

STATEMENT OF CHARGES FOR USE OF ELECTRICITY NORTH WEST LIMITED'S ELECTRICITY DISTRIBUTION NETWORK

This statement is effective from 1 October 2008

This statement is in a form approved by the Gas and
Electricity Markets Authority (GEMA)

Dalton House,
104 Dalton Avenue,
Birchwood Park,
Birchwood,
Warrington,
WA3 6YF.

Registered No. 2366949 (England)

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1. Introduction

- 1.1 This statement has been produced by Electricity North West to inform Suppliers, Generators and Independent Distribution Network Operators (IDNO) of our Use of System Charges. It has been constructed in a way which reflects the requirements of Standard Condition 14 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 1 (a) of SLC14, 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 Electricity North West regarding any aspect of this document please write to or telephone our Commercial Manager at:

Electricity North West Limited,
Regulation Department,
Dalton House,
104 Dalton Avenue,
Birchwood Park,
Birchwood,
Warrington.
WA3 6YF.
Telephone: 01925 534416

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 Electricity North West's Settlements (supercustomer) related tariffs and their structures, as shown in our Market Domain Data tables, and the conditions of use of these tariffs. We enclose a web-link below from which you can gain direct access to our supercustomer Settlement Class combinations and their respective tariffs.

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2.2 Electricity North West will charge supercustomer tariffs through two main charging components, which are fixed charges and kWh charges. There will only be one fixed charge applied to each MPAN or Connection Point to which you are registered. 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 Electricity North West's 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 for Profile Classes 1 and 2;
- Table 3.2 for Profile Classes 3 and 4;
- Table 3.5 for Preserved tariffs (Profile Classes 1, 2, 3 and 4).

Site specific billing and payment

2.5 The following paragraphs are provided to aid your understanding of Electricity North West's site specific tariffs and their structures, as shown in our Market Domain Data tables, and the conditions of use for these tariffs. These charges will relate to a specific Customer site or Connection Point, and are therefore billed on an individual site basis. We enclose a web-link below from which you can gain direct access to our site specific Settlement Class combinations and their respective tariffs.

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2.6 Electricity North West's 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;
- Availability charges to reflect the site capacity usage;
- kVArh charges which apply at sites with a power factor worse than 0.95 lagging and leading.

2.7 Electricity North West's charges vary according to the voltage of the supply and application is limited on supply capacity and/or unit consumption. Where these charges are not appropriate due to special circumstances, we may offer alternative terms. 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 3.3 for NHH Maximum Demand use of system tariffs;
- Table 3.4 for HH Maximum Demand use of system tariffs;
- Table 3.5 for Preserved NHH and HH Maximum Demand use of system tariffs;
- Table 3.6 for Unmetered Supplies use of system tariffs.

Unmetered supplies

2.9 These tariffs are available for supplies, which Electricity North West 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
- b) where the load is small (individually less than 500W, in the case of public lighting less than 500W per column) 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 Electricity North West 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 Electricity North West has approved the inventory, via the certificate of Estimated Annual Consumption, the supplies will qualify for the lower Scale 1 charge.

Extra High Voltage supplies

2.10 EHV sites are allocated site specific use of system tariffs. EHV sites are defined, in Special Condition A1 of the Electricity Distribution Licence, as sites, connected to Electricity North West's distribution system at a voltage of higher than 22 kV, or at a substation with a primary voltage of 66 kV or above. In practice, this means sites with Exit Points at 132 kV, 33 kV, and 25 kV or at a 132/11 kV substation.

Supply Capacity

2.11 For those tariffs contained within Tables 3.3 and 3.5, for Non-Half Hourly Maximum Demand Customers, Electricity North West will determine the Supply Capacity in kilovolt-amperes (kVA) **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

For i) above, the power factor will be derived from the advances of the kVAh and kWh meters.

2.12 For those tariffs contained within Tables 3.4 and 3.5, for Half Hourly Maximum Demand Customers, Electricity North West will determine the Import Supply Capacity in kilovolt-amperes (kVA), by selecting the maximum half hour Supply Capacity value

calculated using the formula below applied to the half hourly data from the billing period:

$$\text{Import Supply Capacity} = 2 \times \sqrt{(\text{kWh IMPORT})^2 + (\text{kVArh IMPORT})^2}$$

Supply Capacity – Half Hourly (Import and Export site)

2.13 For those Distributed Generation customers with an agreed Maximum Export Capacity we will determine the Import Supply Capacity in kilovolt-amperes (kVA), by selecting the maximum half hour Supply Capacity value from every time period of net Active Import calculated using the formula below applied to the half hourly data from the billing period:

$$\text{Import Supply Capacity} = 2 \times \sqrt{(\text{kWh IMPORT})^2 + (\text{Maximum of kVArh IMPORT \& kVArh EXPORT})^2}$$

Authorised Supply Capacity

2.14 The Authorised Supply Capacity in kilovolt-amperes (kVA) is the capacity to be provided at the Exit Point, as agreed between the Customer and Electricity North West. This will be stated in the Connection Agreement covering the premises. The Supplier will also be notified of this authorised figure, by us, when he takes over registration of the premises. An IDNO may also be notified of this authorised figure for each Connection Point.

