



## **STATEMENT OF CHARGES FOR USE OF SP DISTRIBUTION'S ELECTRICITY NETWORK**

This statement is effective from 1st April 2009

SP Energy Networks  
New Alderston House  
Dove Wynd  
Strathclyde Business Park  
Bellshill  
ML4 3FF

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## 1. Introduction

- 1.1 This statement has been produced by us to inform Suppliers, Generators and IDNOs of our Distribution Use of System (DUoS) charges. It has been constructed in a way which reflects the requirements of Standard Condition 4A of our Distribution Licence. It contains information on our Tariff Application and Charging Definitions, provides for an in depth view of how we charge for Use of System in accordance with the requirements of paragraph 2 (a) of SLC4A, and also gives information on our Loss Adjustment Factors and any rebates against our Use of System charges.
- 1.2 If you need to contact us regarding any aspect of this document please write to or telephone our Pricing Team at:

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Regulation  
New Alderston House  
Dove Wynd  
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## 2. Tariff Application and Charging Definitions

### Demand

#### Billing and payment by settlement class

- 2.1 The following paragraphs are provided to help you to understand our Settlements (Supercustomer) related tariffs and their structures, as shown in SP Distribution's Market Domain Data Tables, and the conditions of use of these tariffs. We enclose a web-link to our Regulatory Documents / Charging page below from which you can gain access to our Supercustomer Settlement Class combinations and their respective tariffs.

<http://www.scottishpower.com/ConnectionsUseMetering.htm>

- 2.2 We will charge Supercustomer tariffs through two main charging components, which are Fixed Charges and kWh charges. The kWh charge will be based on the active import registers on the metering system at your customer's premises. More than one kWh charge will be applied to those tariffs which are classed as multi-rate.
- 2.3 Our charges vary according to the voltage of the supply and in some cases application is limited on supply capacity and/or unit consumption. Charges are shown exclusive of VAT, which shall be charged at the appropriate rate.
- 2.4 The Tables within this document that relate to Supercustomer billed tariffs are:
  - Table 3.1, Section 1, for Domestic DUoS tariffs, profile class (PC) 1&2.

- Table 3.1, Section 2, for Non-Domestic DUoS tariffs, PC 3&4.
- Table 3.1, Section 3, for NHH Maximum Demand DUoS tariffs, PC 5-8.
- Table 3.1, Section 5, for Unmetered Supplies DUoS tariffs.
- Table 3.1, Section 7, for Preserved NHH DUoS tariffs.

### **Site specific billing and payment**

2.5 The following paragraphs are provided to aid your understanding of our Site Specific tariffs and their structures, as shown in SP Distribution's Market Domain Data Tables, and the conditions of use for these tariffs. These charges will relate to a specific customer site, and are therefore billed on an individual site basis. We enclose a web-link below to our Regulatory Documents / Charging page from which you can gain access to our Site Specific Settlement Class combinations and their respective tariffs.

<http://www.scottishpower.com/ConnectionsUseMetering.htm>

2.6 Our charges will be based on a range of tariff components:

- A Fixed charge per site;
- kWh charges based on the active import registers as provided by the metering system on site;
- Capacity (or availability) charges to reflect the site capacity usage;
- Reactive Charges

2.7 Our charges vary according to the voltage of the supply and application is limited on supply capacity and/or unit consumption. Charges are shown exclusive of VAT, which shall be charged at the appropriate rate.

2.8 The tables within this document which relate to Site Specific tariffs are:

- Table 3.1, Section 4, for HH Maximum Demand DUoS tariffs.
- Table 3.1, Section 7, for Preserved HH DUoS tariffs.
- Table 3.1, Section 6, for Unmetered Supplies DUoS tariffs.

### **Unmetered supplies**

2.9 These tariffs are available for supplies, which SP Distribution deems as being suitable as Unmetered Supplies. The criteria for deciding suitability are:

- a) where it is financially or technically impractical to install meters or carry out meter reading; or

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b) where the load is small and the consumption is reasonably predictable. Supplies where consumption is dependent on some factor, temperature for example, or where the load could be easily be increased without the knowledge of SP Distribution will not normally be allowed to be connected without a meter.

The privilege of being connected without a meter is conditional on the customer providing and maintaining an accurate and auditable inventory.

### **Extra High Voltage (EHV) supplies**

2.10 EHV sites are allocated site specific DUoS tariffs. EHV sites are defined, in Special Condition A1 of the Electricity Distribution Licence, as sites connected to our distribution system at a voltage of higher than 22 kV, or at a substation with a primary voltage of 66 kV or above.

2.11 Our charges will be based on a range of tariff components:

- A Fixed charge per site;
- A Sole-Use assets charge;
- A Capacity (or availability) charge to reflect the site capacity usage;
- Reactive Charges

2.12 The tables within this document which relate to the common elements of the EHV Site Specific DUoS tariffs are:

- Table 3.1, Section 6.

