

**SP Distribution**

**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.

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## 1. Introduction

- 1.1. This statement has been prepared in order to discharge SP Distribution's 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 SP Distribution'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  
New Alderston House  
Dove Wynd  
Strathclyde Business Park, Bellshill  
ML4 3FF  
Email : commercial@scottishpower.com  
Telephone 0141 614 1787
- 1.5. All enquiries regarding Changes to Maximum Capacities should be addressed to:

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

SP Energy Networks, Energy Income

New Aldertson House

Dove Wynd

Strathclyde Business Park

Bellshill

ML4 3FF

Email : [capacityq@scottishpower.com](mailto: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 Distribution 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 Distribution 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 Distribution. 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 website<sup>2</sup>.
- 2.11. The Domestic Off-Peak and Small Non-Domestic Off-Peak charges are supplementary to either an Unrestricted or a Two Rate charge.

#### **Site-Specific Billing and Payment**

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

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<sup>2</sup> <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 Distribution deems to be suitable as Unmetered Supplies as permitted in the Electricity (Unmetered Supply) Regulations 2001<sup>3</sup> and where operated in accordance with BSCP520<sup>4</sup>.
- 2.25. The time periods for the application of unit charges to connections which are pseudo HH metered are the same as those in paragraph 2.20.

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

- 2.26. SP Distribution 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 Distribution 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 Distribution 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**

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

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

<sup>4</sup> 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

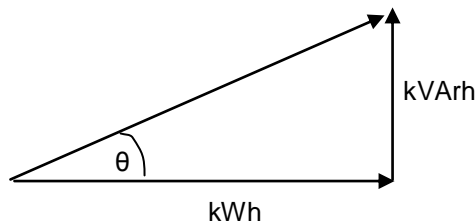
2.36. There is no minimum capacity threshold.

### 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

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

Where:

AI = Active Import in kWh

RI = Reactive Import in kVArh

RE = Reactive Export in kVArh

2.40. This calculation is completed for every half hour and the values summated over the billing period.

2.41. Only kVArh Import and kVArh Export values occurring at times of kWh Import are used.

2.42. The square root calculation will be to two decimal places.

## Generation Chargeable Reactive Power

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

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 Distribution 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 Distribution 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 Distribution). The data shall be e-mailed to [mailto:uos\\_administrators2@scottishpower.com](mailto:uos_administrators2@scottishpower.com)
- 2.47. SP Distribution 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 Distribution 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 Distribution 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 Distribution 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 Distribution 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 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 (<http://www.elexon.co.uk/pages/losses.aspx>) contains more information on LLFs. This page also has links to BSCP 128 and to our LLF methodology.

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

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

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<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, <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 Distribution.
- 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 Distribution) 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 Distribution Limited  
Dove Wynd  
Strathclyde Business Park  
Bellshill  
ML4 3FF  
Email: [commercial@sppowersystem.com](mailto:commercial@sppowersystem.com)  
Telephone: 0141 614 0008  
Fax: 0141 614 1663

## **6. Electricity Distribution Rebates**

- 6.1. SP Distribution 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 " <a href="http://www.elexon.co.uk/ELEXON/Documents/trading_arrangements.pdf">www.elexon.co.uk/ELEXON Documents/trading_arrangements.pdf</a> ".
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.

<b>Term</b>	<b>Definition</b>
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"> <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> <li>• any transmission licensee in its capacity as operator of that licensee's transmission system or the GB transmission system;</li> <li>• and includes any remote transmission assets (owned by a transmission licensee within England and Wales) that are operated by that authorised distributor and any electrical plant, 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.

<b>Term</b>	<b>Definition</b>
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. <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.

<b>Term</b>	<b>Definition</b>
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.