Chargeable Supply Capacity

2.15 The Authorised Supply Capacity cannot be reduced within the first twelve months of a new or increased capacity being provided at an Exit Point. If the Customer or IDNO does not commence, or if he ceases to take energy, or if he changes to a non-Maximum Demand tariff, the use of system content of any availability charges for this period shall become payable as a lump sum.

2.16 The chargeable supply capacity (kVA) shall, for any month, be the highest of:

- the Supply Capacity in that month;
- the Supply Capacity in any of the previous eleven months; or
- the Authorised Supply Capacity.

2.17 If the monthly calculated Supply Capacity falls significantly below the Authorised Supply Capacity, Electricity North West reserves the right to negotiate a new Authorised Supply Capacity.

2.18 In any case, the chargeable supply capacity shall have a minimum value for:

use of system tariffs for LV and LVS supplies	20 kVA
use of system tariffs for HV, HVP and EHV supplies	40 kVA

Reactive Power Charges

2.19 Reactive power charges are applied in order to reflect the additional costs to the network of the operation of load or generation at less than 0.95 power factor.

2.20 A time period is a half hour for a half hourly metered customer and a month for a non-half hourly metered customer.

Import only site

- 2.21 For each kVArh consumed in excess of 33% of the number of active units (kWh) imported in each time period, a Reactive Power charge shall be made. This calculation shall be undertaken for each time period and summated over the month. Should the calculated value in a time period be negative then the Chargeable kVArh for that time period shall be set to zero.

$$\text{Chargeable kVArh} = \text{Maximum of } [(kVArh \text{ IMPORT}) - (0.33 \times kWh \text{ IMPORT})] \text{ and } 0$$

Import and Export site

- 2.22 The calculations are applied for each time period, and a different calculation is applied in periods of net Active Import or net Active Export respectively. Where there are no Active Import or Active Export flows both calculations are set to zero.
- 2.23 In each time period of net Active Import a Reactive Power charge shall be made in respect of the excess reactive units (kVArh). These are calculated for each time period as the greater of the excess of Reactive Import or Reactive Export units over 33% of the number of Active Import units (kWh). Should this calculation for a time period lead to a negative value then it is set to zero. This calculation shall be undertaken for each time period of net Active Import and summated over the billing period.

$$\text{Chargeable kVArh} = \text{Maximum of } [\text{Maximum of } kVArh \text{ IMPORT \& } kVArh \text{ EXPORT} - (0.33 \times kWh \text{ IMPORT})] \text{ and } 0$$

- 2.24 In each time period of net Active Export a Reactive Power charge shall be made in respect of the excess reactive units (kVArh). These are calculated for each time period as the greater of the excess of Reactive Import or Reactive Export units over 33% of the number of Active Export units (kWh). Should this calculation for a time period lead to a negative value then it is set to zero. This calculation shall be undertaken for each time period of net Active Export and summated over the billing period.

$$\text{Chargeable kVArh} = \text{Maximum of } [\text{Maximum of } kVArh \text{ IMPORT \& } kVArh \text{ EXPORT} - (0.33 \times kWh \text{ EXPORT})] \text{ and } 0$$

Generation

Generation supplies

- 2.11 Details of Electricity North West's Generation Distribution Use of System (GDUoS) tariffs are provided in Section 4 of this statement.

The charges contained in this section will be based on the charging methodologies for Distributed Generation connections, which are contained in our Licence Condition 4 statement.

3. Schedule of Demand Tariffs

UoS Charges for Non-Half Hourly (NHH) Connections - available from 1 April 2008

Table 3.1 Tariffs for Profile Classes 1&2

Description	LLFC	Market	PC	Fixed charge (p/MPAN/day)	Day unit charge (p/kWh)	Night unit charge (p/kWh)	Other unit charge (p/kWh)	Capacity charge £/kVA/month	UMS charge £/kW/month	Reactive charge p/kVArh	Tariff closed to new customers
Domestic Unrestricted	11	NHH Import	1	4.98	1.34						N
Domestic Economy 7	31	NHH Import	2	4.98	1.51	0.12					N
Domestic Unrestricted PPM Smartcard	41	NHH Import	1	4.98	1.34						N
Domestic Economy 7 PPM Smartcard	51	NHH Import	2	4.98	1.51	0.12					N
Domestic Smart 7	61	NHH Import	2	4.98	2.11	0.12	1.24				N
Domestic Economy 10	421	NHH Import	2	4.98	1.95	0.14					N
Domestic Unrestricted PPM, Token	441	NHH Import	1	4.98	1.34						N
Domestic Economy 7 PPM, Token	451	NHH Import	2	4.98	1.51	0.12					N
Domestic Unrestricted	511	NHH Import	1	4.98	1.34						N
Domestic Economy 7	531	NHH Import	2	4.98	1.51	0.12					N
Domestic Unrestricted PPM	541	NHH Import	1	4.98	1.34						N
Domestic Economy 7 PPM	551	NHH Import	2	4.98	1.51	0.12					N
Domestic Smart 7	561	NHH Import	2	4.98	2.11	0.12	1.24				N
Domestic Economy 10	621	NHH Import	2	4.98	1.95	0.14					N

