



**Statement of Charges for the
Use of the Electricity
Distribution System**

London Power
Networks plc

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1. Introduction

1.1. This Statement has been prepared in order to discharge the obligation of London Power Networks plc, hereafter referred to as “UK Power Networks”, under Standard Licence Condition 14 of our Distribution Licence. It contains information on our tariffs for Demand Use of System, Generation Use of System and Licensed Distribution Network Operators (LDNOs). It also contains information on our charging principles and our Loss Adjustment Factors.

1.2. If you have any questions about this Statement please contact us at the address shown below:

Chris Ong
Distribution Pricing Manager
UK Power Networks plc
Energy House
Hazelwick Avenue
Crawley
West Sussex
RH10 1EX
Email: DistributionPricing@ukpowernetworks.co.uk
Telephone 01293 657937

1.3. All enquiries regarding Connection Agreements and Changes to Maximum Capacities should be addressed to:

Connection Agreements Administration
UK Power Networks plc
Energy House
Hazelwick Avenue
Crawley
West Sussex
RH10 1EX
Email: ConnectionAgreements@ukpowernetworks.co.uk
Telephone 0808 1014131

2. Tariff Application and Charging Definitions

Billing and Payment by Settlement Class (Supercustomer)

2.1. The Supercustomer approach to Non Half Hourly (NHH) Distribution Use of System (DUoS) billing makes use of the way that Supplier's energy settlements are calculated. Supercustomer tariffs are generally billed through two main charging components: fixed charges and unit charges. The fixed charge is applied to each Metering Point Administration Number (MPAN) registered to a Supplier.

The charges are based on the following tariff components:

- A fixed charge in pence/MPAN/day; and
 - Unit charges in pence/kilowatt hour (kWh), based on the active import registers as provided by the metering system on site. More than one kWh charge will be applied to those tariffs that are classed as multi-rate.
- 2.2. Invoices are calculated on a periodic basis and sent to each supplier, for whom UK Power Networks is delivering supplies of electricity through its distribution system. The tariffs are applied on the basis of the LLFCs (Line Loss Factor Classes) registered to the MPAN, and the units consumed within the time periods specified in this Statement. These time periods may not necessarily be the same as those indicated by the TPR (Time Pattern Regime) associated to the settlement class. All LLFCs are assigned at the sole discretion of UK Power Networks. The charges in this document are shown exclusive of VAT. Invoices take account of previous reconciliation runs and include VAT.
- 2.3. Reconciliation is the process that ensures the cash positions of Suppliers and UK Power Networks are continually corrected to reflect later and more accurate consumption figures.
- 2.4. The tables within this document relating to NHH Supercustomer billed tariffs are:
- Table 1 for Profile Classes 1 and 2;
 - Table 2 for Profile Classes 3 and 4;
 - Table 3 for Profile Classes 5 to 8;
 - Table 6 for NHH Unmetered; and
 - Table 7 for Preserved Tariffs/Additional LLFCs (where applicable).
- 2.5. Where an MPAN has an invalid settlement combination, the 'Domestic Unrestricted' Unit and MPAN charge, which for suppliers can be found within table 1 of this document and for LDNOs can be found within table 11, which will be applied as default until the invalid combination is corrected. Where a tariff/MPAN has multiple

SSC-TPR combinations, the default 'Domestic Unrestricted' unit and MPAN charge will be applied for each invalid TPR combination.

Site Specific Billing and Payment

2.6. These charges apply to exit points where Half Hourly (HH) metering is installed. Invoices for HH metered sites may include the following elements:-

- A fixed charge in pence/MPAN/day;
- A capacity charge in pence/kVA/day, for agreed Maximum Import Capacity (MIC);
- An Exceeded Capacity Charge, if a site exceeds its MIC;
- Unit charges in pence/kWh for transport of electricity over the system; and
- An excess reactive power charge.

2.7. The tables within this document that relate to Site Specific tariffs are:

- Table 4 for HH metered High Voltage (HV) and Low Voltage (LV);
- Table 5 for HH metered Extra High Voltage (EHV);
- Table 6 for Pseudo HH Unmetered; and
- Table 7 for Preserved Tariffs/Additional LLFCs (where applicable).

Extra High Voltage (EHV) Supplies

2.8. Designated EHV properties are allocated Site Specific DUoS tariffs. These are defined in paragraph 11 of Standard Licence Condition 50A (Development and implementation of an EHV Distribution Charging Methodology) of the Electricity Distribution Licence as any of the following:

- 2.8.1. Distribution Systems connected to assets on the Licensee's Distribution System at a voltage level of 22 kilovolts or more;
- 2.8.2. premises connected to assets on the Licensee's Distribution System at a voltage level of 22 kilovolts or more; and
- 2.8.3. premises which do not fall within sub-paragraph 2.8.2 but which at 1 April 2010 were excluded from the Common Distribution Charging Methodology by virtue of paragraph 10 of Standard Licence Condition 50 (Development and implementation of Common Distribution Charging Methodology).

Unmetered Supplies

- 2.9. These charges are available to supplies which UK Power Networks deems to be suitable as Unmetered Supplies. In line with The Electricity (Unmetered Supply) Regulations we may only consider providing an unmetered supply where:
- 2.9.1. there is a known, predictable load which is either continuous or controlled in a manner approved by UK Power Networks, and
 - 2.9.2. the load is less than 500W or it is financially or technically impractical to install meters or carry out meter reading.
- 2.10. Supplies where consumption is dependent on some factor, temperature for example, or where the load could be easily increased without the knowledge of UK Power Networks will not normally be allowed to be connected without a meter.
- 2.11. The privilege of being connected without a meter is conditional on the customer providing and maintaining an accurate, detailed and auditable inventory.