<b>Term</b>	<b>Definition</b>
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 Distribution Ltd - 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/kVAh	Excess Capacity charge (p/kVA)	Closed LLFCs
Domestic Unrestricted	100, 101, 110, 111, 160, 161	1	2.323			4.45				
Domestic Two Rate	114, 115, 118, 119, 120, 121, 162, 163	2	3.041	0.352		4.45				
Domestic Off Peak (related MPAN)	112, 113, 116, 117, 132, 133, 136, 137, 164, 165, 166	2	0.234			.				130, 134, 135
Small Non Domestic Unrestricted	201, 204	3	2.088			5.64				200, 202, 203, 205
Small Non Domestic Two Rate	221, 224, 260	4	2.775	0.401		5.64				220, 222
Small Non Domestic Off Peak (related MPAN)	225, 240, 241, 301, 302	4	0.795			.				223, 242, 243, 244, 245, 246
LV Medium Non-Domestic	400, 402	5-8	1.534	0.222		28.96				
LV Sub Medium Non-Domestic	404	5-8	1.372	0.186		.				
HV Medium Non-Domestic										401
LV HH Metered	500, 504	0	8.601	0.788	0.157	21.73	2.24	0.248	2.24	
LV Sub HH Metered	506, 507	0	5.731	0.416	0.056	7.67	4.17	0.191	4.17	
HV HH Metered	501, 505	0	5.601	0.407	0.054	116.11	4.53	0.140	4.53	
HV Sub HH Metered		0								508, 509
NHH UMS	900, 901, 902, 903, 904, 905, 906, 907, 908, 909	1&8	1.998							
LV UMS (Pseudo HH Metered)	910	0	14.712	1.885	0.739					
LV Generation NHH	781, 782, 783, 784, 785	8	( 0.671)							
LV Sub Generation NHH	602	8	( 0.589)							
LV Generation Intermittent	603, 608	0	( 0.671)					0.138		
LV Generation Non-Intermittent	604, 607	0	( 4.383)	( 0.535)	( 0.140)			0.138		
LV Sub Generation Intermittent	609	0	( 0.589)					0.124		
LV Sub Generation Non-Intermittent	610	0	( 3.955)	( 0.455)	( 0.114)			0.124		
HV Generation Intermittent	611, 612	0	( 0.339)			84.79		0.101		
HV Generation Non-Intermittent	605, 606	0	( 2.770)	( 0.201)	( 0.027)	84.79		0.101		
HV Sub Generation Non-Intermittent	614	0	( 2.283)	( 0.166)	( 0.022)	84.79		0.053		
HV Sub Generation Intermittent	613	0	( 0.279)			84.79		0.053		



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

SP Distribution Ltd - 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)	Unique Identifier
801	Minsca		413.29				
808	Garlaff Landfill		57.22	0.62	0.62		
809	Hagshaw Hill Extension		532.06	1.59	1.59		
811	Muirhall		253.00	1.87	1.87		
812	Burnfoot		1,461.78	0.62	0.62		
820	Craigengelt		111.94	1.37	1.37		
821	Greenknowes		460.33	0.72	0.72		
825	Aikengall		1,171.25				
826	Hagshaw Hill		41.36	2.83	2.83		
827	Gallow Rig		144.23	1.86	1.86		
828	Polwhat Rig		171.55	1.85	1.85		
829	Greendykeside		39.36	1.94	1.94		
830	Dun Law		35.96	1.91	1.91		
831	EPR Chicken Litter		54.35	1.96	1.96		
832	Bowbeat (Emly Bank)		37.00	2.21	2.21		
833	Bowbeat (Roughsidehill)		24.58	2.23	2.23		
834	Harehill		24.50	1.88	1.88		
835	Shanks & McEwan 3&4		121.47	1.84	1.84		
836	Shanks & McEwan 5		5.39	2.28	2.28		
836	Shanks & McEwan 6		15.59	1.84	1.84		
837	Crystal Rig		125.71	0.62	0.62		
838	Hauptland Muir (Ardrossan)		7.52	0.74	0.74		
839	Wetherhill		1,059.68				
840	Artfield		3,726.24				
841	Wardlaw Wood		86.74	1.92	1.92		
842	Earlsburn		698.38				
843	Blackhill		1,475.37				
844	Dalswinton		482.95	0.66	0.66		
845	Steven's Croft Biomass		4,708.88	0.72	0.72		
850	Longpark		677.85				
851	BOC		5,538.68	1.56	1.56		
853	Babcock Thom		6,212.64	1.97	1.97	13,950.35	
854	Blue Circle		2,857.44	2.72	2.72	10,139.60	
855	Pateshill		33.06	1.89	1.89		
856	Clydeport		10,014.21	1.30	1.30	15,004.41	
857	Freescale		7,910.63	1.97	1.97		
858	Tesco		667.02	1.35	1.35		
859	GlaxoSmithKline		7,817.18	1.64	1.64	21,930.02	
861	Weir Pumps		1,262.33	5.00	5.00		
862	Dupont		14,233.18	2.12	2.12	61,564.11	
863	North Rhins		219.37	4.89	4.89		
866	Avecia		14,765.58	9.76	9.76		
867	Norbord	1.876	7,302.98	0.84	0.84		