### **kVA of Maximum Demand**

2.13 For those tariffs contained within Table 3.1, section 3, for Non-Half Hourly Maximum Demand customers, we will determine the kVA of Maximum Demand as the larger of the two numbers calculated as follows:

- a) from the maximum demand registered in the month, provided by the data from the meter; and
- b) by dividing the maximum demand by:
  - i) the power factor determined in the same month; or
  - ii) 0.95

2.14 For the purposes of i) and ii) above, the power factor will be derived from the advances of the kVARh and kWh meters. For those tariffs contained within Table 3.1, section 4, for Half Hourly customers, we will determine the kVA of Maximum Demand by selecting the maximum half hour value calculated using the formula below applied to the half hourly data from the billing period:

$$kVAMD = 2 \times \sqrt{(ActiveImport)^2 + (ReactiveImport)^2}$$

where;

kVAMD: kVA of Maximum Demand

ActiveImport: kWh of Active Import at Maximum Demand

ReactiveImport: kVArh of Reactive import at Maximum Demand

2.15 For Half Hourly Maximum Demand sites with generation the kVA of Maximum Demand in the month is calculated on a half hourly basis. Where Active Import is not equal to 0 and Active Export = 0, the following calculation is used:

$$kVAMD = 2 \times \sqrt{(ActiveImport)^2 + (NetReactive)^2}$$

where:

NetReactive:    Reactive Import – Reactive Export

For all other scenarios no calculation would be carried out in that particular half hour.

### **Maximum Import Capacity**

2.16 The Maximum Import Capacity means, in respect of an Exit Point, the Maximum amount of electricity, as agreed with SP Distribution, expressed in kilowatts or kilovoltapmeres, which may be imported from SP Distribution's Distribution System via that Exit Point. This will normally be stated in the Connection Agreement covering the premises. The Supplier will also be notified of this authorised figure, by SP Distribution, when he takes over registration of the premises.

### **Chargeable Import Capacity**

2.17 The Chargeable Supply Capacity (kVA) shall, for any month, be the highest of:

- the kVA of Maximum Demand in that month; or
- the Maximum Import Capacity.

2.18 Where the Chargeable Capacity exceeds the Maximum Import Capacity SP Distribution reserve the right to re-declare the Authorised Supply Capacity .

### **Reactive Power Charges – Import**

2.19 For each kVArh consumed in excess of 33% of the number of active imported units (kWh) consumed in each month, a Reactive Power charge shall be made. This calculation shall be undertaken for each importing half-hour and aggregated over the month. Should the value for the month be negative then the charge shall be set to zero.

$$ChargeableReactiveUnits = ReactiveImport - (0.33 \times ActiveImport)$$

2.20 For sites with generation the Import Chargeable Reactive Units will be calculated as follows: In each half hour where Active Import is not equal to 0 and Active Export = 0,

the following calculation is used:

$$\text{Chargeable Reactive Units} = \text{Net Reactive Import} - (0.33 \times \text{Active Import})$$

where;

Net Reactive Import: Reactive Import – Reactive Export

For all other scenarios, no calculation will be carried out for that half hour, which would result in a 0.

2.21 The results for each half hour in the month are summated. Where the answer is positive then the charge will be Import Chargeable Reactive Units  $\times$  Charge Rate. If the result is negative no charge will apply.

## **Generation**

### **Generation supplies**

2.22 Generation UoS tariffs were introduced in April 2005 and the charge calculations are initially based on the estimated costs of Distributed Generation connections.

2.23 The actual published charges are based on our charging methodologies for Distributed Generation connections, which at a simple level are based on the estimated costs of connecting the installed capacity of the DG plant. In addition the charges at higher voltages will be location-specific, (i.e. site-specific charges for EHV Distributed Generation).

2.24 LV and HV charges are calculated on an average basis, across our Distribution Services Area, with EHV charges being calculated on a locational basis. Both are charged on a £/kW/per annum basis.

2.25 The tables within this document which relate to generation Use of System charges are:

- Table 4.1.

### **kVA of Maximum Export**

2.26 kVA of Maximum Export means twice the greatest number of kilovolt-ampere-hours exported during any thirty consecutive minutes in the relevant period. This will be calculated using the following formula:

$$kVAME = 2 \times \sqrt{(\text{ActiveExport})^2 + (\text{NetReactive})^2}$$

where;

kVAME: kVA of Maximum Export

ActiveExport: kWh of Active Export at Maximum Export

NetReactive: Reactive Import – Reactive Export

2.27 The kVA of Maximum Export in the month is calculated on a half hourly basis where Active Export is not equal to 0 and Active Import = 0. For all other scenarios no calculation would be carried out in that particular half hour.

## Maximum Export Capacity

2.28 The Maximum Export Capacity means, in respect of an Entry Point, the Maximum amount of electricity, as agreed with SP Distribution, expressed in kilowatts or kilovoltamperes, which may be exported onto SP Distribution's Distribution System via that Entry Point. This will normally be stated in the Connection Agreement covering the premises. The Supplier will also be notified of this authorised figure, by SP Distribution, when he takes over registration of the premises.

## Chargeable Export Capacity

2.29 The Chargeable Export Capacity (kVA) shall, for any month, be the highest of:

- the kVA of Maximum Export in that month; or
- the Maximum Export Capacity.

