



STATEMENT OF CHARGES FOR USE OF SCOTTISH HYDRO ELECTRIC POWER DISTRIBUTION PLC'S ELECTRICITY DISTRIBUTION NETWORK

This statement is effective from 1st April 2008

Version 1.1

The form of this statement was approved by Ofgem on 2 May 2008

**Scottish Hydro Electric Power Distribution plc
Registered office:
Inveralmond House
200 Dunkeld Road
Perth
PH1 3AQ
Registered No.: SC213460**

Document Price £5

Index to the Statement of Charges for the Use of Southern Electric Power Distribution's Distribution System

Version Number	Description of Changes
V0.0	SHEPD DUoS Charges Indicative 2008-09 SHEPD EDN DUoS Charges Effective from 01 April 2007
V0.1	SHEPD DUoS Charges Indicative 2008-09 SHEPD EDN DUoS Charges Indicative 2008-09
V1.0	SHEPD DUoS Charges 2008-09 (LC4A format) SHEPD EDN DUoS Charges Indicative 2008-09
V1.1	SHEPD DUoS Charges 2008-09 (LC4A format) SHEPD EDN DUoS Charges 2008-09 (LC4A format)

Table of Contents

1. Introduction	4 -
2. Tariff Application and Charging Definitions	4 -
Demand	4 -
Billing and payment by settlement class	4 -
Site specific billing and payment	5 -
Unmetered supplies	6 -
Authorised Capacity	6 -
Extra High Voltage Supplies	7 -
Reactive Power Charges	7 -
Generation	8 -
Out of Area Networks	8 -
3. Schedule of Demand Tariffs	10 -
Table 3.1 Tariffs for Profile Classes 1&2	10 -
Table 3.2 Tariffs for Profile Classes 3&4	11 -
Table 3.3 Tariffs for Profile Classes 5-8	13 -
Table 3.4 Tariffs for Profile Class 0	14 -
Table 3.5 Preserved Tariffs	15 -
Table 3.6 Unmetered Supplies Tariffs	16 -
Table 3.7 HH EHV Tariffs	17 -
Table 3.8: Metering Functionality and Data Requirements	18 -
Table 3.9 UoS Charges for Out of Area Networks	21 -
4. GENERATION CHARGES	23 -
Table 4.1 Generation Charges	23 -
5. SYSTEM LOSS ADJUSTMENT FACTORS	24
STANDARD LOSS ADJUSTMENT FACTORS	24
EMBEDDED DISTRIBUTION NETWORKS' LOSS ADJUSTMENT FACTORS	25 -
in "SCOTTISH POWER DISTRIBUTION" area:	25 -
6. Electricity Distribution Use of System Rebates	27 -
7. Glossary of terms	28 -

1. INTRODUCTION

- 1.1 This statement has been produced by Scottish Hydro Electric Power Distribution plc (the "Company" or "SHEPD") to inform Suppliers, Generators and IDNO parties of our Use of System 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 in the first instance please write to or telephone our Commercial Policy Manager at:

Mr Craig Neill
Commercial Policy Manager
System Commercial
Scottish Hydro Electric Power Distribution plc
Inveralmond House
200 Dunkeld Road
Perth
PH1 3AQ
Tel: 01738 456609
Fax: 01738 456521
e-mail: craig.neill@scottish-southern.co.uk

1.3 Notification of Use of System Charges

The Company may vary its Use of System Charges at any time by:

- (i.) giving at least 40 days notice to Suppliers and/ or IDNO parties using the Company's electricity distribution system within its Distribution Services Area; and,
- (ii.) giving at least 28 days notice to Suppliers and/ or IDNO parties using the Company's embedded distribution systems or networks outside its Distribution Services Area.

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 the Company's Market Domain Data Tables, and the conditions of use of these tariffs. The MDD set applicable to the Company is available from the Elexon at the following URL:
- <http://www.elexon.co.uk/participating/marketdomaindata/>.
- 2.2 We 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 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)
- Table 3.6 for Unmetered Supplies (Profile Class 1).

Notes on Domestic and Non Domestic Supplies

The tariffs in table 3.1 refer to any single exit point serving any domestic, private residential premises.

The tariffs in table 3.2 refer to non-domestic profile classes 3 – 4 for any single supply of electricity that is not used solely for domestic purposes in single, private dwellings. This includes private generators unless in our open special terms are appropriate.

Site specific billing and payment

2.4 The following paragraphs are provided to aid your understanding of our Site Specific tariffs and their structures, as shown in the Company'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. The MDD set applicable to the Company is available from the Elexon.

2.5 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;
- Availability charges to reflect the site capacity usage

2.6 Our 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, the Company may offer alternative terms. Charges are shown exclusive of VAT, which shall be charged at the appropriate rate.

2.7 The tables within this document which relates to legacy HV Special and EHV 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 HH Maximum Demand Use of System Tariffs;
- Table 3.6 for Unmetered Supplies Use of System Tariffs.