Capacity Charges (Demand Only)

Chargeable Capacity

- 2.12. The standard charge will be a site's MIC multiplied by a pence/kVA/day rate.
- 2.13. The Chargeable Capacity for each billing period is the highest of either the MIC or the actual capacity, with the same charge rate applying throughout the relevant charging year.

Maximum Import Capacity

- 2.14. The MIC will be charged in pence/kVA/day on a site basis.
- 2.15. The level of MIC will be agreed at the time of connection or when an increase has been approved. Following such an agreement (be it at the time of connection or an increase) no reduction in MIC will be allowed for a period of one year.
- 2.16. Reductions to the MIC may only be permitted once in a 12 month period and no retrospective changes will be allowed. Where MIC is reduced the new lower level will be agreed with reference to the level of the customers' 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.
- 2.17. For LDNOs, if capacity ramping has been agreed with UK Power Networks in accordance with our charging methodology, the phasing profile will apply instead of the above rules. Where a phasing of capacity is agreed this will be captured in the bilateral connection agreement with UK Power Networks.

Standby Capacity for Additional Security on Site

2.18. Where standby Capacity Charges are applied, the charge will be set at the same rate as that applied to the normal MIC.

Exceeded Capacity

2.19. Where a customer takes additional capacity over and above the MIC without authorisation, the excess will be classed as Exceeded Capacity. The exceeded portion of the capacity will be charged at the same p/kVA/day rate, based on the difference between the MIC and the actual capacity. This will be charged for the duration of the month in which the breach occurs.

Minimum Capacity Levels

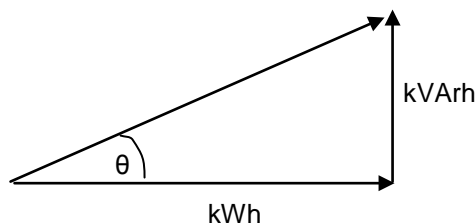
2.20. There is no Minimum Capacity threshold.

Import Reactive Power Charge

2.21. 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 tariff.

2.22. Power Factor is calculated as follows:

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



2.23. The chargeable Reactive Power is calculated as follows:

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

Where:

AI = Active Import in kWh

RI = Reactive Import in kVArh

RE = Reactive Export in kVArh

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

- 2.25. Only kVArh Import and kVArh Export values occurring at times of kWh Import are used.
- 2.26. The square root calculation will be to two decimal places.

Generation Billing and Payment by Settlement Class

- 2.27. UoS charges for NHH Low Voltage (LV) generation tariffs will be billed via Supercustomer.
- 2.28. The structure of NHH generation charges will be as follows:
 - A fixed charge in pence/MPAN/day; and
 - Unit charges in pence/kWh for transport of electricity over the system.
- 2.29. Details of our charges for NHH Generation can be found in Section 4.

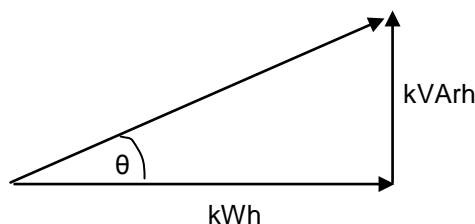
Generation Half Hourly Billing and Payment

- 2.30. UoS charges for HH Low Voltage (LV) and High Voltage (HV) generation tariffs will be billed via the HH billing systems.
- 2.31. The structure of HH generation charges will be as follows:
 - A fixed charge in pence/MPAN/day;
 - Unit charges in pence/kWh for transport of electricity over the system; and
 - An excess reactive power charge.
- 2.32. Details of our charges for HH Generation can be found in Section 4.

Generation Reactive Power Charge

- 2.33. 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 for at the rate appropriate to the particular tariff.
- 2.34. Power Factor is calculated as follows:

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



2.35. The chargeable reactive power is calculated as follows:

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

Where:

AE = Active Export in kWh

RI = Reactive Import in kVArh

RE = Reactive Export in kVArh

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

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

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

Generation Connected at EHV

2.39. Charges for EHV connected generation will be site specific. The charges will be set to recover the three elements of allowed revenue relevant to each particular EHV connected generator with reference to the actual cost of connection.

Provision of Billing Data

2.40. Where Half Hourly metering data is required for UoS charging and this is provided via settlement processes, UK Power Networks requires that this is sent using the D0036 MRA data flow with effect from a date notified to Data Collectors. Where Half Hourly metering data is required for UoS charging and this is not provided through settlements processes, such metering data shall be provided by the user of the system to UK Power Networks, in respect of each calendar month within five working days of the end of that calendar month. The metering data shall identify the amount consumed in each half hour of each day in the charging period 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 UK Power Networks 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. The data shall be e-mailed to duos.services@ukpowernetworks.co.uk.

2.41. UK Power Networks requires reactive consumption or production to be provided for all Measurement Class C (mandatory half hourly metered) sites. UK Power Networks reserves the right to levy a charge on suppliers who fail to provide such reactive data. In order to estimate missing reactive consumption, a Power Factor of 0.9 lag will be applied to the active consumption in any half hour.

Licensed Distributor Network Operator (LDNO) tariffs

- 2.42. LDNO tariffs have been calculated for use by LDNOs only to reflect the displacement of the upstream DNO distribution costs and are not available for DNO to DNO inter-connectors, connections to other offshore transmission networks or other similar connections. Use of System Charges for inter-connectors, offshore transmission connections or other similar connections will be based on the appropriate standard tariffs.