## Reactive Power Charges – Generation

2.30 Chargeable Reactive Units (kVArh) is the net kilovolt-amperes-reactive-hours imported in excess of the number obtained by multiplying the total kilowatt hours exported during the month by 0.33. The following calculation is used to determine the Export Chargeable Reactive Units in each half hour:

$$\text{ChargeableReactiveUnits} = \text{NetReactive} - (0.33 \times \text{ActiveExport})$$

where:

NetReactive: Reactive Import – Reactive Export

ActiveExport: Total active export consumption

2.31 Where Active Export is not equal to 0 and Active Import = 0, the previous formula is used. For all other scenarios, no calculation will be carried out for that half hour, which would result in a 0. The results for each half hour in the month are summated. Where the answer is positive then the charge will be Export Chargeable Reactive Units  $\times$  Charge Rate. If the result is negative then no charge will apply.

## Explanatory notes, capacity management

2.32 Where the Maximum (Import or Export) Capacity is re-declared during the Year of Use, the existing Maximum Capacity will be updated to reflect the re-declared value. The re-declared value will be chargeable for any Billing Period or part of a Billing Period during which the revised value became effective.

2.33 Requests to increase or decrease Maximum Capacity need to be submitted formally to SP Distribution. No reduction in Maximum Capacity will normally be permitted for a period of 5 years from the date that the capacity was first made available at the premises, or from the date at which a change in capacity (involving expenditure by SP Distribution) was provided.

2.34 Subject to the above, reductions in Maximum Capacity will normally be permitted at intervals of not less than one year, providing that at least 28 days prior written notice of such a change has been given to SP Distribution.

### 3. Schedule of Demand Tariffs

**UoS Charges - available from 1 April 2009**

**Table 3.1 Tariffs**

Tariff No.	Tariff Description	LLFC	Market	PC	Fixed Charges		Unit Charges			Capacity Charges	Reactive Power Charges
					Fixed Charge (p/MPAN/day)	Fixed Charge (p/site/day)	Day Unit Charge 1 (p/kWh)	Day Unit Charge 2 (p/kWh)	Night Unit Charge 1 (p/kWh)		
<b>Section 1. Domestic</b>											
T01	Domestic Unrestricted	100, 101	NHH - import	1	6.40		1.83				
T02	Domestic Heating	110, 111	NHH - import	1	8.60		2.08				
T03	Heating	112, 113, 116, 117, 164, 165, 166, 240	NHH - import	2					0.63		
T04	Domestic Day/night	114, 115, 118, 119, 120, 162, 163	NHH - import	2	8.60		2.08		0.63		
T05	HWR Domestic Heating	160, 161		1	4.30		2.08				
T06	12hr Off Peak	132, 241, 133	NHH - import	2						1.12	
T08	Storage Boiler	136	NHH - import	2						1.44	
<b>Section 2. Non-Domestic</b>											
T13	12hr Off Peak HV	301	NHH - import	4						0.61	
T14	Business Single rate	201, 204	NHH - import	3	26.23		1.99				
T15	Business Evening & Weekend	221, 224, 260	NHH - import	3&4	31.36		3.38			0.98	
T16	Business Heating	225	NHH - import	4						0.98	
<b>Section 3. NHH MD</b>											
T17	NHH MMD LV <100kW (PC5-8)	400, 402	NHH LV - import	5-8	95.18		1.85		0.29		
T18	NHH MMD HV<100kW (PC5-8)	403	NHH HV - import	5-8	734.71		0.85			1.14	
<b>Section 4. HH MD</b>											
M03	HH LV	500	HH LV - import	0	49.73		1.45		0.18	2.11	0.29
M07	Embedded Generation Import LV	504	HH LV - import	0	49.73		1.45		0.18	2.11	0.29
M04	HH HV	501	HH HV - import	0	734.71		0.85		0.20	1.14	0.18
M08	Embedded Generation Import HV	505			734.71		0.85		0.20	1.14	0.18

Tariff No.	Tariff Description	LLFC	Market	PC	Fixed Charges		Unit Charges			Capacity Charges	Reactive Power Charges
					Fixed Charge (p/MPAN/day)	Fixed Charge (p/site/day)	Day Unit Charge 1 (p/kWh)	Day Unit Charge 2 (p/kWh)	Night Unit Charge 1 (p/kWh)		
<b>Section 5. Unmetered</b>											
T19	UMS Good Inventory	900, 901, 902, 903	NHH - UMS	8&1	7.91		1.51				
T20	UMS Poor Inventory	904, 905, 906, 907	NHH - UMS	8	7.91		1.66				
T21	UMS Public Lighting Good Inventory	908	NHH - UMS	1&8	7.91		1.75				
T22	UMS Public Lighting Poor Inventory	909	NHH - UMS	1&8	7.91		1.93				
<b>Section 6. EHV</b>											
	33kV Connected	801+	HH EHV - import	0	1512.39	Site Specific				3.25	0.12
<b>Section 7. Preserved</b>											
T03	Domestic 8.5hr Off Peak	130	NHH - import	2					0.63		
T07	16/20hr Off Peak	134, 242, 135	NHH - import	2					1.36		
T09	12hr Crop & Air Conditioning	243	NHH - import	3			1.12				
T10	16hr Crop & Air Conditioning	244	NHH - import	3			1.36				
T11	Crop Conditioning	245	NHH - import	3			1.12	1.36			
T12	Catering	246	NHH - import	3			1.48				
T14	Farm & Combined Premises General Block 2	200, 202, 203, 205	NHH - import	3	26.23		1.99				
T15	White Meter 2, White Meter 5 (day/night)	220, 222	NHH - import	3&4	31.36		3.38		0.98		
T16	White Meter 5 (heating)	223	NHH - import	4					0.98		
T18	Maximum Demand HV	401	NHH HV - import	5-8	734.71		0.85			1.14	