Unmetered supplies

- 2.8 These tariffs are available for supplies, which the Company 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 the Company, will not normally be allowed to be connected without a meter.
- 2.9 Where we have agreed with the customer that the electricity will be unmetered the following appropriate charges would apply.
- (i) Scale 1 - for supplies (exit points) where sufficient geographical detail is provided for the apparatus to be located and audited.
 - (ii) Scale 2 - for supplies (exit points) where sufficient geographical detail is not provided for the apparatus to be located and audited (a summary inventory).

We will make a charge for managing the auditing and quality of the inventories. The charge will be determined on a case by case basis.

Authorised Capacity

2.10 Non Domestic Supplies PC3 -4

The non-domestic charges apply to single low voltage exit point which use less than 50kVA during Weekday Days.

2.11 Non-Domestic LV and HV PC 5-8 and Half hourly charges

These charges apply to single low voltage and high voltage exit points, unless in our opinion special terms are appropriate. The charges include a standing charge, an availability charge (and an excess availability charge if required) and unit rates.

(i) Availability charges

The non-domestic LV and HV PC 5-8 and Half Hourly charges include an availability charge for an agreed maximum capacity. The maximum capacity is in kVA as agreed from time to time between the customer and us. The maximum capacity is based on the maximum power requested and the capacity we can provide. The availability charges apply continuously through the year based on the agreed maximum capacity.

Where a new or larger connection is provided, we will not normally allow the customer to reduce the maximum capacity for the first five years.

Even if the customer no longer needs the supply during the initial five years, the customer will still be legally responsible for the balance of the availability charges.

2.12 **Maximum Capacity**

We will charge to the nearest kVA for Maximum Capacity.

If the maximum demand in any month is greater than the agreed Maximum Capacity, we will apply the availability charges to the highest kVA for at least 12 calendar months and until the Maximum Capacity is reviewed. If the demand measured is in kW only we will assume the power factor is 0.95 unless the customer proves otherwise. The terms Available Capacity and Authorised Capacity may also be used in the above context and shall be construed accordingly.

2.13 **Non-Domestic Site-specific charges.**

Where the Company, after evaluation of the characteristics of the supply and connection made, accepts that none of the categories of standard charges applies, charges for these connections will be determined on a site-specific basis. Normally the Loss Adjustment Factors (LAFs) will also be site-specific. Details of the charges and LAFs are available on request.

Extra High Voltage Supplies

- 2.14 Extra High Voltage (EHV) is defined in Special Condition Part B of the Electricity Distribution Licence, as sites connected to our distribution system which operate at, or above 22kV, up to, and including 33kV.

Reactive Power Charges

- 2.15 In respect of loads with power factors, which fall outside the range of 0.8 lagging and unity, any specific conditions related to the power factor will be stated in the Connection Agreement.

Preserved Charges

- 2.16 The preserved charges are only available to customers at premises where Switched Restricted Hours ('Switched' – RHT), Non-Domestic Summer/Winter Unrestricted LV and Non-Domestic Summer/Winter Unrestricted HV charges applied on 31 March 2008 and are not available to other or new customers. The preserved charges can not be transferred to a different property. The charges include a daily standing charge and a single unit rate.

Generation

Generation supplies

- 2.17 Generators applying for Connection after 1 April 2005 are liable for GDUoS, such charges applying to single EHV, HV and LV entry points. Where the generator also imports energy from the distribution system, the appropriate demand tariffs will apply. The GDUoS £/kVA charge will be levied on the export capacity specified in the generator's connection agreement. At this stage, no charges will be made for generators connected at non half-hourly metered sites.

Out of Area Networks

- 2.18 Where the Company operates distribution networks outside its distribution services area, it will charge any demand connections on those networks. The charges are included in this statement. In any such out of area networks, the metering functionality requirements will generally be those published by the host DNO. Where no such metering functionality requirements are published by the host DNO, those detailed in Table 3.9 shall apply.

A. Domestic Supplies

The following charges apply to any single exit point serving domestic private residential premises.

DUoS charge codes: xx1, xx2 where xx identifies the embedded distribution system(s) in "Scottish Power distribution" area.

B. Non Domestic Supplies

The following non-domestic charges apply to single low voltage exit point, which use less than 70kVA and whole current metered.

DUoS charge codes: xx3, xx4 where xx identifies the embedded distribution system(s) in Scottish Power area.

The following non-domestic charges apply to single low voltage exit point which use equal to or greater than 70kVA and all CT metered exit points.

DUoS charge codes: xx0, xx6 and xx9 (where appropriate) where xx identifies the embedded distribution system(s) in "Scottish Power distribution" area.

Availability charges

Where the non-domestic charge includes an availability component the charge will be based on the maximum capacity. The maximum capacity is in kVA as agreed from time to time between the customer and us. The maximum capacity is based on the maximum power requested and the capacity we can provide. The availability charges apply continuously through the year based on the agreed maximum capacity.

Where a new or larger connection is provided, we will not normally allow the customer to reduce the maximum capacity for the first five years.

Even if the customer no longer needs the supply during the initial five years, the customer will still be legally responsible for the balance of the availability charges.

Maximum capacity

We will charge in blocks for maximum capacity.