873	Millour Hill		165.00	0.70	0.70		
874	Glenkerie		495.34	2.83	2.83		
875	Kelburn (A)		137.54	1.89	1.89		
876	Kelburn (B)		137.54	1.89	1.89		
878	Drone Hill		369.55	0.74	0.74		
879	Roths Biomass (A)		3,477.79	0.72	0.72		
	Roths Biomass (B)		3,477.79	0.72	0.72		
	Dumbarton		68.43	3.07	3.07		
	Stirling Road		68.43	1.51	1.51		
310	Magco		611.57	5.93	5.93		
311	Stirling University	0.844	611.57	6.35	6.35		
312	Glenochil Distillery		611.57	5.07	5.07		
313	Longannet Power Station		611.57	11.94	11.94		
314	Cameron Ironworks	0.173	611.57	4.40	4.40		
315	Shin-Etsu		15,565.12	2.03	2.03		
316	United Biscuits		611.57	5.34	5.34		
317	NCB Wellesley		10,684.68	2.08	2.08		
318	Balfours		611.57	1.18	1.18		
319	NB Distillery		611.57	2.23	2.23		
320	Finnart BP		16,945.07	1.47	1.47		
321	National Semiconductor		1,223.14	5.92	5.92		
322	Glasgow Airport		611.57	6.63	6.63		
323	BP Dalmeny		12,094.97	0.86	0.86		
324	Edinburgh Dock North		611.57	1.65	1.65		
325	IBM		611.57	2.93	2.93		
326	Bonnington Power Station	1.866	5.51	3.57	3.57		
327	SGB Lurgie		5,693.10	1.36	1.36		

**SP Distribution Ltd - 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
620	Craigengelt	23,378.71	0.69	0.69	0.13	
621	Greenknowes	42,364.71	0.69	0.69	0.13	
624	Greendykeside	4,232.57	0.69	0.69	0.13	
625	Aikengall	42,231.02	0.69	0.69	0.13	
629	Hagshaw Hill Extension	20,771.40	0.69	0.69	0.13	
638	Hauptland Muir (Ardrossan)	1,266.13	0.69	0.69	0.13	
643	Blackhill	25,788.30	0.58	0.58	0.13	
650	Longpark	23,286.30	0.58	0.58	0.13	
655	Pateshill	1,428.96	0.69	0.69	0.13	
663	North Rhins	10,170.26	0.91	0.91	0.13	
671	Muirhall	9,393.44	0.69	0.69	0.13	
672	Burnfoot	7,676.32	0.69	0.69	0.13	
673	Millour Hill	19,780.84	0.69	0.69	0.13	
674	Glenkerie	29,722.47	0.69	0.69	0.13	
675	Kelburn (A)	10,026.87	0.69	0.69	0.13	
676	Kelburn (B)	10,026.87	0.69	0.69	0.13	