### **Accompanying Notes for Domestic Tariffs**

The Domestic group of tariffs is available for supplies of electricity for use exclusively for domestic purposes in a private residence.

Other supplies that may be treated as Domestic are:

1. A separately metered supply of electricity for domestic purposes in a detached garage.
2. Residential accommodation (e.g. boarding houses, children or old people's homes, nurses' residences), which have ten or less assessable rooms.
3. Staircase lighting in residential accommodation either:
  - a) Provided by the landlord who is a part occupier of the premises and has a personal domestic supply, or
  - b) Separately metered and provided by the landlord who is not an occupier of the premises.
4. Separately metered communal services in residential accommodation where the total installed load does not exceed 5kW.

Where the supply of electricity is used partly for domestic purposes and partly for the purposes of or in connection with any trade, business or profession (including farming), a business tariff will apply.

**Table 3.2 Domestic Tariff Conditions**

<b>TARIFF</b>	<b>LLFC</b>	<b>CONDITIONS</b>	<b>NOTES</b>
Domestic Unrestricted T01	100, 101	All units charged at the same rate.	
CPC Domestic General, T02	110, 111	General usage (non heating), unrestricted. Must be taken together with LLFC 112 or 113. Available only to premises with storage heating appliances form a minimum of 60% of the total installed electrical space heating.	

TARIFF	LLFC	CONDITIONS	NOTES
CPC Domestic Heating, T03	112, 113	<p>To be taken together with LLFC 110 or 111 (see note above).</p> <p>Controlled circuit (storage space heating), available for a maximum of 14 hours between 7.30pm and 3.30pm as determined by the WEATHERCALL® system (or similar system approved by SP Distribution). Not more than 4 hours to be available between the hours of 8.30am and 3.30pm. Exact times to be determined by the Supplier.</p> <p>The storage water heating circuit available for 4.5 hours between 7.30pm and 3.30pm. Exact times to be determined by the Supplier. Direct space and water heating circuit, available 24 hrs per day</p>	Clock Time
Domestic Day/Night, T04	114, 115	Domestic Day/night. Tariffs mutually conditional with Domestic control. Available only to premises where use is made of storage heating appliances. General usage, 8.5 hours available at "night" rate between 10pm and 8.30am. Exact times to be determined by the Supplier.	GMT
Domestic Control, T03	116, 117	<p>Domestic Control. Tariffs mutually conditional with Domestic Day/night. Available only to premises where use is made of storage heating appliances</p> <p>Controlled circuit (storage heating), available between 7.30pm and 3.30pm for</p> <ul style="list-style-type: none"> <li>a) a maximum of 8.5 hours; or</li> <li>b) a period or periods, subject to a maximum of 14 hours, as determined by the WEATHERCALL® system (or similar system approved by ScottishPower) if this option is adopted.</li> </ul> <p>Regardless of which option is chosen, not more than 4 hours to be available between the hours of 8.30 am and 3.30pm. Exact times to be determined by the Supplier.</p>	Clock Time
<b>White Meter 1, T04</b>	118, 119	<p>Intended for premises where use is made of storage heating appliances. All electricity consumed at the premises shall be charged on this tariff.</p> <p>8.5 hrs at "night" rate available between 10pm and 8.30am. Exact times to be determined by Supplier</p>	GMT

TARIFF	LLFC	CONDITIONS	NOTES
<b>8.5 hr Off Peak, T03</b>	240	<p>Must be taken with Domestic tariff.</p> <p>Available to premises where use is made of storage heating appliances.</p> <p>Available all day at weekends and for 8.5 hours between the hours of 10.30pm and 8am each day Monday to Friday (exact times to be determined by the Supplier)</p>	GMT
<b>12 hr Off Peak, T06</b>	132, 241, 133,	<p>Must be taken with Domestic tariff.</p> <p>Available to premises where use is made of storage heating appliances.</p> <p>Available for 12 hours each day Monday to Friday.</p> <p>The availability on Monday to Friday will be: Not less than 8 hours between 7.30pm and 8.30am and not more than 4 hours between the hours of 8.30 am and 3.30pm.</p> <p>Exact times to be determined by the Supplier. Available all day at weekends.</p>	GMT
<b>Storage Boiler, T08</b>	136, 137	<p>Must be taken with Domestic unrestricted tariff.</p> <p>Storage boiler circuit available for a maximum of 18 hours per day between 6.30pm and 4.30pm. Exact times to be determined by the Supplier.</p>	Clock Time

### Accompanying Notes for Business Tariffs

Available where a Domestic DUoS Tariff does not apply.