Accompanying Notes for Profile Classes 1&2

- **Distribution Use of System LLF Codes 11, 31, 41, 51, 61, 421, 441, 451, 511, 531, 541, 551, 561 and 621** are primarily designed for domestic premises. Domestic premises are premises, used exclusively as private dwellings. These LLF codes can also be used in premises used for residential business purposes, including boarding houses, hotels, hostels, homes for children and the elderly, premises divided into flats, or bed-sitting rooms, and caravan sites under the following conditions:
 - a) where the supply is single phase and the capacity required is no greater than 24 kVA;
 - b) where the premises are unlicensed;
 - c) where a caravan site supply is to provide electricity for use only for caravans used as dwellings

Metering:- Tariffs for Profile Classes 1&2

DUoS TARIFF	APPLICATION	DUoS METERING FUNCTIONALITY
Domestic Unrestricted	Single phase or Polyphase credit meter	kWh 1 rate
Domestic Economy 7	Single phase or Polyphase credit meter	kWh 2 rate
Domestic Unrestricted PPM, Smartcard	Single phase smartcard prepayment meter	kWh 1 rate
Domestic Economy 7 PPM, Smartcard	Single phase smartcard prepayment meter	kWh 2 rate
Domestic Smart 7	Single phase credit meter	kWh 3 rate
Domestic Economy 10	Single or Polyphase credit meter	kWh 2 rate
Domestic Unrestricted PPM, Token	Single phase token prepayment meter	kWh 1 rate
Domestic Economy 7 PPM, Token	Single phase token prepayment meter	kWh 2 rate
Domestic Unrestricted PPM	Single phase smartcard, token or key prepayment meter	kWh 1 rate
Domestic Economy 7 PPM	Single phase smartcard, token or key prepayment meter	kWh 2 rate

Table 3.2 Tariffs for Profile Classes 3&4

Description	LLFC	Market	PC	Fixed charge (p/MPAN/day)	Day unit charge (p/kWh)	Night unit charge (p/kWh)	Other unit charge (p/kWh)	Capacity charge £/kVA/month	UMS charge £/kW/month	Reactive charge p/kVArh	Tariff closed to new customers
Non Domestic Unrestricted	131	NHH Import	3	7.92	1.33						N
Non Domestic Economy 7	161	NHH Import	4	7.92	1.48	0.09					N
Non Domestic Economy 7 Evening & Weekend	171	NHH Import	4	7.92	1.94	0.09	0.23				N
Non Domestic Unrestricted	631	NHH Import	3	7.92	1.33						N
Non Domestic Economy 7	661	NHH Import	4	7.92	1.48	0.09					N
Non Domestic Economy 7 Evening & Weekend	671	NHH Import	4	7.92	1.94	0.09	0.23				N

Accompanying Notes for Profile Classes 3&4

- **Distribution Use of System LLF Codes 131 and 631** are only available for supplies with limits on capacity of 60 kVA and limits on consumption of 100,000 kWh per annum.
- **Distribution Use of System LLF Codes 161, 171, 661 and 671** are only available for supplies with limits on the daytime capacity of 60 kVA and limits on daytime consumption of 100,000 kWh per annum.

Metering:- Tariffs for Profile Classes 3&4

DUoS TARIFF	APPLICATION	DUoS METERING FUNCTIONALITY
Non-Domestic Unrestricted	Single phase or Polyphase credit meter from LV network, taking less than 60kVA	kWh 1 rate
Non-Domestic Economy 7	Single phase or Polyphase credit meter from LV network, taking less than 60kVA	kWh 2 rate
Non-Domestic Economy 7 Evening & Weekend	Single phase or Polyphase credit meter from LV network, taking less than 60kVA	kWh 3 rate

Table 3.3 Tariffs for Profile Classes 5-8

Description	LLFC	Market	PC	Fixed charge (p/MPAN/day)	Day unit charge (p/kWh)	Night unit charge (p/kWh)	Other unit charge (p/kWh)	Capacity charge £/kVA/month	UMS charge £/kW/month	Reactive charge p/kVArh	Tariff closed to new customers
LV MD (NHH Metering)	201	NHH Import	5,6,7,8	1255	0.43	0.09		1.47		0.62	N
LVS MD (NHH Metering)	202	NHH Import	5,6,7,8	2470	0.26	0.11		1.33		0.54	N
HV MD (NHH Metering)	203	NHH Import	5,6,7,8	14560	0.24	0.06		1.16		0.28	N
LV SToD (NHH Metering)	211	NHH Import	5,6,7,8	1255	0.43	0.09		1.47		0.62	N
LVS SToD (NHH Metering)	212	NHH Import	5,6,7,8	2470	0.26	0.11		1.33		0.54	N
HV SToD (NHH Metering)	213	NHH Import	5,6,7,8	14560	0.24	0.06		1.16		0.28	N
LV MD (NHH Metering)	701	NHH Import	5,6,7,8	1255	0.43	0.09		1.47		0.62	N
LVS MD (NHH Metering)	702	NHH Import	5,6,7,8	2470	0.26	0.11		1.33		0.54	N
HV MD (NHH Metering)	703	NHH Import	5,6,7,8	14560	0.24	0.06		1.16		0.28	N
LV SToD (NHH Metering)	711	NHH Import	5,6,7,8	1255	0.43	0.09		1.47		0.62	N
LVS SToD (NHH Metering)	712	NHH Import	5,6,7,8	2470	0.26	0.11		1.33		0.54	N
HV SToD (NHH Metering)	713	NHH Import	5,6,7,8	14560	0.24	0.06		1.16		0.28	N