3. Schedule of Demand Tariffs

Tariffs for Profile Classes 1 & 2

- 3.1. Suppliers who wish to supply electricity to customers with Non Half Hourly metered (Measurement Class A) MPANs on Profile Classes 1 or 2 may adopt one of the charging structures set out in the table below.
- 3.2. Valid combinations for these Line Loss Factor Classes (LLFCs) are detailed in Market Domain Data (MDD).

Table 1 – NHH Tariffs for Profile Classes 1 & 2					
Description	LLFC	Profile Class	Fixed Charge (p/MPAN/day)	Day or Unrestricted Unit Charge (p/kWh)	Night Unit Charge (p/kWh)
Domestic Unrestricted	902	1	3.19	1.661	
	903				
	910				
Domestic Two Rate	906	2	3.19	2.085	0.227
	907				
Domestic Off Peak (Related MPAN)	911	2		0.239	
	914				
	915				
Notes:	<p>Unit time periods are as specified in the SSC.</p> <p>The Domestic Off Peak (Related MPAN) tariff is supplementary to a standard published tariff and therefore only available in conjunction with those tariffs.</p> <p>UK Power Networks uses a default tariff for invalid settlement combinations and those including MTC 800. The Domestic Unrestricted MPAN and unit charges from table 1 of this document for Suppliers will be applied to each invalid TPR.</p> <p>The Domestic Off Peak (Related MPAN) tariff does not include charges for cyclocontrol transmitters.</p>				

Tariffs for Profile Classes 3 & 4

3.3. Suppliers who wish to supply electricity to customers with non Half Hourly metered (Measurement Class A) MPANs on Profile Classes 3 or 4 may adopt one of the charging structures set out in the table below.

3.4. Valid combinations for these tariffs are detailed in MDD.

Table 2 – NHH Tariffs for Profile Classes 3 & 4					
Description	LLFC	Profile Class	Fixed Charge (p/MPAN/day)	Day or Unrestricted Unit Charge (p/kWh)	Night Unit Charge (p/kWh)
Small Non Domestic Unrestricted	952	3	3.43	1.095	
	953				
	960				
	961				
	970				
	971				
Small Non Domestic Two Rate	956	4	3.43	1.155	0.097
	957				
Small Non Domestic Off Peak (Related MPAN)	964	4		0.338	
	965				
Notes:	<p>Unit time periods are as specified in the SSC.</p> <p>The Small Non Domestic Off Peak (Related MPAN) tariff is supplementary to a standard published tariff and therefore only available in conjunction with those tariffs.</p> <p>UK Power Networks uses a default tariff for invalid settlement combinations and those including MTC 800. The Domestic Unrestricted MPAN and unit charges from table 1 of this document for Suppliers will be applied to each invalid TPR.</p> <p>The Small Non Domestic Off Peak (Related MPAN) tariff does not include charges for cyclocontrol transmitters.</p>				

Tariffs for Profile Classes 5 - 8

- 3.5. Suppliers who wish to supply electricity to customers with non Half Hourly metered (Measurement Class A) MPANs on Profile Classes 5 to 8 may adopt one of the charging structures set out in the table below.
- 3.6. Valid combinations for these tariffs are detailed in MDD.

Table 3 – NHH Tariffs for Profile Classes 5 to 8					
Description	LLFC	Profile Class	Fixed Charge (p/MPAN/day)	Day or Unrestricted Unit Charge (p/kWh)	Night Unit Charge (p/kWh)
LV Medium Non Domestic	400 - 407	5 - 8	26.86	1.239	0.133
LV Sub Medium Non Domestic					
Notes:	Unit time periods are as specified in the SSC. UK Power Networks uses a default tariff for invalid settlement combinations and those including MTC 800. The Domestic Unrestricted MPAN and unit charges from table 1 of this document for Suppliers will be applied to each invalid TPR.				

Tariffs for Half Hourly Metered LV and HV

3.7. Suppliers who wish to supply electricity to customers whose supplies are Half Hourly metered (Measurement Classes C or E) may adopt one of the charging structures shown below, dependent upon the voltage at which the customer is connected to the system. The UoS charge will be the sum of the charges set out in the table:

Table 4 – Tariffs for HH Metered LV & HV								
Description	LLFC	Fixed Charge (p/MPAN/day)	Capacity Charge (p/kVA/day)	Exceeded Capacity Charge (p/kVA/day)	Red Unit Charge (p/kWh)	Amber Unit Charge (p/kWh)	Green Unit Charge (p/kWh)	Excess Reactive Power Charge (p/kVArh)
LV HH Metered	9	10.07	2.07	2.07	3.184	0.273	0.080	0.370
LV Sub HH Metered	756	6.90	4.02	4.02	2.574	0.166	0.035	0.282
HV HH Metered	359	73.96	4.42	4.42	1.906	0.107	0.018	0.184
HV Sub HH Metered	771	73.96	2.13	2.13	1.812	0.100	0.016	0.207
Notes:	<p>Fixed charges are generally levied on a pence per MPAN basis. Where two or more Half Hourly import MPANs are located at the same point of connection, with the same LLFC, and registered to the same supplier, only one daily fixed charge will be applied.</p> <p>LV Sub applies to customers connected to the licensee's distribution system at a voltage of less than 1kV at a substation with a primary voltage (the highest operating voltage present at the substation) of at least 1kV and less than 22kV, where the current transformer used for the customer's settlement metering is located within the substation or where the substation is not accessible to the customer in an immediately adjacent housing or building.</p> <p>HV Sub applies to customers connected to the licensee's distribution system at a voltage of at least 1kV and less than 22kV at a substation with a primary voltage (the highest operating voltage present at the substation) of at least 22kV and less than 66kV, where the current transformer used for the customer's settlement metering or for metering used in the calculation of the customer's use of system charges or credits is located at the substation or where the substation is not accessible to the customer in an immediately adjacent housing or building.</p> <p>Where a site is found to be LV or HV Sub, we will backdate the LLFC/tariff for a maximum of three years, but no earlier than 1st April 2010.</p> <p>The time periods for each unit rate where applicable are as follows:</p> <p>Red Unit – 11:00 to 14:00 and 16:00 to 19:00, Monday to Friday, including Bank Holidays.</p> <p>Amber Unit – 07:00 to 11:00, 14:00 to 16:00 and 19:00 to 23:00, Monday to Friday, including Bank Holidays.</p> <p>Green Unit – All other times.</p> <p>All times shown in Clock Time.</p>							

Tariffs for Half Hourly Metered EHV

3.8. The following charges are calculated using UK Power Networks EHV Charging Methodology and are applied on a Site Specific basis.