**Table 3.3 Business Tariff Conditions**

TARIFF	LLFC	CONDITIONS	NOTES
<b>Business General, T14</b>	201, 204	All units charged at the same rate. Available to customers with a capacity of less than 45kVA .	
<b>White Meter 5 Heating, T16</b>	223	<p><u>Must be taken in conjunction with White Meter Day/Night (above)</u></p> <p>Controlled circuit (storage heating), available between 7.30pm and 3.30pm for:</p> <p>a) a maximum of 8.5 hours; or</p> <p>b) a period or periods, subject to a maximum of 14 hours, as determined by the WEATHERCALL® system (or similar system approved by ScottishPower) if this option is adopted.</p> <p>Regardless of which option is chosen, not more than 4 hours to be available between the hours of 8.30am and 3.30pm. Exact times to be determined by the Supplier.</p>	Clock Time
<b>Business Day/Night, T15</b>	224	<p>Available only to business premises where use is made of storage heating <u>appliances</u>.</p> <p>8.5 hrs at "night" rate available between <u>10pm</u> and 8.30am. Exact times to be determined by the Supplier.</p> <p>Available to customers with a capacity of <u>less</u> than 45kVA.</p>	Clock Time

TARIFF	LLFC	CONDITIONS	NOTES
<b>Business Control, T16</b>	225	<p><u>Must be taken together with Business Day/Night</u></p> <p>Controlled circuit (storage heating), available between 7.30pm and 3.30pm for:</p> <p>a) a maximum of 8.5 hours; or</p> <p>b) a period or periods, subject to a maximum of 14 hours, as determined by the WEATHERCALL® system (or similar system approved by ScottishPower) if this option is adopted.</p> <p>Regardless of which option is chosen, not more than 4 hours to be available between the hours of 8.30am and 3.30pm. Exact times to be determined by the Supplier.</p> <p>Available to customers with a capacity of less than 45kVA.</p>	Clock Time
<b>Business Evening and Weekend, T15</b>	260	<p>Low rate available between 7.30pm and 7.30am each day Monday to Friday, and all day at weekends. All electricity consumed at the premises shall be charged on this tariff.</p> <p>Available to customers with a capacity of less than 45kVA.</p>	GMT
<b>Maximum Demand (LV), T17</b>	400, 402	For supplies from the Low Voltage Network, with a non half-hourly metered monthly tariff.	
<b>Maximum Demand (HV), T18</b>	403	For supplies from the High Voltage Network, with a non half-hourly metered monthly tariff..	
<b>HHLV, M03</b>	500	Mandatory for customers with a maximum demand of 100kW and above supplied from the Low Voltage Network. Customers with maximum demand of less than 100kW can elect to go on this tariff	
<b>Embedded Generation import (LV), M07</b>	504	Available to supplies made available from the Low Voltage Network to premises with on site generation.	

TARIFF	LLFC	CONDITIONS	NOTES
<b>HHHV, M04</b>	501	Mandatory for customers with a maximum demand of 100kW and above supplied from the High Voltage Network. Customers with maximum demand of less than 100kW can elect to go on this tariff	
<b>Embedded Generation import (HV), M08</b>	505	Available to supplies made available from the High Voltage Network to premises with on site generation.	

### **Accompanying Notes for Preserved Tariffs**

- Distribution Use of System LLF Codes 130, 134, 135, 200, 202, 203, 205, 220, 222, 223, 242, 243, 244, 245, 246 and 401 are Preserved tariffs. As such, they are only available to existing supplies, subject to certain conditions:
  - a) Suppliers may not normally transfer a meter point from one preserved tariff to another preserved tariff;
  - b) If a supply under a preserved tariff should cease, other than on change of tenancy, the preserved tariff may not normally be restored;
  - c) Any additional load required to be supplied on the preserved tariff must be within the existing supply capacity.

### Accompanying Notes for Unmetered Supplies Tariffs

- Distribution Use of System LLF Codes 900, 901, 902, 903, 904, 905, 906, 907, 908 and 909 are available to supplies, which SP Distribution deems as being suitable as Unmetered Supplies. The criteria for deciding suitability are:
  - where it is financially or technically impractical to install meters or carry out meter reading; or
  - where the load is small and the consumption is reasonably predictable. Supplies where consumption is dependent on some factor, temperature for example, or where the load could be easily be increased without the knowledge of SP Distribution will not normally be allowed to be connected without a meter.

The privilege of being connected without a meter is conditional on the customer providing and maintaining an accurate and auditable inventory.

Where SP Distribution has approved the inventory, via the certificate of Estimated Annual Consumption, the supplies will qualify for the relevant Good Inventory tariff (T19 or T21).