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

SP Distribution Ltd - 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	Capacity charge p/kVA/day	Reactive power charge p/kVArh	Excess Capacity charge (p/kVA)
Domestic Off-Peak (Related MPAN)	130, 134, 135	2	0.234			.			
Small Non-Domestic Unrestricted	200, 202, 203, 205	3	2.088			5.64			
Small Non-Domestic Two Rate	220, 222	4	2.775	0.401		5.64			
Small Non-Domestic Off peak (related MPAN)	223, 242, 243, 244, 245, 246	4	0.795			.			
HV Medium Non-Domestic	401	5-8	0.904	0.075		330.70			
Notes:	<p>Unit time periods are as specified in the SSC.</p> <p>SP Distribution 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)
HV Sub HH Metered	508, 509	0	3.642	0.265	0.035	250.16	5.16	0.098	5.16
Notes:	<p><b>Time Periods</b></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>								

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

SP Distribution Ltd - 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	1.544			2.96			
LDNO LV: Domestic Two Rate	2	2.022	0.234		2.96			
LDNO LV: Domestic Off Peak (related MPAN)	2	0.156						
LDNO LV: Small Non Domestic Unrestricted	3	1.388			3.75			
LDNO LV: Small Non Domestic Two Rate	4	1.845	0.267		3.75			
LDNO LV: Small Non Domestic Off Peak (related MPAN)	4	0.529						
LDNO LV: LV Medium Non-Domestic	5-8	1.020	0.148		19.25			
LDNO LV: LV HH Metered	0	5.718	0.524	0.104	14.45	1.49	0.165	1.49
LDNO LV: NHH UMS	1&8	1.328						
LDNO LV: LV UMS (Pseudo HH Metered)	0	9.781	1.253	0.491				
LDNO LV: LV Generation NHH	8	( 0.671)						
LDNO LV: LV Generation Intermittent	0	( 0.671)					0.138	
LDNO LV: LV Generation Non-Intermittent	0	( 4.383)	( 0.535)	( 0.140)			0.138	
LDNO HV: Domestic Unrestricted	1	0.797			1.53			
LDNO HV: Domestic Two Rate	2	1.043	0.121		1.53			
LDNO HV: Domestic Off Peak (related MPAN)	2	0.080						
LDNO HV: Small Non Domestic Unrestricted	3	0.716			1.93			
LDNO HV: Small Non Domestic Two Rate	4	0.952	0.138		1.93			
LDNO HV: Small Non Domestic Off Peak (related MPAN)	4	0.273						
LDNO HV: LV Medium Non-Domestic	5-8	0.526	0.076		9.93			
LDNO HV: LV HH Metered	0	2.949	0.270	0.054	7.45	0.77	0.085	0.77
LDNO HV: LV Sub HH Metered	0	3.109	0.226	0.030	4.16	2.26	0.104	2.26
LDNO HV: HV HH Metered	0	3.448	0.251	0.033	71.48	2.79	0.086	2.79
LDNO HV: NHH UMS	1&8	0.685						
LDNO HV: LV UMS (Pseudo HH Metered)	0	5.045	0.646	0.253				
LDNO HV: LV Generation NHH	8	( 0.671)						
LDNO HV: LV Sub Generation NHH	8	( 0.589)						
LDNO HV: LV Generation Intermittent	0	( 0.671)					0.138	
LDNO HV: LV Generation Non-Intermittent	0	( 4.383)	( 0.535)	( 0.140)			0.138	
LDNO HV: LV Sub Generation Intermittent	0	( 0.589)					0.124	
LDNO HV: LV Sub Generation Non-Intermittent	0	( 3.955)	( 0.455)	( 0.114)			0.124	
LDNO HV: HV Generation Intermittent	0	( 0.339)					0.101	
LDNO HV: HV Generation Non-Intermittent	0	( 2.770)	( 0.201)	( 0.027)			0.101	
LDNO HVplus: Domestic Unrestricted	1	0.559			1.07			
LDNO HVplus: Domestic Two Rate	2	0.731	0.085		1.07			
LDNO HVplus: Domestic Off Peak (related MPAN)	2	0.056						
LDNO HVplus: Small Non Domestic Unrestricted	3	0.502			1.36			
LDNO HVplus: Small Non Domestic Two Rate	4	0.667	0.096		1.36			
LDNO HVplus: Small Non Domestic Off Peak (related MPAN)	4	0.191						
LDNO HVplus: LV Medium Non-Domestic	5-8	0.369	0.053		6.96			
LDNO HVplus: LV Sub Medium Non-Domestic		0.522	0.071					
LDNO HVplus: HV Medium Non-Domestic		0.390	0.032		142.77			
LDNO HVplus: LV HH Metered	0	2.068	0.189	0.038	5.23	0.54	0.060	0.54
LDNO HVplus: LV Sub HH Metered	0	2.180	0.158	0.021	2.92	1.59	0.073	1.59
LDNO HVplus: HV HH Metered	0	2.418	0.176	0.023	50.13	1.96	0.060	1.96
LDNO HVplus: NHH UMS	1&8	0.480						