Table 5 – Site Specific Tariffs for HH Metered EHV								
Description	LLFC	Fixed Charge (p/Site/Day)	Capacity Charge (p/kVA/Day)	Winter Peak Charge (p/kWh)	Winter Shoulder Charge (p/kWh)	Excess Reactive Power Charge 1 (p/kVArh)	Excess Reactive Power Charge 2 (p/kVArh)	Notes
Bankside 1, 2 & 3	808	3,421	5.108	0.000	0.000	0.132	0.165	
GSK Dartford	809	14,647	1.298	0.000	0.000	0.132	0.165	
LU Acton	N/A	3,212	0.135	0.000	0.000	0.132	0.165	1
LU Canal Junction	796	14,144	1.317	0.000	0.000	0.132	0.165	
LU Hoxton	796	17,242	1.157	0.000	0.000	0.132	0.165	
LU Lots Road	838	91,489	0.542	0.000	0.000	0.132	0.165	
LU Mansell Street	837	63,055	1.042	0.000	0.000	0.132	0.165	
LU Neasden	829	96,913	0.408	0.000	0.000	0.132	0.165	
LU Stephenson St E16	839	16,059	1.465	0.000	0.000	0.132	0.165	
NGC Barking Sub-station	817	683	0.000	0.000	0.000	0.132	0.165	
NR Bow	796	18,373	6.329	0.000	0.000	0.132	0.165	
NR Bromley 33kV	847	8,052	2.899	0.000	0.000	0.132	0.165	
NR Maiden Lane	840	957	8.272	0.000	0.000	0.132	0.165	
NR New Cross	845	60,246	0.794	0.000	0.000	0.132	0.165	
NR Poole St (City Rd)	846	963	2.447	0.000	0.000	0.132	0.165	
NR Poole St (Whiston Rd)	849	957	2.451	0.000	0.000	0.132	0.165	
NR Stephenson St	843	966	2.589	0.000	0.000	0.132	0.165	
NR West Ham 25kV	848	41,212	1.509	0.000	0.000	0.132	0.165	
NR Willesden 11kV	841	14,858	1.579	0.000	0.000	0.132	0.165	
NR Willesden 25kV	842	31,815	1.612	0.000	0.000	0.132	0.165	
NR Wimbledon	844	22,879	0.623	0.000	0.000	0.132	0.165	
Olympic Park & Stratford City IDNO	N/A	28,823	2.802	0.000	0.000	0.132	0.165	2
RRRL Belvedere	798	683	1.393	0.000	0.000	0.132	0.165	
Royal Docks	N/A	683	5.649	0.000	0.000	0.132	0.165	2
SELCHP	827	683	1.573	0.000	0.000	0.132	0.165	
S&S Dagenham Docks	N/A	4,675	0.021	0.000	0.000	0.132	0.165	2
S&S Thamesmead Temp 11kV	N/A	1,981	2.983	0.000	0.000	0.132	0.165	2
Taylors Lane Power Station	N/A	683	1.464	0.000	0.000	0.132	0.165	1
Telehouse West Data Centre	798	2,261	3.181	0.000	0.000	0.132	0.165	
Thames Water Beckton	828	61,155	0.352	0.000	0.000	0.132	0.165	
Notes:	1. CVA Site 2. Licensed Distribution Networks							

Unmetered Non Half Hourly and Pseudo Half Hourly Tariffs

3.9. Suppliers who wish to supply electricity to customers where a non Half Hourly unmetered (Measurement Class B) or pseudo Half Hourly (Measurement Class D) supply is provided may adopt one of the charging structures in the table below:

Table 6 – Tariffs for NHH and Pseudo HH Unmetered				
Description	LLFC	Red or Unrestricted Unit Charge (p/kWh)	Amber Unit Charge (p/kWh)	Green Unit Charge (p/kWh)
NHH Unmetered	420 - 435	1.424		
Pseudo HH Unmetered	500	8.864	1.203	0.636
Notes:	<p>UK Power Networks uses a default tariff for invalid NHH settlement combinations and those including MTC 800. The Domestic Unrestricted MPAN and unit charges from table 1 of this document for Suppliers will be applied to each invalid TPR.</p> <p>The above charges do not include any meter administration fees for pseudo metering required for the operation of the Balancing and Settlement Code, or any alternative agreement or Code, in accordance with the “Unmetered Supplies Procedure” – BSCP520.</p> <p>The time periods for each unit rate where applicable are as follows:</p> <p>Red Unit – 11:00 to 14:00 and 16:00 to 19:00, Monday to Friday, including Bank Holidays.</p> <p>Amber Unit – 07:00 to 11:00, 14:00 to 16:00 and 19:00 to 23:00. Monday to Friday, including Bank Holidays.</p> <p>Green Unit – All other times.</p> <p>All times shown in Clock Time.</p>			