From 70kVA to 100kVA	in blocks of	5 kVA
From 100kVA to 250kVA	in blocks of	10 kVA
From 250kVA to 500kVA	in blocks of	25 kVA
From 500kVA to 1000kVA	in blocks of	50 kVA
Above 1000Kva	in blocks of	100 kVA

If the maximum demand in any month is greater than the agreed maximum capacity, we will apply the availability charges to a suitable higher block for at least 12 calendar months and the maximum capacity reviewed. If the demand measured is in kW only we will assume the power factor is 0.95 unless the customer proves otherwise.

Provision of metering equipment.

For those customers who have a qualifying demand over 100kW, mandatory half-hourly code of practice metering is required for settlement purposes. Customers who have a qualifying demand less than 100kW and wish to settle on a half-hourly basis will require a code of practice half-hour meter.

Charge for reactive power

In respect of loads with power factors that fall outside the range of 0.8 lagging and unity, any specific conditions related to the power factor will be stated in the Connection Agreement.

Unmetered Supplies

Where we have agreed with the customer that the electricity will be unmetered the appropriate charges detailed in Table 3.6 would apply. The charges apply to supplies (exit points) where sufficient geographical detail is provided for the apparatus to be located and audited.

We may make a charge for managing the auditing and quality of the inventories. The charge will be determined on a case by case basis.

The charges shown in Table 3.6 do not include pseudo half-hourly Meter Administration charges or the Load Research charges (as agreed from time to time) which are also payable where appropriate. Details are available on request.

3. SCHEDULE OF DEMAND TARIFFS

UoS Charges for Non-Half Hourly (NHH) Connections

Table 3.1 Tariffs for Profile Classes 1&2

Tariff Description	LLFC	Market	PC	Fixed Charge 1 (p/ MPAN/ day)	Day Unit Charge 1 (p/kWh)	Night Unit Charge 1 (p/kWh)	Other / Summer Unit Charge 1 (p/kWh)	Capacity Charge 2 (p/kVA/month)	UMS Charge 2 (p/ kWh)	Reactive Power charge p/ kVARh
Dom UR	100	NHH - import	1	5.18	2.16					
Dom UR P	300	NHH - import	1	5.18	2.16					
Dom UR PPM	120	NHH - import	1	5.18	2.16					
Dom UR PPM P	320	NHH - import	1	5.18	2.16					
Dom EW	105	NHH - import	1	5.18	2.16	2.16				
Dom EW P	305	NHH - import	1	5.18	2.16	2.16				
Dom UR PPM KM	126	NHH - import	1	5.18	2.16					
Dom Day Night	101	NHH - import	2	5.18	2.16	0.92				
Dom Day Night P	301	NHH - import	2	5.18	2.16	0.92				
Dom Day Night PPM	121	NHH - import	2	5.18	2.16	0.92				
Dom Day Night PPM P	321	NHH - import	2	5.18	2.16	0.92				
Dom SW Heating	102	NHH - import	2	-		0.92				
Dom SW Heating P	302	NHH - import	2	-		0.92				
Dom SW Heating PPM	122	NHH - import	2	-		0.92				
Dom SW Heating PPM P	322	NHH - import	2	-		0.92				
Dom EW PPM	125	NHH - import	2	5.18	2.16	2.16				
Dom EW PPM P	325	NHH - import	2	5.18	2.16	2.16				
Dom Day Night PPM KM	127	NHH - import	2	5.18	2.16	0.92				

Notes to Table 3.1 Tariffs for Profile Classes 1&2:

Fixed Charge 1 = p/ MPAN / day

Day Unit Charge 1 = p/ kWh

Night Unit Charge 1 = p/ kWh

Other / Summer Unit Charge 1 = p/ kWh

Table 3.2 Tariffs for Profile Classes 3&4

Tariff Description	LLFC	Market	PC	Fixed Charge 1 (p/MPAN/day)	Day Unit Charge 1 (p/kWh)	Night Unit Charge 1 (p/kWh)	Other / Summer Unit Charge 1 (p/kWh)	Capacity Charge 2 (p/kVA/month)	UMS Charge 2 (p/kWh)	Reactive Power charge p/kVARh
Non Dom UR	150	NHH - import	3	7.22	3.45					
Non Dom UR P	350	NHH - import	3	7.22	3.45					
Non Dom UR PPM	170	NHH - import	3	7.22	3.45					
Non Dom UR PPM P	370	NHH - import	3	7.22	3.45					
Non Dom UR PPM KM	177	NHH - import	3	7.22	3.45					
Non Dom Catering	153	NHH - import	3		3.45					
Non Dom Catering P	353	NHH - import	3		3.45					
Non Dom Catering PPM	173	NHH - import	3		3.45					
Non Dom Catering PPM P	373	NHH - import	3		3.45					
Non Dom Crop Drying	154	NHH - import	3	-	3.45					
Non Dom Crop Drying P	354	NHH - import	3	-	3.45					
Non Dom Crop Drying PPM	174	NHH - import	3	-	3.45					
Non Dom Crop Drying PPM P	374	NHH - import	3	-	3.45					
Non Dom EW	156	NHH - import	3	7.22	3.45	3.45				
Non Dom EW P	356	NHH - import	3	7.22	3.45	3.45				
Non Dom Day Night	151	NHH - import	4	7.22	3.45	0.92				
Non Dom Day Night P	351	NHH - import	4	7.22	3.45	0.92				
Non Dom Day Night PPM	171	NHH - import	4	7.22	3.45	0.92				
Non Dom Day Night PPM P	371	NHH - import	4	7.22	3.45	0.92				
Non Dom SW Heating	152	NHH - import	4	-		0.92				
Non Dom SW Heating P	352	NHH - import	4	-		0.92				
Non Dom SW Heating PPM	172	NHH - import	4	-		0.92				
Non Dom SW Heating PPM P	372	NHH - import	4	-		0.92				
Non Dom EW PPM	176	NHH - import	4	7.22	3.45	3.45				