LDNO HVplus: LV UMS (Pseudo HH Metered)	0	3.538	0.453	0.178				
LDNO HVplus: LV Generation NHH	8	( 0.255)						
LDNO HVplus: LV Sub Generation NHH	8	( 0.254)						
LDNO HVplus: LV Generation Intermittent	0	( 0.255)					0.052	
LDNO HVplus: LV Generation Non-Intermittent	0	( 1.667)	( 0.204)	( 0.053)			0.052	
LDNO HVplus: LV Sub Generation Intermittent	0	( 0.254)					0.054	
LDNO HVplus: LV Sub Generation Non-Intermittent	0	( 1.707)	( 0.196)	( 0.049)			0.054	
LDNO HVplus: HV Generation Intermittent	0	( 0.339)			84.79		0.101	
LDNO HVplus: HV Generation Non-Intermittent	0	( 2.770)	( 0.201)	( 0.027)	84.79		0.101	
LDNO EHV: Domestic Unrestricted	1	0.257			0.49			
LDNO EHV: Domestic Two Rate	2	0.337	0.039		0.49			
LDNO EHV: Domestic Off Peak (related MPAN)	2	0.026						
LDNO EHV: Small Non Domestic Unrestricted	3	0.231			0.62			
LDNO EHV: Small Non Domestic Two Rate	4	0.307	0.044		0.62			
LDNO EHV: Small Non Domestic Off Peak (related MPAN)	4	0.088						
LDNO EHV: LV Medium Non-Domestic	5-8	0.170	0.025		3.21			
LDNO EHV: LV Sub Medium Non-Domestic		0.240	0.033					
LDNO EHV: HV Medium Non-Domestic		0.180	0.015		65.77			
LDNO EHV: LV HH Metered	0	0.953	0.087	0.017	2.41	0.25	0.027	0.25
LDNO EHV: LV Sub HH Metered	0	1.004	0.073	0.010	1.34	0.73	0.033	0.73
LDNO EHV: HV HH Metered	0	1.114	0.081	0.011	23.09	0.90	0.028	0.90
LDNO EHV: NHH UMS	1&8	0.221						
LDNO EHV: LV UMS (Pseudo HH Metered)	0	1.630	0.209	0.082				
LDNO EHV: LV Generation NHH	8	( 0.118)						
LDNO EHV: LV Sub Generation NHH	8	( 0.117)						
LDNO EHV: LV Generation Intermittent	0	( 0.118)					0.024	
LDNO EHV: LV Generation Non-Intermittent	0	( 0.768)	( 0.094)	( 0.025)			0.024	
LDNO EHV: LV Sub Generation Intermittent	0	( 0.117)					0.025	
LDNO EHV: LV Sub Generation Non-Intermittent	0	( 0.787)	( 0.090)	( 0.023)			0.025	
LDNO EHV: HV Generation Intermittent	0	( 0.156)			39.06		0.047	
LDNO EHV: HV Generation Non-Intermittent	0	( 1.276)	( 0.093)	( 0.012)	39.06		0.047	
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 Distribution Ltd - Effective from April 2012 - INDICATIVE LLF Time Periods					
Time periods	Period 1	Period 2	Period 3	Period 4	
Monday to Friday April - 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				
<b>Generic Demand and Generation LLFs</b>					
<b>Metered voltage, respective periods and associated LLFCs</b>					
Metered Voltage	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Low Voltage NHH	1.079	1.09	1.103	1.117	100, 101, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 130, 132, 133, 134, 135, 136, 137, 160, 161, 162, 163, 164, 165, 166, 200, 201, 202, 203, 204, 205, 220, 221, 222, 223, 224, 225, 240, 241, 242, 243, 244, 245, 246, 260, 400, 402, 404, 602, 604, 607, 781, 782, 783, 784, 785, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909
Low Voltage HH	1.078	1.089	1.103	1.116	500, 504, 506, 507, 603, 608, 609, 610, 910
High Voltage Network	1.024	1.027	1.031	1.034	301, 302, 401, 501, 505, 508, 509, 605, 606, 611, 612, 613, 614
High Voltage Substation	1.024	1.027	1.031	1.034	310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327
33kV Generic (demand)	1.003	1.004	1.005	1.006	
33kV Generic (generation)	1.000	1.000	1.000	1.000	
132kV Generic (demand)					
132kV Generic (generation)					