Accompanying Notes for Profile Classes 5-8

- **Distribution Use of System LLF Codes 201, 211, 701 and 711** are only available to supplies from Electricity North West's Low Voltage network.
- **Distribution Use of System LLF Codes 202, 212, 702 and 712** are available for supplies from Electricity North West's High Voltage network, to a substation provided and maintained by the Customer, where:
 - a) the transformer and associated switchgear in the substation are provided and maintained by us;
 - b) the supply is metered on the Low Voltage side of the transformer;
 - c) the substation may be used by us to supply other Customers.

- **Distribution Use of System LLF Codes 203, 213, 703 and 713** are available for supplies from Electricity North West's High Voltage network, to a substation provided and maintained by the Customer where:
 - a) the supply is metered at High Voltage; and
 - b) the substation may be used by us to supply other Customers.

Metering:- NHH Site Specific Tariffs for Profile Classes 5-8

LV MD NHH

DUoS TARIFF	APPLICATION	DUoS METERING FUNCTIONALITY
LV MD (NHH Metering)	Polyphase Maximum Demand metered supply from LV network	kWh 2 rate Monthly Max demand value in kW kVArh
LV SToD (NHH Metering)	Polyphase Maximum Demand metered supply from LV network	kWh 2 rate Monthly Max demand value in kW kVArh

LVS MD NHH

DUoS TARIFF	APPLICATION	DUoS METERING FUNCTIONALITY
LVS MD (NHH Metering)	Polyphase Maximum Demand metered supply at LV from a substation	kWh 2 rate Monthly Max demand value in kW kVArh
LVS SToD (NHH Metering)	Polyphase Maximum Demand metered supply at LV from a substation	kWh 2 rate Monthly Max demand value in kW kVArh

HV MD NHH

DUoS TARIFF	APPLICATION	DUoS METERING FUNCTIONALITY
HV MD (NHH Metering)	Polyphase Maximum Demand metered supply from the HV network	kWh 2 rate Monthly Max demand value in kW kVArh
HV SToD (NHH Metering)	Polyphase Maximum Demand metered supply from the HV network	kWh 2 rate Monthly Max demand value in kW kVArh

UoS Charges for Half-Hourly (HH) Connections – available from 1 April 2008

Table 3.4 Tariffs for Profile Class 0

Description	LLFC	Market	PC	Fixed charge (p/MPAN/month) *(p/site/month)	Day unit charge (p/kWh)	Night unit charge (p/kWh)	Other unit charge (p/kWh)	Capacity charge £/kVA/month	UMS charge £/kW/month	Reactive charge p/kVArh	Tariff closed to new customers
LV MD (HH Metering)	251	HH Import	0	2241	0.43	0.09		1.47		0.62	N
LVS MD (HH Metering)	252	HH Import	0	2470	0.26	0.11		1.33		0.54	N
HV MD (HH Metering)	253	HH Import	0	14560	0.24	0.06		1.16		0.28	N
HVP	384	HH Import	0	26708	0.25	0.06		0.98		0.14	N
LV Generator Import	401	HH Import	0	2241	0.43	0.09		1.47		0.62	N
LVS Generator Import	402	HH Import	0	2470	0.26	0.11		1.33		0.54	N
HVP Generator Import	404	HH Import	0	26708	0.25	0.06		0.98		0.14	N
HV Generator Import	413	HH Import	0	14560	0.24	0.06		1.16		0.28	N
HH EHV Site Specific *	280	EHV Import	0	477211				0.50		0.10	N
HH EHV Site Specific *	300	EHV Import	0	10000				0.72		0.10	N
HH EHV Site Specific *	320	EHV Import	0	423811				0.32		0.10	N
HH EHV Site Specific *	330	EHV Import	0	10000				0.74		0.10	N
HH EHV Site Specific *	340	EHV Import	0	181535				4.55		0.10	N
HH EHV Site Specific *	370	EHV Import	0	10000	0.24	0.06		1.16		0.10	N
HH EHV Site Specific *	390	EHV Import	0	10000				0.32		0.10	N
HH EHV Site Specific *	410	EHV Import	0	10000	0.24	0.06		1.16		0.10	N
HH EHV Site Specific *	430	EHV Import	0	46661	0.24	0.06		1.16		0.10	N