Demand Tariffs

Tariff Description	LLFC	Market	PC	Fixed Charge 1 (p/MPAN/day)	Day Unit Charge 1 (p/kWh)	Night Unit Charge 1 (p/kWh)	Other / Summer Unit Charge 1 (p/kWh)	Capacity Charge 2 (p/kVA/month)	UMS Charge 2 (p/ kWh)	Reactive Power charge p/ kVARh
Non Dom EW PPM P	376	NHH - import	4	7.22	3.45	3.45				
Non Dom Day Night PPM KM	178	NHH - import	4	7.22	3.45	0.92				

Notes to: Table 3.2 Tariffs for Profile Classes 3&4

Fixed Charge 1 = p / MPAN / day

Day Unit Charge 1 = p / kWh

Night Unit Charge 1 = p / kWh

Other / Summer Unit Charge 1 = p/ kWh

Table 3.3 Tariffs for Profile Classes 5-8

Tariff Description	LLFC	Market	PC	Fixed Charge 4 (p/site/month)	Day Unit Charge 1 (p/ kWh)	Night Unit Charge 1 (p/ kWh)	Other / Summer Unit Charge 1 (p/ kWh)	Winter Unit Charge 2 (p/ kWh)	Capacity Charge 2 (p/kVA/month)	UMS Charge 2 (p/ kWh)	Reactive Power charge p/ kVARh
Non Dom SmWt Day Night LV	501	NHH LV - import	5-8	420			0.86	0.92	170		

Notes to: Table 3.3 Tariffs for Profile Classes 5-8

Fixed Charge 4 = p / site / month

Day Unit Charge 1 = p / kWh

Night Unit Charge 1 = p / kWh

Other / Summer Unit Charge 1= p/ kWh

Winter Unit Charge 2 = p/ kWh

Capacity Charge 2 = p / kVA / month

UoS Charges for Half-Hourly (HH) Connections

Table 3.4 Tariffs for Profile Class 0

Tariff Description	LLFC	Market	PC	Fixed Charge 4 (p/site/month)	Day Unit Charge 1 (p/kWh)	Night Unit Charge 1 (p/kWh)	Other / Summer Unit Charge 1 (p/kWh)	Winter Unit Charge 2 (p/kWh)	Capacity Charge 2 (p/kVA/month)	UMS Charge 2 (p/kWh)	Reactive Power charge p/kVARh
Non Dom SmWt Day Night LV HH	500	HH LV - import	0	336			0.86	0.92	170		
Non Dom SmWt Day Night LV HH NAC	503	HH LV - import	0	336			0.86	0.92			
Non Dom SmWt Day Night HV HH	600	HH HV - import	0	2326			0.6	0.6	137		
Non Dom SmWt Day Night HV HH NAC	603	HH HV - import	0	2326			0.6	0.6			

Notes to: Table 3.4 Tariffs for Profile Class 0:

Fixed Charge 4 = p / site / month

Day Unit Charge 1 = p / kWh

Night Unit Charge 1 = p / kWh

Other / Summer Unit Charge 1 = p / kVA / month

Winter Unit Charge 2 = p / kWh

Capacity Charge 2 = p / kVA / month

Table 3.5 Preserved Tariffs

UoS Tariffs No Longer Available (only available to customers using the tariff before 1990)

Tariff Description	LLFC	Market	PC	Fixed Charge 1 (p/ MPAN/ day)	Day Unit Charge 1 (p/kWh)	Night Unit Charge 1 (p/kWh)	Other / Summer Unit Charge 1 (p/kWh)	Capacity Charge 2 (p/kVA/month)	UMS Charge 2 (p/ kWh)	Reactive Power charge p/ kVARh
Dom SW RHT	104	NHH - import	2	-		0.92				
Dom SW RHT P	304	NHH - import	2	-		0.92				
Dom SW RHT PPM	124	NHH - import	2	-		0.92				
Dom SW RHT PPM P	324	NHH - import	2	-		0.92				
Non Dom SW RHT	155	NHH - import	4	-		0.92				
Non Dom SW RHT P	355	NHH - import	4	-		0.92				
Non Dom SW RHT PPM	175	NHH - import	4	-		0.92				
Non Dom SW RHT PPM P	375	NHH - import	4	-		0.92				