Use of System Charges Out of Area

3.10. UK Power Networks does not operate out of its distribution service area.

Preserved Tariffs/Additional LLFC Classes

3.11. UK Power Networks has no preserved LLFCs at 1 October 2011, so these tables have been left intentionally blank.

Table 7a – Preserved Tariffs/Additional LLFC Classes					
Description	LLFC	Profile Class	Fixed Charge (p/MPAN/day)	Day or Unrestricted Unit Charge (p/kWh)	Night Unit Charge (p/kWh)

Table 7b – HH Preserved Tariffs/Additional LLFC Classes								
Description	LLFC	Fixed Charge (p/MPAN/day)	Capacity Charge (p/kVA/day)	Excess Capacity Charge (p/kVA/day)	Red Unit Charge (p/kWh)	Amber Unit Charge (p/kWh)	Green Unit Charge (p/kWh)	Excess Reactive Power Charge (p/kVArh)

4. Generation Tariffs

- 4.1. Suppliers who wish to purchase electricity from distributed generators with NHH metered (Measurement Class A) MPANs or with HH metered (Measurement Classes C or E) MPANs may adopt one of the charging structures shown below, depending upon the metered voltage.
- 4.2. The tariffs in Table 8a apply to sites metered at HV or LV. The Site Specific charges in Table 8b apply to sites metered at EHV.

Table 8a – Generation Tariffs						
Description	LLFC	Fixed Charge (p/MPAN/day)	Red or Unrestricted Unit Charge (p/kWh)	Amber Unit Charge (p/kWh)	Green Unit Charge (p/kWh)	Excess Reactive Power Charge (p/kVArh)
Non-Half Hourly Tariffs						
LV Generation NHH	753 762 763		-0.809			
LV Sub Generation NHH						
Half Hourly Tariffs						
LV Generation Intermittent	750		-0.809			0.410
LV Generation Non Intermittent	765		-3.670	-0.337	-0.104	0.410
LV Sub Generation Intermittent	781		-0.753			0.383
LV Sub Generation Non Intermittent	782		-3.453	-0.302	-0.090	0.383
HV Generation Intermittent	751	34.81	-0.548			0.333
HV Generation Non Intermittent	767	34.81	-2.699	-0.167	-0.033	0.333
HV Sub Generation Intermittent	791	34.81	-0.587			0.264
HV Sub Generation Non Intermittent	792	34.81	-2.905	-0.173	-0.033	0.264
Notes:	<p>UK Power Networks uses a default tariff for NHH invalid settlement combinations and those including MTC 800. The Domestic Unrestricted MPAN and unit charges from table 1 of this document for Suppliers will be applied to each invalid TPR.</p> <p>The time periods for each unit rate where applicable are as follows:</p> <p style="color: red;">Red Unit – 11:00 to 14:00 and 16:00 to 19:00, Monday to Friday, including Bank Holidays.</p> <p style="color: orange;">Amber Unit – 07:00 to 11:00, 14:00 to 16:00 and 19:00 to 23:00, Monday to Friday, including Bank Holidays.</p> <p style="color: green;">Green Unit – All other times.</p> <p>All times shown in Clock Time.</p>					

4.3. The following charges are calculated using UK Power Networks EHV charging methodology and are applied on a site specific basis:

Table 8b –Generation Tariffs for HH Metered EHV						
Description	LLFC	Fixed Charge (p/site/Day)	Capacity Charge (p/kVA/Day)	Excess Reactive Power Charge 1 (p/kVArh)	Excess Reactive Power Charge 2 (p/kVArh)	Notes
GSK Dartford	799	0.0	0.000	0.000	0.000	
LU Neasden	728	0.0	0.000	0.000	0.000	1
NR Bow	799	0.0	0.000	0.000	0.000	
NR West Ham 25kV	799	0.0	0.000	0.000	0.000	
NR Willesden 25kV	799	0.0	0.000	0.000	0.000	
RRRL Belvedere	799	0.0	0.173	0.000	0.000	
SELCHP	730	526.0	0.000	0.000	0.000	
Taylors Lane Power Station	N/A	0.0	0.000	0.000	0.000	2
Thames Water Beckton	799	0.0	0.000	0.000	0.000	
Notes:	1. Treated in settlement as an ‘Export’ site, but is actually flow through. 2. CVA site.					

4.4. UK Power Networks has no preserved Generation LLFCs at 1 October 2011.

5. Licensed Distributor Network Operator (LDNO) Tariffs

- 5.1. LDNO tariffs have been calculated for use by LDNOs only to reflect the displacement of the upstream DNO distribution costs and are not available for DNO to DNO inter-connectors, connections to other offshore transmission networks or other similar connections. Use of System Charges for inter-connectors, offshore transmission connections or other similar connections will be based on the appropriate standard tariffs.
- 5.2. The tariff structure for embedded network operators will mirror the structure of the ‘All the Way’ tariff and is dependent upon the voltage of connection, either LV or HV. The same tariff elements will apply.

LDNO LV Connections to DNO Network: Low Voltage Tariffs for Profile Classes 1 to 8

- 5.3. The following tariffs apply to the LDNOs whose connection to the distribution network is at LV.