**Table 3.5 Unmetered Supplies Conditions**

TARIFF	LLFC	CONDITIONS	NOTES
<b>UMS Good Inventory, T19</b>	900, 901, 902, 903	Charged when a detailed and accurate inventory of connected equipment is provided.	
<b>UMS Poor Inventory, T20</b>	904, 905, 906, 907	Charged when a detailed and accurate inventory is not provided.	
<b>UMS Public Lighting Good Inventory, T21</b>	908	Available to Local Authorities and other customers who have a statutory duty to supply public lighting (e.g. landlords who require to light stairwells on their premises). Charged when a detailed and accurate inventory is provided.	
<b>UMS Public Lighting Poor Inventory, T22</b>	909	Available to Local Authorities and other customers who have a statutory duty to supply public lighting (e.g. landlords who require to light stairwells on their premises). Charged when a detailed and accurate inventory is not provided.	

### **UoS Charges for Out of Area Networks**

SP Distribution has no Out of Area DUoS tariffs.

**Table 3.7 Metering Functionality and Data Requirements**

DUoS Tariff	LLFC	Application	Metering Functionality	Meter Reading Frequency	Time for Provision of Data to Distributor
T01	100	single phase or polyphase supply to domestic property - credit	kWh total	quarterly 1	Supercustomer
T01	101	single phase or polyphase supply to domestic property - prepayment	kWh total	quarterly 1	Supercustomer
T02, T03, T04, T05	110, 112, 114, 116, 118, 160, 162, 164, 165, 166	single phase or polyphase supply to domestic property - credit	kWh rate 1 <sub>2</sub> kWh rate 2	quarterly 1	Supercustomer
T02, T03, T04, T05	111, 113, 115, 117, 119, 161, 163	single phase or polyphase supply to domestic property - prepayment	kWh rate 1 <sub>2</sub> kWh rate 2	quarterly 1	Supercustomer
T03, T06, T07, T08, T09, T10, T11, T12	130, 240, 132, 241, 134, 242, 302, 136, 243, 244, 245, 246	Off Peak separately wired circuit – credit1	kWh total	quarterly 1	Supercustomer
T06, T07, T08	133, 135 137	Off Peak separately wired circuit - prepayment	kWh total	quarterly 1	Supercustomer
T14	200, 201, 202	single phase or polyphase supply to business from LV network taking less than 45kVA - credit	kWh total	quarterly 1	Supercustomer
T14	203, 204	single phase or polyphase supply to business from LV network taking less than 45kVA - prepayment	kWh total	quarterly 1	Supercustomer
T15, T16	220, 221, 222, 223, 224, 225, 260	single phase or polyphase supply to business from LV network taking less than 45kVA	kWh rate 1 <sub>2</sub> kWh rate 2	quarterly 1	Supercustomer
T17	400, 402	supply to a business from the LV network taking less than 100kW	kWh total kWh rate 1 <sub>2</sub> kWh rate 2 Peak kW (4-7pm Mon - Fri Nov - Feb) 24 hour kW 24 hour kVAr kVArh total	monthly	within three working days of meter read

<b>DUoS Tariff</b>	<b>LLFC</b>	<b>Application</b>	<b>Metering Functionality</b>	<b>Meter Reading Frequency</b>	<b>Time for Provision of Data to Distributor</b>
T18	401, 403	supply to a business from the HV network taking less than 100kW	kWh total kWh rate 1 <sup>2</sup> kWh rate 2 Peak kW (4-7pm Mon - Fri Nov - Feb) 24 hour kW 24 hour kVAr kVArh total	monthly	within three working days of meter read
M03, M07	500, 504	supply to a business from the LV network taking 100kW or more	kWh total kWh rate 1 <sup>2</sup> kWh rate 2 Peak kW (4-7pm Mon - Fri Nov - Feb) 24 hour kW 24 hour kVAr kVArh total	half hourly	within three working days
M04, M08	501, 505	supply to a business from the HV network taking 100kW or more	kWh total kWh rate 1 <sup>2</sup> kWh rate 2 Peak kW (4-7pm Mon - Fri Nov - Feb) 24 hour kW 24 hour kVAr kVArh total	half hourly	within three working days
EHV site specific		supply taken at 33kV or higher	on application	on application	on application
T19, T20, T21, T22	900, 901, 902, 903, 904, 905, 906, 907, 908, 909	supply covered by a certificate for unmetered supply <sup>3</sup>	on application	on application	on application

<sup>1</sup> quarterly may mean less frequently for sites billed by Supercustomer. Further details available on request.

<sup>2</sup> for tariffs with two or more rates, the timings for each register should match one of the SSC combinations shown in MDD. Default tariff codes may be applied, subject to the details given in Table 6, where requests for any other SSC combinations are made.