Tariff Description	LLFC	Market	PC	Fixed Charge 4 (p/site/ month)	Day Unit Charge 1 (p/ kWh)	Night Unit Charge 1 (p/ kWh)	Other / Summer Unit Charge 1 (p/ kWh)	Winter Unit Charge 2 (p/ kWh)	Capacity Charge 2 (p/kVA/ month)	Reactive Power charge p/ kVARh
Non Dom SmWt Unrestricted LV	502	NHH LV - import	5-8	420			0.86	0.92	170	
Non Dom SmWt Unrestricted HV	602	NHH HV - import	5-8	2905			0.6	0.6	137	
Non Dom SmWt Day Night HV	601	NHH HV - import	5-8	2905			0.6	0.6	137	

Notes to: Table 3.5 Preserved Tariffs

Fixed Charge 1 = p / MPAN / day

Fixed Charge 4 = p / site / month

Day Unit Charge 1 = p / kWh

Night Unit Charge 1 = p / kWh

Capacity Charge 5 = <200 kVA, p / kVA / month

Capacity Charge 6 = >200 kVA, p / kVA / month

Excess Capacity Charge 2 = p / kVA / month

UoS Charges for Unmetered Connections

Table 3.6 Unmetered Supplies Tariffs

Tariff Description	LLFC	Market	PC	Fixed Charge 1 (p/MPAN/day)	Day Unit Charge 1 (p/ kWh)	Night Unit Charge 1 (p/ kWh)	Other / Summer Unit Charge 1 (p/kWh)	Winter Unit Charge 2 (p /kWh)	Capacity Charge 2 (p/kVA/month)	UMS Charge 2 (p/ kWh)
UMS B C D Scale 1	800	NHH - UMS	1& 8	-	1.98	1.98				
Metered Public Lighting	801	NHH - UMS	1& 8	-	1.98	1.98				
UMS B C D Scale 2	802	NHH - UMS	1& 8	-	1.98	1.98				
UMS_A_Cont	803	NHH - UMS	1& 8	-	1.98	1.98				
UMS LV HH	804	NHH - UMS	0	-	1.98	1.98				

Notes to Table 3.6 Unmetered Supplies Tariffs:

Day Unit Charge 1 = p / kWh

Night Unit Charge 1 = p / kWh

Table 3.7 HH EHV Tariffs

Tariff Description	LLFC	Market	PC	Fixed Charge 4 (p/site/month)	Day Unit Charge 1 (p/ kWh)	Night Unit Charge 1 (p/ kWh)	Other / Summer Unit Charge 1 (p/ kWh)	Winter Unit Charge 2 (p/ kWh)	Capacity Charge 2 (p/kVA/month)	UMS Charge 2 (p/ kWh)	Tariff closed to new customers
HH EHV	700	HH EHV - import	0	2696			0.182	0.182	88		
HH EHV NAC	702	HH EHV - import	0	2703			0.182	0.182			

Notes to: Table 3.7 HH EHV Tariffs

Fixed Charge 4 = p/ site/ month

Other / Summer Unit Charge 1 = p/ kWh

Winter Unit Charge 2 = p/ kWh

Capacity Charge 2 = p/kVA/ month

METERING FUNCTIONALITY AND DATA REQUIREMENTS

Table 3.8: Metering Functionality and Data Requirements

DUoS Charge Code	Metering Functionality	Meter Reading Frequency	Provision of data to Distributor
100	kWh total	Six Monthly	Supercustomer, see note 1
101	kWh Rate 1, kWh Rate 2	Six Monthly	Supercustomer, see note 1
102	kWh total	Six Monthly	Supercustomer, see note 1
104	kWh total	Six Monthly	Supercustomer, see note 1
105	kWh Rate 1, kWh Rate 2	Six Monthly	Supercustomer, see note 1
120	kWh total	Six Monthly	Supercustomer, see note 1
121	kWh Rate 1, kWh Rate 2	Six Monthly	Supercustomer, see note 1
122	kWh total	Six Monthly	Supercustomer, see note 1
124	kWh total	Six Monthly	Supercustomer, see note 1
125	kWh Rate 1, kWh Rate 2	Six Monthly	Supercustomer, see note 1
126	kWh total	Six Monthly	Supercustomer, see note 1
127	kWh Rate 1, kWh Rate 2	Six Monthly	Supercustomer, see note 1
150	kWh total	Six Monthly	Supercustomer, see note 1
151	kWh Rate 1, kWh Rate 2	Six Monthly	Supercustomer, see note 1
152	kWh total	Six Monthly	Supercustomer, see note 1
153	kWh total	Six Monthly	Supercustomer, see note 1
154	kWh total	Six Monthly	Supercustomer, see note 1
155	kWh total	Six Monthly	Supercustomer, see note 1
156	kWh Rate 1, kWh Rate 2	Six Monthly	Supercustomer, see note 1
170	kWh total	Six Monthly	Supercustomer, see note 1
171	kWh Rate 1, kWh Rate 2	Six Monthly	Supercustomer, see note 1
172	kWh total	Six Monthly	Supercustomer, see note 1
173	kWh total	Six Monthly	Supercustomer, see note 1
174	kWh total	Six Monthly	Supercustomer, see note 1
175	kWh total	Six Monthly	Supercustomer, see note 1
176	kWh Rate 1, kWh Rate 2	Six Monthly	Supercustomer, see note 1
177	kWh total	Six Monthly	Supercustomer, see note 1
178	kWh Rate 1, kWh Rate 2	Six Monthly	Supercustomer, see note 1
500	"Code of Practice Compliant - Half-hourly: Import kWh, Export kWh, Import kVArh, Export kVArh and kVAh"	Monthly (HH)	Within 3 working day of meter read/daily
501	kWh Rate 1, kWh Rate 2, kWh Rate 3, kWh Rate 4, kVA MD, Restricted	Monthly	Within 3 working day of meter read/daily