HH EHV Site Specific *	450	EHV Import	0	181661				1.36		0.10	N
HH EHV Site Specific *	460	EHV Import	0	85294				0.36		0.10	N
HH EHV Site Specific *	480	EHV Import	0	10000	0.24	0.06		1.16		0.10	N
HH EHV Site Specific *	500	EHV Import	0	51927				0.57		0.10	N
HH EHV Site Specific *	510	EHV Import	0	166771				0.43		0.10	N
HH EHV Site Specific *	520	EHV Import	0	90014				0.55		0.10	N
HH EHV Site Specific *	530	EHV Import	0	316574				0.66		0.10	N
HH EHV Site Specific *	540	EHV Import	0	166771				0.76		0.10	N
HH EHV Site Specific *	550	EHV Import	0	166771				0.80		0.10	N
HH EHV Site Specific *	570	EHV Import	0	144800				0.58		0.10	N
HH EHV Site Specific *	600	EHV Import	0	10000	0.24	0.06		1.16		0.10	N
HH EHV Site Specific *	610	EHV Import	0	581503				0.40		0.10	N
HH EHV Site Specific *	640	EHV Import	0	82968				1.39		0.10	N
HH EHV Site Specific *	650	EHV Import	0	37951				1.14		0.10	N
HH EHV Site Specific *	660	EHV Import	0	96078				1.26		0.10	N
HH EHV Site Specific *	670	EHV Import	0	44061				1.74		0.10	N
HH EHV Site Specific *	680	EHV Import	0	37951				0.77		0.10	N
HH EHV Site Specific *	700	EHV Import	0	114048				1.49		0.10	N
HH EHV Site Specific *	810	EHV Import	0	90014				0.69		0.10	N
HH EHV Site Specific *	830	EHV Import	0	140306	0.24	0.06				0.10	N
HH EHV Site Specific *	850	EHV Import	0	398281				1.30		0.10	N

HH EHV Site Specific *	900	EHV Import	0	37951				1.74		0.10	N
HH EHV Site Specific *	910	EHV Import	0	17899				1.90		0.10	N
HH EHV Site Specific *	920	EHV Import	0	17899				1.10		0.10	N
HH EHV Site Specific *	950	EHV Import	0	752591				0.57		0.10	N
HH EHV Site Specific *	960	EHV Import	0	250174				0.41		0.10	N
HH EHV Site Specific *	980	EHV Import	0	10000	0.24	0.06		1.16		0.10	N

* These tariffs contain a fixed charge which is levied on a pence/site/month basis.

Accompanying Notes for Profile Class 0

- **Distribution Use of System LLF Codes 251 and 401** are only available to supplies from Electricity North West's Low Voltage network.
- **Distribution Use of System LLF Codes 252 and 402**, are available for supplies from Electricity North West's High Voltage network, to a substation provided and maintained by the Customer, where:
 - a) the transformer and associated switchgear in the substation are provided and maintained by us;
 - b) the supply is metered on the Low Voltage side of the transformer;
 - c) the substation may be used by us to supply other Customers.
- **Distribution Use of System LLF Codes 253 and 413**, are available for supplies from Electricity North West's High Voltage network, to a substation provided and maintained by the Customer, where:
 - a) the supply is metered at High Voltage; and
 - b) the substation may be used by us to supply other Customers.
- **Distribution Use of System LLF Codes 384 and 404** are available for supplies connected directly at High Voltage, from an Electricity North West Primary substation, without using our High Voltage network, where:
 - a) the supply is metered at High Voltage at the primary substation; and
 - b) the substation may be used by us to supply other Customers.
- **Distribution Use of System LLF Codes 280, 300, 320, 330, 340, 370, 390, 410, 430, 450, 460, 480, 500, 510, 520, 530, 540, 550, 570, 600, 610, 640, 650, 660, 670, 680, 700, 810, 830, 850, 900, 910, 920, 950, 960 and 980** are only available to supplies from Electricity North West's Extra High Voltage network.

Metering:- HH Site Specific Tariffs for Profile Class 0

LV MD HH

DUoS TARIFF	APPLICATION	DUoS METERING FUNCTIONALITY
LV MD (HH Metering)	Polyphase Maximum Demand metered supply from LV network	Half Hourly Active Import, Active Export, Reactive Import, Reactive Export.
LV Generator Import		

LVS MD HH

DUoS TARIFF	APPLICATION	DUoS METERING FUNCTIONALITY
LVS MD (HH Metering)	Polyphase Maximum Demand metered supply at LV from a substation	Half Hourly Active Import, Active Export, Reactive Import, Reactive Export.
LVS Generator Import		

HV MD HH

DUoS TARIFF	APPLICATION	DUoS METERING FUNCTIONALITY
HV MD (HH Metering)	Polyphase Maximum Demand metered supply from the HV network	Half Hourly Active Import, Active Export, Reactive Import, Reactive Export.
HV Generator Import		

HVP MD HH

DUoS TARIFF	APPLICATION	DUoS METERING FUNCTIONALITY
HVP	Polyphase Maximum Demand metered supply at HV from a primary sub-station	Half Hourly Active Import, Active Export, Reactive Import, Reactive Export.
HVP Generator Import		

EHV MD HH

DUoS TARIFF	APPLICATION	DUoS METERING FUNCTIONALITY
HH EHV Site Specific	Polyphase Maximum Demand metered supply from the EHV network or at the secondary side of a substation with a primary voltage of 66kV	Half Hourly Active Import, Active Export, Reactive Import, Reactive Export.