Table 9 – LDNO LV Connections to DNO Network: Low Voltage Tariffs for Profile Classes 1 to 8					
Description	LLFC	Profile Class	Fixed Charge (p/MPAN/day)	Day or Unrestricted Unit Charge (p/kWh)	Night Unit Charge (p/kWh)
Domestic Unrestricted		1	2.53	1.319	
Domestic Two Rate		2	2.53	1.656	0.180
Domestic Off Peak (Related MPAN)		2		0.190	
Small Non Domestic Unrestricted		3	2.72	0.869	
Small Non Domestic Two Rate		4	2.72	0.917	0.077
Small Non Domestic Off Peak (Related MPAN)		4		0.268	
LV Medium Non Domestic		5 - 8	21.33	0.984	0.106
NHH Unmetered		1&8		1.131	
LV Generation NHH		8		-0.809	
Notes:	<p>Unit time periods are as specified in the SSC.</p> <p>The Non Domestic Off Peak (Related MPAN) tariff is supplementary to a standard published tariff and therefore only available in conjunction with those tariffs.</p> <p>UK Power Networks uses a default tariff for invalid NHH settlement combinations and those including MTC 800. The Domestic Unrestricted MPAN and unit charges from table 11 of this document for LDNOs will be applied to each invalid TPR.</p>				

LDNO LV Connections to DNO Network: Low Voltage Tariffs for HH Metered Customers

5.4. The following tariffs apply to LDNOs whose connection to the distribution network is at LV.

Table 10 – LDNO LV Connections to DNO Network: Low Voltage Tariffs for HH Metered Customers								
Description	LLFC	Fixed Charge (p/MPAN/ day)	Capacity Charge (p/kVA/ day)	Exceeded Capacity Charge (p/kVA/day)	Red or Unrestricted Unit Charge (p/kWh)	Amber Unit Charge (p/kWh)	Green Unit Charge (p/kWh)	Excess Reactive Power Charge (p/kVAh)
LV HH Metered		8.00	1.64	1.64	2.528	0.217	0.064	0.294
Pseudo HH Unmetered					7.038	0.955	0.505	
LV Generation Intermittent					-0.809			0.410
LV Generation Non Intermittent					-3.670	-0.337	-0.104	0.410
Notes:	<p>The time periods for each unit rate where applicable are as follows:</p> <p>Red Unit – 11:00 to 14:00 and 16:00 to 19:00, Monday to Friday, including Bank Holidays.</p> <p>Amber Unit – 07:00 to 11:00, 14:00 to 16:00 and 19:00 to 23:00, Monday to Friday, including Bank Holidays.</p> <p>Green Unit – All other times.</p> <p>All times shown in Clock Time.</p>							

LDNO HV Connections to DNO Network: Low Voltage Tariffs for Profile Classes 1 to 8

5.5. The following tariffs apply to LDNOs whose connection to the distribution network is at HV.

Table 11 – LDNO HV Connections to DNO Network: Low Voltage Tariffs for Profile Classes 1 to 8					
Description	LLFC	Profile Class	Fixed Charge (p/MPAN/day)	Day or Unrestricted Unit Charge (p/kWh)	Night Unit Charge (p/kWh)
Domestic Unrestricted		1	1.77	0.923	
Domestic Two Rate		2	1.77	1.159	0.126
Domestic Off Peak (Related MPAN)		2		0.133	
Small Non Domestic Unrestricted		3	1.91	0.609	
Small Non Domestic Two Rate		4	1.91	0.642	0.054
Small Non Domestic Off-Peak (Related MPAN)		4		0.188	
LV Medium Non Domestic		5 – 8	14.93	0.689	0.074
NHH Unmetered		1 & 8		0.792	
LV Generation NHH		8		-0.809	
Notes:	<p>Unit time periods are as specified in the SSC.</p> <p>The Small Non Domestic Off Peak (Related MPAN) tariff is supplementary to a standard published tariff and therefore only available in conjunction with those tariffs.</p> <p>UK Power Networks uses a default tariff for invalid NHH settlement combinations and those including MTC 800. The Domestic Unrestricted MPAN and unit charges from table 11 of this document for LDNOs will be applied to each invalid TPR.</p>				

LDNO HV Connections to DNO Network: High Voltage Tariffs for HH Metered Customers

5.6. The following tariffs apply to LDNOs whose connection to the distribution network is at HV.

Table 12 – LDNO HV Connections to DNO Network: Low Voltage and High Voltage Tariffs for HH Metered Customers								
Description	LLFC	Fixed Charge (p/MPAN/ day)	Capacity Charge (p/kVA/ day)	Exceeded Capacity Charge (p/kVA/ day)	Red or Unrestricted Unit Charge (p/kWh)	Amber Unit Charge (p/kWh)	Green Unit Charge (p/kWh)	Excess Reactive Power Charge (p/kVArh)
LV HH Metered		5.60	1.15	1.15	1.770	0.152	0.044	0.206
Pseudo HH Unmetered					4.927	0.669	0.354	
LV Sub HH Metered		5.11	2.98	2.98	1.907	0.123	0.026	0.209
HV HH Metered		61.02	3.65	3.65	1.573	0.088	0.015	0.152
LV Generation Intermittent					-0.809			0.410
LV Generation Non Intermittent					-3.670	-0.337	-0.104	0.410
LV Sub Generation Intermittent					-0.753			0.383
LV Sub Generation Non Intermittent					-3.453	-0.302	-0.090	0.383
HV Generation Intermittent					-0.548			0.333
HV Generation Non Intermittent					-2.699	-0.167	-0.033	0.333

Continued overleaf ...