METERING FUNCTIONALITY AND DATA REQUIREMENTS

DUoS Charge Code	Metering Functionality	Meter Reading Frequency	Provision of data to Distributor
	kVA MD, kVArh total		
502	kWh Total, kVA MD, Restricted kVA MD, kVArh total	Monthly	Within 3 working day of meter read/daily
503	"Code of Practice Compliant - Half-hourly: Import kWh, Export kWh, Import kVArh, Export kVArh and kVAh"	Monthly (HH)	Within 3 working day of meter read/daily
600	"Code of Practice Compliant - Half-hourly: Import kWh, Export kWh, Import kVArh, Export kVArh and kVAh"	Monthly (HH)	Within 3 working day of meter read/daily
601	kWh Rate 1, kWh Rate 2, kWh Rate 3, kWh Rate 4, kVA MD, Restricted kVA MD, kVArh total	Monthly	Within 3 working day of meter read/daily
602	kWh Total, kVA MD, Restricted kVA MD, kVArh total	Monthly	Within 3 working day of meter read/daily
603	"Code of Practice Compliant - Half-hourly: Import kWh, Export kWh, Import kVArh, Export kVArh and kVAh"	Monthly (HH)	Within 3 working day of meter read/daily
700	"Code of Practice Compliant - Half-hourly: Import kWh, Export kWh, Import kVArh, Export kVArh and kVAh"	Monthly (HH)	Within 3 working day of meter read/daily
702	"Code of Practice Compliant - Half-hourly: Import kWh, Export kWh, Import kVArh, Export kVArh and kVAh"	Monthly (HH)	Within 3 working day of meter read/daily
800	In accordance with UMS procedure		
801	In accordance with UMS procedure		
802	In accordance with UMS procedure		
803	In accordance with UMS procedure		
804	Code of Practice Compliant (pseudo metered) 1/2hr kWh, 1/2hr kVArh	Monthly (HH)	Within 3 working day of meter read/daily
909	"Code of Practice Compliant - Half-hourly: Import kWh, Export kWh, Import kVArh, Export kVArh and kVAh"	Monthly (HH)	Within 3 working day of meter read/daily
910	"Code of Practice Compliant - Half-hourly: Import kWh, Export kWh, Import kVArh, Export kVArh and kVAh"	Monthly (HH)	Within 3 working day of meter read/daily
960	"Code of Practice Compliant - Half-hourly: Import kWh, Export kWh, Import kVArh, Export kVArh and kVAh"	site specific (HH)	Within 3 working day of meter read/daily
951	kWh Rate 1, kWh Rate 2	Six Monthly	Supercustomer, see note 1
952	kWh Rate 1, kWh Rate 2	Six Monthly	Supercustomer, see note 1

Notes to Table 3.8: Metering Functionality and Data Requirements

1. In the event of the Supercustomer flow (D0030 - Non Half Hourly DUoS Report) not being delivered to the Company, the User shall provide that portion of the User's Supercustomer flow which contains the sites supplied within the Company's authorised area.
2. Restricted kVA MD is provided on request and subject to Connection Agreement.
3. For Half-hourly Metering Outside Settlement Timescales (MOST) it is anticipated that data would be received within 3 working days of meter read and for Metering Inside Settlement Timescales (MIST) it is anticipated that data will be received daily.

METERING FUNCTIONALITY AND DATA REQUIREMENTS

4. Provision of Half Hour data shall be provided on flow D0275 - Validated Half Hourly Advances. Failure of the User's Data Collector to provide timely and accurate data will result in the production of an estimated bill based on historical data.
5. For non-domestic customers on 'M' DUoS charges (profiled or half hourly metered) the register readings (including Maximum Demand and where appropriate restricted Maximum Demand, in kVA) shall be provided by the User's Data Collector within 3 working days of the end of the month in flow D0010 - Meter Readings. Failure of the User's Data Collector to provide timely and accurate data will result in the production of an estimated bill based on historical data.
6. Collector to provide timely and accurate data will result in the production of an estimated bill based on historical data.