Table UoS Tariffs No Longer Available (only available to customers on them before 1990)

Table 3.5 Preserved Tariffs

Description	LLFC	Market	PC	Fixed charge (p/MPAN/month) *(p/site/month)	Day unit charge (p/kWh)	Night unit charge (p/kWh)	Other unit charge (p/kWh)	Capacity charge £/kVA/month	UMS charge £/kW/month	Reactive charge p/kVArh	Tariff closed to new customers
Restricted Hour 8	71	NHH Import	2, 4	0.16		0.12					Y
Restricted Hour 9	81	NHH Import	2, 4	0.16		0.16					Y
Restricted Hour 7	91	NHH Import	2, 4	0.16		0.12					Y
Restricted Hour 10	101	NHH Import	2, 4	0.16		0.16					Y
Restricted Hour 11	111	NHH Import	2, 4	0.16		0.16					Y
Non Domestic Evening and Weekend	181	NHH Import	4	7.92	1.94		0.18				Y
Crop Drying	191	NHH Import	3,4	0.16	0.12						Y
LV MD (NHH Metering) *	221	NHH Import	5,6,7,8	1255	0.43	0.09		1.47		0.62	Y
LVS MD (NHH Metering) *	222	NHH Import	5,6,7,8	2470	0.26	0.11		1.33		0.54	Y
HV MD (NHH Metering) *	223	NHH Import	5,6,7,8	14560	0.24	0.06		1.16		0.28	Y
LV SToD (NHH Metering) *	231	NHH Import	5,6,7,8	1255	0.43	0.09		1.47		0.62	Y
LV MD – Day Unit only (NHH Metering) *	241	NHH Import	5,6,7,8	1255	0.43			1.47		0.62	Y
LVS MD – Day Unit only (NHH Metering) *	242	NHH Import	5,6,7,8	2470	0.26			1.33		0.54	Y
LV MD (HH Metering) *	271	HH Import	0	2241	0.43	0.09		1.47		0.62	Y
LVS MD (HH Metering) *	272	HH Import	0	2470	0.26	0.11		1.33		0.54	Y
LV MD – Day Unit only (NHH Metering) *	431	NHH Import	5,6,7,8	1255	0.43			1.47		0.62	Y
LVS MD – Day Unit only (NHH Metering)*	432	NHH Import	5,6,7,8	2470	0.26			1.33		0.54	Y
Restricted Hour 8	571	NHH Import	2,4	0.16		0.12					Y
Restricted Hour 9	581	NHH Import	2,4	0.16		0.16					Y
Restricted Hour 7	591	NHH Import	2,4	0.16		0.12					Y
Restricted Hour 10	601	NHH Import	2,4	0.16		0.16					Y

Restricted Hour 11	611	NHH Import	2,4	0.16		0.16					Y
Non Domestic Evening and Weekend	681	NHH Import	4	7.92	1.94		0.18				Y
Crop Drying	691	NHH Import	3,4	0.16	0.12						Y

* These tariffs contain a fixed charge which is levied on a p/site/month basis.

Accompanying Notes for Preserved Tariffs

- **Distribution Use of System LLF Codes 71, 81, 91, 101, 111, 181, 191, 221, 222, 223, 241, 242, 271, 272, 431, 432, 571, 581, 591, 601, 611, 681, and 691** 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.
- **Distribution Use of System LLF Codes 181 and 681** are only available for supplies with limits on capacity of 60 kVA and limits on consumption of 100,000 kWh per annum.
- **Distribution Use of System LLF Codes 71, 81, 91, 101, 111, 191, 571, 581, 591, 601, 611, and 691** are Restricted Hour tariffs. As such they are subject to the following conditions:
 - a) Restricted hour tariffs are available only for purposes of which Electricity North West approves;
 - b) Equipment, supplied on a restricted hour tariff, may not be supplied with electricity supplied under any other tariff;
 - c) The meter and time control device, to ensure that the supply is available only during the hours permitted, shall be provided by Electricity North West or an approved Meter Operator Agent;
 - d) Restricted hour tariffs will not normally be provided, where the premises have other time-of-day tariffs.

Metering:- Preserved Tariffs

DUoS TARIFF	APPLICATION	DUoS METERING FUNCTIONALITY
Restricted Hour 7/8/9/10/11	Single phase or Polyphase credit meter	kWh 1 rate
Crop Drying	Single phase or Polyphase credit meter from LV network, taking less than 60kVA	kWh 1 rate
Non-Domestic Evening & Weekend	Single phase or Polyphase credit meter from LV network, taking less than 60kVA	kWh 2 rate
LV MD (NHH Metering)	Polyphase Maximum Demand metered supply from LV network	kWh 2 rate Monthly Max demand value in kW kVArh