EHV Site Specific LLFs						
Demand						
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC	
Minsca	1.000	1.000	1.000	1.000	801	
Garlaff Landfill	1.003	1.004	1.005	1.006	808	
Hagshaw Hill Extension	1.000	1.000	1.000	1.000	809	
Muirhall Windfarm	1.003	1.004	1.005	1.006	811	
Burnfoot Windfarm	1.003	1.004	1.005	1.006	812	
Caigengelt	1.000	1.000	1.000	1.000	820	
Greenknowes Windfarm	1.000	1.000	1.000	1.000	821	
Aikengall Windfarm	1.000	1.000	1.000	1.000	825	
Hagshaw Hill	1.012	1.017	1.020	1.023	826	
Gallow Rig	1.036	1.043	1.048	1.053	827	
Polwat Rig	1.036	1.043	1.048	1.053	828	
Greendykeside Windfarm	1.001	1.001	1.001	1.001	829	
Dun Law Wind Farm	1.006	1.008	1.010	1.011	830	
EPR Chicken Litter	1.000	1.000	1.000	1.000	831	
Bowbeat Emly Bank	1.025	1.036	1.043	1.051	832	
Bowbeat Roughsidehill	1.025	1.035	1.043	1.050	833	
Harehill	1.036	1.043	1.048	1.053	834	
Shanks & McEwan 3 & 4	1.001	1.001	1.001	1.001	835	
Shanks & McEwan 5 & 6	1.001	1.001	1.001	1.001	836	
Crystal Rig	1.000	1.000	1.000	1.000	837	
Hauptlandmuir	1.000	1.000	1.000	1.000	838	
Wetherhill	1.028	1.040	1.048	1.055	839	
Artfield Fell	1.000	1.000	1.000	1.000	840	
Wardlaw Wood Windfarm	1.021	1.029	1.035	1.040	841	
Earlsburn Windfarm	1.000	1.000	1.000	1.001	842	
Black Hill Windfarm	1.037	1.054	1.066	1.077	843	
Dalswinton	1.000	1.000	1.000	1.000	844	
Stevens Croft Power Station	1.000	1.001	1.001	1.002	845	
Longpark Windfarm	1.000	1.000	1.000	1.000	850	
BOC	1.002	1.002	1.002	1.002	851	
Babcock Thom	1.002	1.002	1.003	1.003	853	
Blue Circle	1.036	1.004	1.004	1.004	854	
Pates Hill	1.000	1.000	1.000	1.000	855	
Clydeport	1.000	1.000	1.000	1.000	856	
Freescale	1.000	1.000	1.000	1.000	857	
Tesco	1.000	1.000	1.000	1.000	858	
GlaxoSmithkline	1.010	1.011	1.011	1.011	859	
Weir Pumps	1.003	1.004	1.005	1.006	861	
Dupont	1.024	1.027	1.031	1.034	862	
North Rhines	1.000	1.000	1.000	1.000	863	
Avecia	1.024	1.027	1.031	1.034	866	
Norbord	1.024	1.027	1.031	1.034	867	
Millour Hill	1.003	1.004	1.005	1.006	873	
Glenkerie	1.003	1.004	1.005	1.006	874	
Kelburn A	1.003	1.004	1.005	1.006	875	
Kelburn B	1.003	1.004	1.005	1.006	876	