Table 3.9 UoS Charges for Out of Area Networks

Table 3.9.1 GSP Groups

GSP GROUP	DISTRIBUTION NETWORK AREA
N	SCOTTISH POWER DISTRIBUTION AREA

Table 3.9.2 UoS Charges for Out of Area Networks: 1st April 2008

Tariff Description	LLFC	Market	PC	Fixed Charge 1 (p/MPAN/day)	Fixed Charge 4 (p/site/month)	Day Unit Charge 1 (p/ kWh)	Night Unit Charge 1 (p/ kWh)	Other Unit Charge 1 (p/ kWh)	Capacity Charge 2 (p/kVA/month)	UMS Charge (p/ kWh)
Dom UR (PC1) (GSP_ID _N)	381	NHH - import	1	5.71		1.64				
Dom Restricted (PC2) (GSP_ID _N)	382	NHH - import	2	7.68		1.86	0.56			
Non-Dom UR (PC3) (GSP_ID _N)	383	NHH - import	3	23.40		1.78				
Non-Dom Restricted (PC4) (GSP_ID _N)	384	NHH - import	4	27.99		3.02	0.87			
NHH Non-Dom UR <100kW (GSP_ID _N)	389	NHH LV - import	5-8		2583	1.65				
NHH Non-Dom DN <100kW (GSP_ID _N)	385	NHH LV - import	5-8		2583	1.65	0.26			
Non-Dom HH Day Night LV (GSP_ID _N)	380	HH LV - import	0		1349	1.3	0.16		57	
Non-Dom HH Day Night HV (GSP_ID _N)	386	HH HV -	0		19942	0.76	0.18		31	

Tariff Description	LLFC	Market	PC	Fixed Charge 1 (p/MPAN/day)	Fixed Charge 4 (p/site/month)	Day Unit Charge 1 (p/ kWh)	Night Unit Charge 1 (p/ kWh)	Other Unit Charge 1 (p/ kWh)	Capacity Charge 2 (p/kVA/month)	UMS Charge (p/ kWh)
		import								
UMS 24 Hour (GSP_ID _N)	881	NHH - UMS	8	7.06				1.56		
UMS Dusk to Dawn (GSP_ID _N)	882	NHH - UMS	1	7.06				1.56		
UMS Half Night Pre-Dawn (GSP_ID _N)	883	NHH - UMS	1	7.06				1.56		
UMS Dawn to Dusk (GSP_ID _N)	884	NHH - UMS	1	7.06				1.56		
UMS pseudo HH (GSP_ID _N)	880	NHH - UMS	1	7.06				1.56		
LV Generation - non SSEG (GSP_ID _N)	390	NHH - export	1-8	0						
LV Generation - SSEG (GSP_ID _N)	391	NHH - export	1-8	0						
LV Generation	387	HH LV - export	0						0	
HV Generation	388	HH HV - export	0						12	
EHV Generation	960	HH EHV - export	0						SS	

Notes to Table 3.9 UoS Charges for Out of Area Networks

Fixed Charge 1 = p / MPAN / day

Fixed Charge 4 = p /site / month

Day Unit Charge 1 = p / kWh

Night Unit Charge 1 = p / kWh

Other Unit Charge 1 = p / kWh

Capacity Charge 2 = p / kVA / month

SS = Site Specific

4. GENERATION CHARGES

Table 4.1 Generation Charges

Tariff Description	LLFC	Market	PC	Fixed Charge 1 (p/MPAN/day)	Day Unit Charge 1 (p/ kWh)	Night Unit Charge 1 (p/ kWh)	Other / Summer Unit Charge 1 (p/ kWh)	Winter Unit Charge 2 (p/ kWh)	Capacity Charge 2 (p/kVA/month)	UMS Charge 2 (p/ kWh)
LV Generation - non SSEG	951	NHH - export	1-8	0						
LV Generation - SSEG	952	NHH - export	1-8	0						
LV Generation	909	HH LV - export	0						46	
HV Generation	910	HH HV - export	0						46	
EHV Generation	960	HH EHV - export	0						41	

Notes to: Table 4.1 Generation Charges

Fixed Charge 1 = p/ MPAN/ day

Capacity Charge 2 = p/ kVA/ month

5. SYSTEM LOSS ADJUSTMENT FACTORS

STANDARD LOSS ADJUSTMENT FACTORS

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

Authorised Electricity Operators providing a supply of electricity from any entry point into the Company'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.

For premises connected at extra high voltage (at or above 22,000 volts or at a substation with a primary voltage of 33,000 volts or above), special assessment will determine the loss adjustment factor, which is relevant to the particular exit point. In some circumstances, special low-loss equipment (such as transformers) may be available and can be included in the calculation. Loads with power factors, which fall outside the range of 0.8 lagging and unity, may also require special assessment.

Role of Loss Adjustment Factors In the Generation of Electricity

For generators embedded in the Company'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 the Company's electricity distribution network.

Table of Standard Loss Adjustment Factors in GSP Group_P

Voltage of Exit Point	Peak 1600-1900 Mon-Fri Nov-Feb	Winter Weekday 0730-2000 exc peak Mon-Fri Nov-Feb	Other Times	Night 0030-0730 Daily
EHV	1.025	1.026	1.020	1.020
HV	1.058	1.061	1.048	1.048
LV	1.108	1.112	1.096	1.098

Notes on the Table

- (i.) Times given are Clock times GMT or BST as appropriate for the time of year
- (ii.) LV means not exceeding 1,000 volts; and,
- (iii.) HV means exceeding 1,000 volts but less than 22,000 volts
- (iv.) The loss adjustment factors reflect the total losses on the system as attributable to the relevant voltages.
- (v.) For EHV, HV and LV generators embedded in the Company's distribution system, the Loss Adjustment Factors will be 1.000. (Applicable LLFC's are 909, 910, 950, 951, 952 and 960).