#### 4. Table 4.1 Generation DUoS Charges

Tariff No.	Tariff Description	LLFC	Market	PC	Fixed Charges		Unit Charges			Capacity Charges	Reactive Power Charges
					Fixed Charge (p/MPAN/day)	Fixed Charge (p/site/day)	Day Unit Charge 1 (p/kWh)	Day Unit Charge 2 (p/kWh)	Night Unit Charge 1 (p/kWh)		
E06	LV Connected Generators with NHH metering		NHH - export	1-8							
E07	LV Connected Generators pre April 2005	604	HH LV - export	0						0.00	0.00
E05	LV Connected Generators post April 2005	607	HH LV - export	0							0.29
E08	HV Connected Generators pre April 2005	605	HH HV Export	0						0.00	0.00
E04	HV Connected Generators post April 2005	606	HH HV Export	0						0.28	0.18
E01	EHV Connected Generators Borders	601+	HH EHV – export	0		Site Specific				0.40	0.12
E02	EHV Connected Generators SouthWest	601+	HH EHV – export	0		Site Specific				0.63	0.12
E03	EHV Connected Generators Central	601+	HH EHV - export	0		Site Specific				0.47	0.12

## 5. System Loss Adjustment Factors

- 5.1. The total electrical losses on our distribution system are regulated in accordance with the price control set out in the Licence. Suppliers should refer to the table of loss adjustment factors to calculate the amount of electricity that they must provide. The same loss adjustment factors (LAFs) are reflected automatically in the settlement system.

### **Role of Loss Adjustment Factors In the Supply of Electricity**

- 5.2. Authorised Electricity Operators providing a supply of electricity from any entry point into SP Distribution electricity distribution network, including a generator entry point embedded in the network or a supply point from the transmission network, will be required to demonstrate that at all times the amount of electricity entering the network is sufficient to meet the supply in accordance with the following adjustment factors.
- 5.3. Adequate supply can be demonstrated either by membership of the Balancing and Settlement Code, or by provision of metering information on the relevant supply and load(s). The table which follows indicates the factor by which supplies taken from the Grid Supply Point must exceed the take at the exit point from the network, varying according to the time of day, the season and the voltage of connection.

### **Role of Loss Adjustment Factors In the Generation of Electricity**

- 5.4. For generators embedded in SP Distribution electricity distribution network, the output of the generator will be grossed up to the equivalent of grid supply point supplies in a way which conforms with the factors provided below.

**Table of standard Loss Adjustment Factors**

		Night	Other	Winter Weekday	Winter Peak	<b>LLFC</b>
		Period 1	Period 2	Period 3	Period 4	
<b>Import</b>	<b>LV Non Half Hourly</b>	1.068	1.077	1.088	1.095	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, 500, 504
	<b>LV UMS</b>	1.068	1.077	1.088	1.095	900, 901, 902, 903, 904, 905, 906, 907, 908, 909
	<b>LV Half Hourly</b>	1.067	1.076	1.085	1.095	500, 504
	<b>HV</b>	1.027	1.031	1.035	1.038	301, 302, 401, 403, 501, 505
	<b>HV Site Specific</b>	1.013	1.013	1.014	1.014	Site specific (800+)
	<b>33kV</b>	1.004	1.005	1.005	1.006	Site specific (800+)
<b>Export</b>	<b>LV</b>	1.068	1.077	1.085	1.095	781 - 785
	<b>LV Half Hourly</b>	1.067	1.076	1.085	1.095	604, 607
	<b>HV</b>	1.027	1.031	1.035	1.038	605, 606
	<b>33kV</b>	1.004	1.005	1.005	1.006	Site Specific (600+)

**Notes on the Table**

a. Times given are clock time. Time periods are defined as follows:

<b>Period 1</b>	<b>Night</b>	23.30-07.30	All Year
<b>Period 2</b>	<b>Other</b>	Any time outwith Periods 1, 3, 4	
<b>Period 3</b>	<b>Winter Weekday</b>	07.30-16.00	Mon-Fri 1 Nov - 28 Feb
		19.00-20.00	Mon-Fri 1 Nov - 28 Feb
<b>Period 4</b>	<b>Winter Weekday Peak</b>	16.00-19.00	Mon-Fri 1 Nov - 28 Feb

b. Loads with a power factor of 0.95 or less may require individual assessment and will be allocated to a loss adjustment band according to power factor and voltage.

c. Appendix 1 of the Licence Condition 4 Statement describes the methodology for the calculation of Loss Adjustment Factors shown in the above table.

d. For premises connected at extra high voltage (that is, at a voltage at or higher than 22 kV or at a substation supply with a primary voltage of 66 kV or above), special assessment may be required to determine the loss adjustment factor(s) which are relevant to the particular exit point.

e. The loss adjustment factors reflect the total losses on the SP Distribution' network attributable to the relevant customer groups.

## 6. Network Unavailability Rebates

6.1 For generators that are due network unavailability rebates, these will be calculated as follows:

Network Unavailability Rebates = £20 per MW of installed capacity  $\times$  total duration of relevant interruptions (in hours). Subject to a maximum value of the annual use of system charges for the generator and a minimum value of £50.