Little Raith	1.003	1.004	1.005	1.006	877
Rothes Bio Power (A)	1.003	1.004	1.005	1.006	879
Rothes Bio Power (B)	1.003	1.004	1.005	1.006	
Dumbarton	1.000	1.000	1.000	1.000	
Stirling Rd	1.000	1.000	1.000	1.000	

EHV Site Specific LLFs					
Generation					
Site	Period 1	Period 2	Period 3	Period 4	Associated LLFC
Craigengelt	0.998	0.998	0.997	0.996	620
Greenknowes Windfarm	0.991	0.991	0.989	0.988	621
Greendykeside Windfarm	0.999	0.999	0.998	0.999	624
Aikengall Windfarm	0.996	0.996	0.996	0.996	625
Hagshaw Hill	1.001	1.005	1.006	1.008	626
Gallow Rig	1.020	1.026	1.027	1.029	627
Polwhat Rig	1.020	1.026	1.026	1.027	628
Hagshaw Hill Extension	0.995	0.995	0.994	0.993	629
Dun Law Wind Farm	0.984	0.984	0.985	0.987	630
EPR Chicken Litter	0.998	0.998	0.998	0.998	631
Bowbeat Emly Bank	1.007	1.016	1.019	1.024	632
Bowbeat Roughsidehill	1.004	1.013	1.016	1.021	633
Harehill	1.015	1.019	1.026	1.031	634
Shanks & McEwan 3 & 4	0.996	0.996	0.996	0.996	635
Shanks & McEwan 5 & 6	0.997	0.997	0.996	0.996	636
Crystal Rig	1.000	1.000	1.000	1.000	637
Hauptlandmuir (& Extension)	0.995	0.995	0.994	0.994	638
Wetherhill Windfarm	1.000	1.010	1.010	1.013	639
Artfield Fell Windfarm	1.000	1.000	1.000	1.000	640
Wardlaw Wood Windfarm	0.997	1.007	1.008	1.013	641
Earlsburn Windfarm	0.989	0.990	0.987	0.986	642
Black Hill Windfarm	1.010	1.024	1.027	1.037	643
Stevens Croft Power Station	0.984	0.984	0.987	0.987	645
Longpark	1.000	1.000	1.000	1.000	650
Lalarge Cement (Blue Circle)	1.036	1.004	1.004	1.004	654
Pateshill	1.000	1.000	1.000	1.000	655
North Rhinns	1.000	1.000	1.000	1.000	663
Muirhall Windfarm	1.000	1.000	1.000	1.000	671
Burnfoot Windfarm	1.000	1.000	1.000	1.000	672
Millour Hill	1.000	1.000	1.000	1.000	673
Glenkerie	1.000	1.000	1.000	1.000	674
Kelburn A	1.000	1.000	1.000	1.000	675
Kelburn B	1.000	1.000	1.000	1.000	676
Little Raith	1.000	1.000	1.000	1.000	677
Rothes Bio Power (A)	1.000	1.000	1.000	1.000	679
Rothes Bio Power (B)	1.000	1.000	1.000	1.000	
Minsca	0.991	0.990	0.990	0.990	
Dalswinton	0.997	0.997	0.996	0.996	



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

Please see excel file for Annex 6.