LV SToD (NHH Metering)	Polyphase Maximum Demand metered supply from LV network	kWh 2 rate Monthly Max demand value in kW kVAh
LV MD – Day Unit only (NHH Metering)	Polyphase Maximum Demand metered supply from LV network	kWh 1 rate Monthly Max demand value in kW kVAh
LV MD (HH Metering)	Polyphase Maximum Demand metered supply from LV network	Half Hourly Active Import, Active Export, Reactive Import, Reactive Export.
LVS MD (NHH Metering)	Polyphase Maximum Demand metered supply from LV network	kWh 2 rate Monthly Max demand value in kW kVAh
LVS SToD (NHH Metering)	Polyphase Maximum Demand metered supply from LV network	kWh 2 rate Monthly Max demand value in kW kVAh
LVS MD – Day Unit only (NHH Metering)	Polyphase Maximum Demand metered supply from LV network	kWh 1 rate Monthly Max demand value in kW kVAh
LVS MD (HH Metering)	Polyphase Maximum Demand metered supply from LV network	Half Hourly Active Import, Active Export, Reactive Import, Reactive Export.
HV MD (HH Metering)	Polyphase Maximum Demand metered supply from LV network	Half Hourly Active Import, Active Export, Reactive Import, Reactive Export.

Table 3.6 Unmetered Supplies Tariffs

Description	LLFC	Market	PC	Fixed charge (p/MPAN/month)	Day unit charge (p/kWh)	Night unit charge (p/kWh)	Other unit charge (p/kWh)	Capacity charge £/kVA/month	UMS charge £/kW/month	Reactive charge p/kVArh	Tariff closed to new customers
Unmetered – Scale 2	341	UMS Import	0,8	717					6.92		N
Unmetered - Scale 1	351	UMS Import	0,8	717					5.23		N
Unmetered without Demand Charge	371	UMS Import	0,8	717	1.51	0.10					N
Unmetered – Scale 3	381	UMS Import	0,8	717					8.04		N

Accompanying Notes for Unmetered Supplies Tariffs

- **Distribution Use of System LLF Codes 341,351,371,381** are available to supplies, which Electricity North West 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
 - b) where the load is small (individually less than 500 W, in the case of public lighting less than 500 W per column) 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 Electricity North West 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 Electricity North West has approved the inventory, via the certificate of Estimated Annual Consumption, the supplies will qualify for the lower Scale 1 charge (LLF 351).

Metering:- Unmetered Supplies Tariffs

DUoS TARIFF	APPLICATION	DUoS METERING FUNCTIONALITY
Unmetered - Standard	Supply covered by a certificate for unmetered supply	None / lamp
Unmetered - Lower	Supply covered by a certificate for unmetered supply	None / lamp

UoS Charges for Out of Area Networks – available from 1 April 2008

Table 3.7 Out of Area Tariffs

Electricity North West has no Out of Area DUoS tariffs.

4. Distributed Generation Tariffs

Table 4.1 Distributed Generation Tariffs

	CONNECTION VOLTAGE		
	EHV	HV or LV ¹	LV - SSEG ²
GENERATION CHARGE (£ per annum per kW of Installed Generation Capacity)	Range: £2.77 to £22.05 ³ Average: £5.21 ³	£5.21 ⁴ £2.77 ⁵	£0 ⁶

¹ Excludes LV connected SSEG

² SSEG - a Small Scale Embedded Generator is a source of electrical energy rated up to and including 16 Ampere per phase, single or multiphase, 230/400 Volt ac.

³ Electricity North West shall calculate a site-specific generation charge for each EHV connected generator. An EHV connected generator can expect to pay a value of between £2.77 and £22.05/kW per annum, depending on the extent of the reinforcement works required to connect it and his/her proportionate share of the reinforcement costs. The lower level is derived from the allowable Operation & Maintenance (O&M) value of £1.11/kW per annum and the fixed capacity allowance for distributed generation of £1.66/kW per annum. The upper level of £22.05/kW pa is derived from the cap of £221/kW (above which the connecting generator will be required to pay the cost of reinforcement in the form of connection charges), assuming 100% of the reinforcement costs below this cap are included in GDUoS.

⁴ Electricity North West expects to connect generation customers (connected at HV or LV) at an average cost of £37/kW. The £37/kW (in the annuity calculation) is converted into an annualised charge of £2.44/kW per annum, assuming 80% of this cost is included in GDUoS. The allowable O&M value of £1.11/kW per annum and the fixed capacity allowance of £1.66/kW per annum are then added to this to value to produce the total charge of £5.21/kW per annum.

⁵ For generation customers connected where no reinforcement costs are applicable then £2.77/kW is chargeable, being the O&M value of £1.11/kW per annum and the fixed capacity allowance of £1.66/kW per annum.

⁶ Electricity North West does not expect to reinforce its electrical network to connect small scale embedded generation during 2008/09, therefore no charge will be levied on these generators. Note, if costs are incurred to connect this type of generation then an appropriate charge will be levied on these generators.

5. System Loss Adjustment Factors

The total electrical losses on Electricity North West's distribution system are regulated in accordance with the price control set out in our Licence. Suppliers and IDNO's 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

Authorised Electricity Operators providing a supply of electricity from any Entry Point into Electricity North West's 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.

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

For Generators embedded in Electricity North West's 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. 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 our electricity distribution network.