## 7. Glossary of terms

7.1 The following definitions are included to aid understanding.

Act	The Electricity Act 1989 as amended by Utilities Act 2000, the Sustainable Energy Act 2003 and the Energy Act 2004.
Authorised Electricity Operator	Persons entitled, by licence or by exemption under the Act, to use SP Distribution' distribution network to supply, distribute or generate electricity.
Authorised Supply Capacity (ASC)	The agreed Authorised Supply Capacity measured in kilovoltampere you are allowed to take from the Distribution Network through your point of connection.
Authority	The Gas and Electricity Markets Authority (GEMA) – the regulatory body for the gas and electricity industries established under section 1 of the Utilities Act 2000.
BSC	Balancing and Settlements Code
Chargeable Capacity	Means whichever is higher between the Maximum Authorised Capacity and the Maximum Export or Maximum Import.
CUSC	The Connection and Use of System Code governing connection to and use of NGET's transmission system
Customer With Own Generation (CwoG)	A customer who has own generation and which is capable of being paralleled to our Distribution Network.
Distributed Generator	A generator with a direct connection to SP Distribution' distribution network.
Distribution Code	The Distribution Code of the Distributors of England and Wales. It is the document produced by each Distributor in accordance with Condition 9 of its Licence and approved by Ofgem to define the technical aspects and planning criteria of the working relationship between the Distributor and all those connected to its Distribution Network.
Distribution Licence	The Electricity Distribution Licence granted to SP Distribution Electricity PLC pursuant to section 6(1) of the Act.
Distribution Use of System Agreement (DuoSA)	The agreement between SP Distribution and an authorised electricity operator, which sets out the obligations of both parties for the use of SP Distribution' distribution network.
Distribution Use of System (DUoS)	Use of system charges for demand and generation customers which are connected to and utilising SP Distribution' distribution network.
Elexon	The Balancing and Settlements Company.
Extra high voltage (EHV)	22 kV or higher voltage or 11 or 6.6 kV if supplied directly from a transformer with a primary voltage of 132 kV. The permitted tolerance at these voltages is plus and minus 6%.
Generator Use	Generator Distribution Use of System charge.

of System (GDUoS)	
Grid Code	The document produced by NGET in accordance with its transmission licence and approved by Ofgem to define the technical aspects and planning criteria of the working relationships between NGET and all those connected to its transmission system and including, in certain aspects Distributed Generators.
Grid Supply Point (GSP)	A grid supply point is connection point at which the NGET's transmission network System is connected to SP Distribution' distribution network.
HH	Half hourly
High voltage (HV)	6.6 kV volt or 11 kV plus or minus 6% measured between any two phase conductors.
Installed Generation Capacity	The capacity provide to meet the maximum power required as requested by the party seeking to export onto the SP Distribution' distribution network.
kVar	kilovoltampere reactive
kVA	kilovoltampere
kW	kilowatt
kWh	kilowatt hour
LLFC	Line Loss Factor Class
Low voltage (LV)	230 volt plus 10% or minus 6% measured between the neutral conductor and any phase conductor.
Maximum Export Capacity	The Maximum amount of electricity, as agreed with SP Distribution, which may be exported onto the SP Distribution Distribution System via an Entry Point. (Entry Point having the meaning given in the DCUSA)
Maximum Import Capacity	The Maximum amount of electricity, as agreed with SP Distribution, which may be imported from the SP Distribution Distribution System via an Exit Point. (Exit Point having the meaning given in the DCUSA)
MDD	Market Domain Data
MRA	Master Registration Agreement
MPAN	Meter Point Administration Number
MPAS	Meter Point Administration Service
National Grid Electricity Transmission (NGET)	The company that owns and operates the transmission network in England and Wales.
Network	The whole of our interconnected distribution equipment, including cables, overhead lines and substations, which we operate in accordance with our licence.
NHH	Non-half hourly

Ofgem	Ofgem is the Office of Gas and Electricity Markets that regulates the gas and electricity industries in Great Britain. Ofgem operates under the governance of the Gas and Electricity Markets Authority (sometimes referred to as the Authority or GEMA) which sets all major decisions and policy priorities.
Operation and Maintenance (O&M) percentage	The percentage rate of Operation and Maintenance is calculated as the percentage of the operation and maintenance costs to the modern equivalent value of the distribution network assets.
PC	Profile Class
Relevant Objectives	<p>The relevant objectives, as defined in our Electricity Distribution Licence, are:</p> <p>(a) That compliance with the use of system charging methodology facilitates the discharge by the licensee of the obligations imposed on it under the Act and by this licence;</p> <p>(b) That compliance with the use of system charging methodology facilitates competition in the generation and supply of electricity, and does not restrict, distort, or prevent competition in the transmission or distribution of electricity;</p> <p>(c) That compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable (taking account of implementation costs), the costs incurred by the licensee in its distribution business; and</p> <p>(d) That, so far as is consistent with sub-paragraph (a), (b) and (c), the use of system charging methodology, as far as is reasonably practicable, properly takes account of developments in the licensee's distribution business.</p>
Retail Price Index (RPI)	The general index of retail prices published by the Office for National Statistics each month.
Supplier	The company from whom you purchase electricity, or to whom you sell the exported electricity from your generation.
Supplier Volume Allocation Agent (SVAA)	The BSC agent for Supplier Volume Allocation.
Supplier Volume Allocation (SVA)	The determination of quantities of active energy to be taken into account for the purposes of Settlement in respect of Supplier BM Units.