Notes:	<p>LV Sub applies to customers connected to the licensee's distribution system at a voltage of less than 1kV at a substation with a primary voltage (the highest operating voltage present at the substation) of at least 1kV and less than 22kV, where the current transformer used for the customer's settlement metering is located within the substation or where the substation is not accessible to the customer in an immediately adjacent housing or building.</p> <p>HV Sub applies to customers connected to the licensee's distribution system at a voltage of at least 1kV and less than 22kV at a substation with a primary voltage (the highest operating voltage present at the substation) of at least 22kV and less than 66kV, where the current transformer used for the customer's settlement metering or for metering used in the calculation of the customer's use of system charges or credits is located at the substation or where the substation is not accessible to the customer in an immediately adjacent housing or building.</p> <p>The time periods for each unit rate where applicable are as follows:</p> <p>Red Unit – 11:00 to 14:00 and 16:00 to 19:00, Monday to Friday, including Bank Holidays.</p> <p>Amber Unit – 07:00 to 11:00, 14:00 to 16:00 and 19:00 to 23:00, Monday to Friday, including Bank Holidays.</p> <p>Green Unit – All other times.</p> <p>All times shown in Clock Time.</p>
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6. System Loss Adjustment Factors

Role of Loss Adjustment Factors in the Supply of Electricity

- 6.1. Authorised Electricity Operators providing a supply of electricity from any entry point into UK Power Networks 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.
- 6.2. 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). Table 14 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.
- 6.3. The treatment of electrical losses on our distribution system is 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 in the settlement system.
- 6.4. LAFs are calculated in accordance with BSCP128. BSCP128 determines the principles with which DNOs must comply when setting LAFs. Our methodology can be downloaded from the Elexon website, www.Elexon.co.uk.

Site Specific Loss Adjustment Factors

- 6.5. In accordance with BSCP128, where a site is metered at EHV, account will be taken of the individual characteristics and location with regard to the real electrical flows on the network, including any losses on the connection into UK Power Networks electricity distribution network. New EHV connections will be allocated a generic EHV loss factor from Table 14 dependent on the voltage of connection.
- 6.6. Tables 15a and 15b indicate the factors by which supplies entering at the Grid Supply Point must exceed the take at the exit point from the system, varying according to the time of day, the season and the voltage of connection. The LAFs reflect the total losses on the company's system as attributable to the relevant voltages.
- 6.7. The Elexon website contains the LAFs in standard industry data format (D0265). Details can be found within the Market data – Static data area at www.Elexon.co.uk

Table 13 – LAF Time Periods		
Period 1	Peak	16:00 – 19:59, Monday to Friday Between November and February
Period 2	Summer Peak	07:00 – 19:59, Monday to Friday between June and August
Period 3	Winter Shoulder	07:00 – 15:59, Monday to Friday between November and February 07:00 – 19:59, Monday to Friday during March
Period 4	Night	00:00 – 06:59, All Year
Period 5	Other	All Other Times
Notes:	All times are shown in UK Clock time	

Table 14 – Metered Voltage, Respective Periods and Associated LLFCs Demand						
Metered Voltage	Period 1	Period 2	Period 3	Period 4	Period 5	Associated LLFC
LV Network NHH	1.065	1.054	1.060	1.044	1.053	902,903,910,906,907, 911,914,915,952,953,960, 961,970,971,956,957, 964,965,400-407, 420-435
LV Network HH	1.065	1.054	1.060	1.044	1.053	9,500
LV Sub	1.044	1.038	1.041	1.032	1.037	756
HV Network	1.029	1.025	1.028	1.020	1.024	359
HV Sub	1.028	1.025	1.027	1.023	1.025	771
33kV Generic	1.021	1.018	1.020	1.016	1.018	796
132kV Generic	1.001	1.001	1.001	1.001	1.001	798
Generation						
Metered Voltage	Period 1	Period 2	Period 3	Period 4	Period 5	Associated LLFC
LV Network NHH	1.065	1.054	1.060	1.044	1.053	753,762,763
LV Network HH	1.065	1.054	1.060	1.044	1.053	750,765
LV Sub	1.044	1.038	1.041	1.032	1.037	781,782
HV Network	1.029	1.025	1.028	1.020	1.024	751,767
HV Sub	1.028	1.025	1.027	1.023	1.025	791,792
33kV Generic	1.021	1.018	1.020	1.016	1.018	797
132kV Generic	1.001	1.001	1.001	1.001	1.001	799

Table 15a –EHV Site Specific Demand

MDD Description	Period 1	Period 2	Period 3	Period 4	Period 5	Associated LLFC
Bankside 1, 2 & 3	1.039	1.033	1.036	1.026	1.032	808
GSK Dartford	1.012	1.011	1.012	1.010	1.010	809
LU Acton	1.000	1.000	1.000	1.000	1.000	N/A
LU Canal Junction	1.021	1.018	1.020	1.016	1.018	796
LU Hoxton	1.021	1.018	1.020	1.016	1.018	796
LU Lots Road	1.010	1.009	1.010	1.006	1.008	838
LU Mansell Street	1.008	1.007	1.008	1.006	1.007	837
LU Neasden	1.013	1.012	1.013	1.011	1.012	829
LU Stephenson St E16	1.007	1.006	1.006	1.004	1.007	839
NGC Barking Sub-station	1.000	1.000	1.000	1.000	1.000	817
NR Bow	1.021	1.018	1.020	1.016	1.018	796
NR Bromley 33kV	1.030	1.027	1.028	1.026	1.026	847
NR Maiden Lane	1.030	1.026	1.028	1.025	1.025	840
NR New Cross	1.004	1.003	1.004	1.003	1.003	845
NR Poole St (City Rd)	1.017	1.014	1.011	1.057	1.013	846
NR Poole St (Whiston Rd)	1.027	1.020	1.021	1.098	1.016	849
NR Stephenson St	1.024	1.023	1.023	1.022	1.023	843
NR West Ham 25kV	1.022	1.020	1.020	1.017	1.019	848
NR Willesden 11kV	1.011	1.011	1.011	1.009	1.010	841
NR Willesden 25kV	1.008	1.008	1.008	1.006	1.007	842
NR Wimbledon	1.013	1.011	1.012	1.009	1.011	844
Olympic Park & Stratford City IDNO	1.021	1.019	1.020	1.016	1.019	N/A
Royal Docks	1.021	1.019	1.020	1.016	1.019	N/A
RRRL Belvedere	1.001	1.001	1.001	1.001	1.001	798
SELCHP	1.014	1.013	1.012	1.011	1.012	827
S&S Dagenham Docks	1.021	1.019	1.020	1.016	1.019	N/A
S&S Thamesmead Temp 11kV	1.021	1.019	1.020	1.016	1.019	N/A
Taylor's Lane Power Station	1.000	1.000	1.000	1.000	1.000	N/A
Telehouse West Data Centre	1.001	1.001	1.001	1.001	1.001	798
Thames Water Beckton	1.008	1.004	1.007	1.003	1.006	828