Table of standard Loss Adjustment Factors

		November – February		Night 24:00 – 07:00	Other
		Monday – Friday			
Loss Adjustment Factor Class		16:00 – 19:00	07:00 – 16:00 19:00 – 24:00		
4	HV at 33 kV substation	1.024	1.022	1.020	1.021
3	HV from network	1.033	1.031	1.026	1.029
2	LV at substation	1.045	1.042	1.039	1.041
1	LV from network	1.065	1.060	1.055	1.058

Electricity North West's EHV loss adjustment factors are all individual in nature and are therefore provided on a site specific basis.

Notes on the Table

- Times given are Clock times
- 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.
- Appendix 1 of our Licence Condition 4 Statement describes the methodology for the calculation of loss adjustment factors shown in the above table.
- 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 will 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 Electricity North West network attributable to the relevant voltages.

6. Electricity Distribution Use of System Rebates

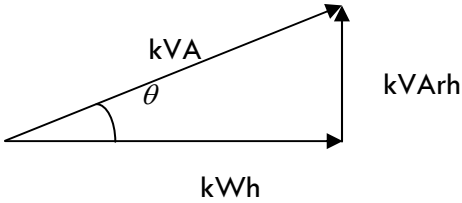
- 6.1 Electricity North West is not proposing to provide a distribution use of system rebate to suppliers in 2008/9.

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 Electricity North West's distribution network to supply, distribute or generate electricity.
Authorised Supply Capacity (ASC)	The agreed maximum 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.
Balancing and Settlement Code or BSC	Balancing and Settlements Code, including all Party Service Lines and BSC Procedures (as therein defined) made under it, established pursuant to the GB System Operator Licence.
Connectee	means, in respect of: (a) a Customer Installation, the relevant Customer; (b) a Generation Installation, the relevant Generator; and (c) a User Installation, the User.
Connection Agreement	An agreement between Electricity North West and a Connectee which provides that that Connectee has the right for its Connected Installation to be and remain directly or indirectly connected to our Distribution System.
Connection Point	A point at which the Distribution System of Electricity North West Connects to the Distribution System of the IDNO.
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.
Customer Installation	Any structures, equipment, lines, appliances or devices used or to be used by a Customer and connected or to be connected directly or indirectly to the Distribution System.
Distributed Generation	A Generator with a direct connection to Electricity North West's distribution network.
Distribution Licence	The Electricity Distribution Licence granted, or treated as granted to Electricity North West Limited, pursuant to section 6(1) of the Act.
Elexon	The Balancing and Settlements Company.
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).

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%.
GB System Operator	The holder, from time to time, of the GB System Operator Licence.
GB System Operator Licence	A transmission licence granted, or treated as granted, pursuant to Section 6(1)(b) of the Act and in which section C of the standard transmission licence conditions applies.
Generator	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).
Generator Installation	Any structure, equipment, lines, appliances or devices used or to be used by a Generator and connected or to be connected directly or indirectly to a Distribution System.
Generator Use of System (GDUoS)	Generator Distribution Use of System charge.
Grid Supply Point (GSP)	A grid supply point is connection point at which the NGET's transmission network System is connected to Electricity North West's 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 Electricity North West's distribution network.
kVA	kilovoltamperes.
kVAr	kilovoltamperes reactive.
kVArh	kilovoltampere hours reactive.
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 Demand	The Maximum Demand means in kilowatts (kW) twice the largest number of kilowatt-hours (units) supplied in any 30 consecutive minutes as determined by the metering equipment installed.
Meter Operator Agent	Has the meaning given to that term in the Balancing and Settlement Code.
MPAN	Meter Point Administration Number
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

<p>Reactive Power Charge</p>	<p>A reactive power charge is made for each kVArh consumed in excess of 33% of the number of units (kWh) consumed in each month. This represents a threshold value for power factor of 0.95, below which consumed reactive units are chargeable. The diagram below shows the calculation of power factor.</p> <p style="text-align: center;">$\cos\theta = \text{Power Factor}$</p> 
<p>Settlement</p>	<p>Has the meaning given to that term in the Balancing and Settlement Code.</p>
<p>Settlement Class</p>	<p>Has the meaning given to that term in the Balancing and Settlement Code.</p>
<p>Supplier</p>	<p>The company from whom you purchase electricity, or to whom you sell the exported electricity from your generation.</p>
<p>Supply Capacity</p>	<p>The largest amount of electricity, expressed in kilovoltampere, that we say can pass from our network to your equipment, or vice versa, at your premises.</p>
<p>Unmetered Supply</p>	<p>A supply of electricity the quantity of which Electricity North West, through the issue of a relevant Unmetered Supplies Certificate, has authorised not to be measured by physical metering equipment.</p>
<p>Unmetered Supplies Certificate</p>	<p>A certificate issued by Electricity North West (in its sole discretion) to a Customer in accordance with the Unmetered Supplies Procedure which states (amongst other things) the supply numbers of the metering points by reference to which we have authorised the Customer to receive Unmetered Supplies.</p>
<p>Use of System Charges</p>	<p>Charges for demand and generation customers which are connected to and utilising Electricity North West's distribution network.</p>
<p>User</p>	<p>Is a Supplier, Generator or IDNO.</p>