EMBEDDED DISTRIBUTION NETWORKS' LOSS ADJUSTMENT FACTORS

EMBEDDED DISTRIBUTION NETWORKS' LOSS ADJUSTMENT FACTORS

in "SCOTTISH POWER DISTRIBUTION" area:

For the purposes of converting metered kWh to a GSP equivalent, the following multipliers are to be used: -

Voltage of Exit Point	Winter Peak 1600-1900 Mon – Fri Nov-Feb	Other Winter Weekday 0730-1600 1900-2000 Mon – Fri Nov – Feb	Night 2330-0730 daily	Other Times
EHV	1.007	1.006	1.004	1.006
HV	1.029	1.027	1.022	1.024
LV	1.086	1.080	1.066	1.073

Embedded Generator Voltage of Exit Point	Winter Peak 1600-1900 Mon – Fri Nov-Feb	Other Winter Weekday 0730-1600 1900-2000 Mon – Fri Nov – Feb	Night 2330-0730 daily	Other Times
EHV	1.007	1.006	1.004	1.006
HV	1.029	1.027	1.022	1.025
LV	1.086	1.080	1.066	1.072

All the above applies at all times and are Clocktime.

Application of Line Loss Factor Class Codes:

EHV: 960 (Export)

HV: 386, 388 (Export)

LV: 380 – 384, [387, 390, 391 (Export)], 880-884

EMBEDDED DISTRIBUTION NETWORKS' LOSS ADJUSTMENT FACTORS

Note: - The export loss adjustment factors will apply to the generated output provided by embedded generators.

6. ELECTRICITY DISTRIBUTION USE OF SYSTEM REBATES

- 6.1 The Company 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 Capacity	means the capacity of supply expressed in kilovoltamperes (kVA), requested by the Customer or authorised by the Company. Where a new or larger connection is provided, we will not normally allow the customer to reduce the maximum capacity for the first five years (ten for generator connections). Even if the customer no longer needs the supply during the initial five years (ten for generator connections), the customer will still be legally responsible for the balance of the availability charges. The terms Available Capacity and Maximum Capacity may also be used in the above context and shall be construed accordingly.
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 the Authorised Capacity of the supply expressed in kilovoltamperes (kVA) or such higher capacity as may be determined from the recorded peak demand in kilowatts (kW) in the month of the account, and the associated power factor. Whenever the Chargeable Capacity in a month exceeds the Authorised Capacity, the Authorised Capacity will be reset to the higher figure until further notice.
Clocktime	means Greenwich Mean Time (GMT) in the winter and British Summer Time (BST) in the summer as appropriate for the time of year.
CT	means Current Transformer.
Day	means all hours other than Night.
Distribution Licence	means a licence granted, or treated as granted, pursuant to Section 6(1)(c) of the Act.
Distribution Services Area	has in respect of the Company, the meaning given to the term in paragraph 5(b) of Condition 2 of the Company's Distribution Licence.
Evening and weekend	means times other than Night or Weekday day.
High Voltage	means a pressure of more than 1,000 volts and less than 22,000 volts at the customer's terminals
IDNO	means a party that holds a Distribution Licence in which Section C of the standard distribution licence conditions does not have effect, whether or not that party is also engaged in the supply or generation of electricity.
Low Voltage	means a pressure of not more than 1,000 volts at the customer's terminals.
Maximum Capacity	means the agreed capacity normally kept available, based on the maximum kVA required, for electricity flow into the premises.
Month	means the period of around 30 days between normal meter reading

dates.

Night	means generally a period of 7 or 8 hours daily between 11pm and 9 am GMT or Clocktime as appropriate for the charge structure. The switching times may change from time to time.
Normal Working Hours	means pre-programmed work between 0800 and 1800 on any day other than a Saturday, Sunday, Christmas Day, New Year's Day or a day which is a bank holiday within the meaning of the Electricity Act 1989.
Peak Period	means generally a period of 12 hours between 7.30am to 7.30pm GMT or Clocktime as appropriate, Monday to Friday, November to February inclusive.
Power factor	means the ratio of kW and kVA supplied in any month.
Qualifying demand	means the average of the three highest monthly maximum demand in any consecutive 12 months commencing on or after January 1993. If the demand is measured in kVA, we will assume the power factor is 0.95 unless customer proves otherwise. This means that 100kW is equivalent to 111kVA.
Supplier	means a party that holds a Supply Licence and that does not hold a Distribution Licence.
Supplier Licence	means a licence granted, or treated as granted, pursuant to Section 6(1)(d) of the Act.
Three Phase	means an exit point provided with more than a single-phase supply.
Unit	means one-kilowatt hour. This is the amount of electricity used in one hour by an appliance rated 1,000 watts (one kilowatt).
Unit Rate 1:	The unit charge associated with unrestricted unit consumption.
Unit Rate 2:	The unit charge associated with restricted unit consumption and which is generally a period of 6 – 12 hours daily as appropriate for the charge structure. The switching times may change, from time to time, and are detailed in the Market Domain Data.
Weekday	day means generally a period of 12 hours between 7.30am to 7.30pm GMT or Clocktime as appropriate for the charge structure on Mondays to Friday other than a day which is a bank holiday within the meaning of the Electricity Act 1989. The switching times may change from time to time.