Table 15b–EHV Site Specific Generation

MDD Description	Period 1	Period 2	Period 3	Period 4	Period 5	Associated LLFC
GSK Dartford	1.001	1.001	1.001	1.001	1.001	799
LU Neasden	1.021	1.019	1.020	1.016	1.019	728
NR Bow	1.001	1.001	1.001	1.001	1.001	799
NR West Ham 25kV	1.001	1.001	1.001	1.001	1.001	799
NR Willesden 25kV	1.001	1.001	1.001	1.001	1.001	799
RRRL Belvedere	1.001	1.001	1.001	1.001	1.001	799
SELCHP	1.000	0.999	0.999	0.998	0.999	730
Taylors Lane Power Station	1.000	1.000	1.000	0.999	1.000	N/A
Thames Water Beckton	1.001	1.001	1.001	1.001	1.001	799

7. Electricity Distribution Rebates

- 7.1. UK Power Networks has neither given nor announced any distribution system rebates to authorised electricity operators in the 12 months preceding the date of publication of this revision of the Statement.

8. Accounting and Administration Services

- 8.1. No Accounting and Administration charges are detailed within this Statement, please refer to our Statement of Miscellaneous Charges for details of transactional charges and other notices.

9. Charges for Electrical Plant Provided Ancillary to the Grant of Use of System

- 9.1. No charges for Electrical Plant Provided Ancillary to the Grant of Use of System are detailed within this Statement, please refer to our Statement of Miscellaneous Charges for details of transactional charges and other Statements.

10. Glossary of Terms

10.1. The following definitions are included to aid understanding:

Term	Definition
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.
Distribution Licence	The Electricity Distribution Licence granted or treated as granted pursuant to section 6(1) of the Act.
Distribution Services Area	Has, in respect of each company, the meaning given to that term in paragraph 5(b) of Condition 2 of the Distribution Licence.
Distribution Connection and Use of System Agreement (DCUSA)	The DCUSA is a multi party contract between Licensed Electricity Distributors, Suppliers and Generators within Great Britain.
Extra High Voltage (EHV)	Voltages of 22kV and above.
Entry Point	A boundary point at which electricity is exported onto a distribution system from a connected installation or from 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 boundary point at which electricity is imported from 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).
High Voltage (HV)	Nominal voltages of at least 1kV and less than 22kV.
High Voltage Sub-Station (HV Sub)	HV Sub applies to customers connected to the licensee's distribution system at a voltage of at least 1kV and less than 22kV at a substation with a primary voltage (the highest operating voltage present at the substation) of at least 22kV and less than 66kV, where the current transformer used for the customer's settlement metering or for metering used in the calculation of the customer's use of system charges or credits is located at the substation.
Intermittent Generation	Intermittent generation is defined as a generation plant where the energy source of the prime mover cannot be made available on demand, in accordance to the definitions in ER P2/6. These include wind, tidal, wave, photovoltaic and small hydro. The operator has little control over operating times therefore, a single-rate tariff (based on a uniform probability of operations across the year) will be applied to intermittent generation.

Low Voltage (LV)	Nominal voltages below 1kV.
Low Voltage Sub-Station (LV Sub)	LV Sub applies to customers connected to the licensee's distribution system at a voltage of less than 1kV at a substation with a primary voltage (the highest operating voltage present at the substation) of at least 1kV and less than 22kV, where the current transformer used for the customer's settlement metering is located at the substation.
Licensed Distributor Network Operator	Licensed Distribution Network Operator (LDNO). This refers to an Independent Distribution Network Operator (IDNO) or to a Distribution Network Operator (DNO) operating embedded distribution network outside its distribution service area.
Market Domain Data	Market Domain Data is the central repository of reference data used by Suppliers, Supplier Agents and Licensed Distribution System Operators (LDSOs) in the retail electricity market. It is essential to the operation of Supplier Volume Allocation (SVA) Trading Arrangements.
Measurement Class	The Measurement Class of a Metering System e.g. above 100kW, below 100kW, unmetered.
MTC	Meter Timeswitch Code.
Non Intermittent Generation	Non-intermittent generation is defined as a generation plant where the energy source of the prime mover can be made available on demand, in accordance to the definitions in ER P2/6. The generator can choose when to operate, and bring more benefits to the network if it runs at times of high load. These include combined cycle gas turbine (CCGT), gas generators, landfill, sewage, biomass, biogas, energy crop, waste incineration and combined heat and power (CHP). A three-rate tariff will be applied to generation credits for half-hourly settled non-intermittent generation.
Ofgem	The Office of Gas and Electricity Markets - Ofgem is governed by GEMA and is responsible for the regulation of the distribution companies.
SSC	Standard Settlement Configuration.
TPR	Time Pattern Regime.
Use of System Charges	Charges for demand and generation customers which are connected to and utilising the distribution network.
User	Is a Supplier, Generator or Distribution Network Operator.