0.994	1.001	639
Moel Maelogan A	0.962	0.966	0.969	0.975	640
Moel Maelogan B	0.962	0.966	0.969	0.975	641
North Hoyle	0.984	0.999	0.991	1.004	642
Cefn Croes 3	1.046	1.057	1.058	1.069	643
Cefn Croes 4	1.037	1.048	1.046	1.057	644
Tir Mostyn	0.978	0.998	0.984	1.001	645
Mynydd Clogau	1.002	1.017	1.022	1.028	646
Granox	1.009	1.018	1.016	1.024	647
Braich Ddu	0.967	0.990	0.999	0.930	649
Wern Ddu	1.012	1.013	1.014	1.015	654
Rhyl Flats	0.985	0.996	0.984	0.971	656
Cemmaes B	0.961	0.955	0.970	0.960	665
Penrhyddlan	0.992	0.986	0.949	0.963	666
Llidartywaun	0.972	0.984	0.962	0.980	667
Rhyd y Groes	0.983	0.983	0.983	0.986	668
Llangwyrfon	0.990	1.000	1.013	1.029	669
Rheidol	1.018	1.031	1.034	1.049	671
Carno B	0.993	1.005	0.997	1.018	672
Carno A	0.993	1.005	0.997	1.018	673
Trysglwyn	0.999	0.999	0.997	0.992	674
Llanabo	0.987	0.982	0.985	0.988	675
Mynydd Gorddu	1.023	1.045	1.049	1.065	687
Network Rail (Crewe)	1.000	1.000	1.000	1.000	691
Network Rail (Speke)	1.000	1.000	1.000	1.000	682
PG Winnington	0.993	1.007	1.003	1.016	698
Shotton Paper	1.000	0.999	1.000	0.999	
Burbo Bank	0.998	1.000	0.999	1.000	

Annex 6 - Un-scaled network group costs

Please see excel file for Annex 6.