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Transco

Piping gas for you

Gas Transportation Charges

from 1st May 2000

TRANSPORTATION CHARGES EFFECTIVE FROM 1st MAY 2000

Introduction

This publication sets out revised transportation charges from those published in the publication "Gas Transportation charges from 1st October 1999". These charges apply for use of the Transco pipeline network, as required by Standard Condition 3 of the Public Gas Transporter's licence. For ease of comparison with the October publication, the same section and table numbers have been used below. The charges described below will apply from 1st May 2000. This document does not override or vary any of the statutory, licence or Network Code obligations upon Transco.

For more information on the charges set out below, contact Transco's Pricing team on **(0121) 623 2142**.

2.1.1 Network Code

The Network Code is supported by an integrated set of computer systems called UK Link. The charges and formulae in this booklet will be used in the calculation of charges within UK Link, which are definitive for billing purposes.

There are a number of areas of the Network Code that impact upon the cost to shippers of using the transportation network, such as imbalance charges, scheduling charges, capacity over-runs and ratchets, top-up neutrality charges and contractual liabilities. Reference should be made to the Network Code - as modified from time to time - for details of such charges and liabilities.

2.1.2 Units

Charges are expressed in units of both kilowatt hours (kWh) and therms. The charges expressed in pence per kilowatt hour or pence per peak day kilowatt hour are the definitive charges for billing purposes. It is these which are used in UK Link.

The tables also show capacity charges for peak kilowatt hours at both a daily rate and an equivalent annual rate. UK Link will use the daily rate figures for capacity and fixed charges.

2.1.3 Invoicing

Transco's Invoicing team produce and issue the invoices that are derived from the transportation charges shown within this publication. To clarify this link between pricing and invoicing, details relating to the latter (namely charge codes and invoice names) are included in the tables.

For more information on invoicing, please contact Transco's Invoicing team on **(0121) 712 4752**.

2.1.4 The Transco price control formula

Transportation charges are derived in relation to a price control formula which is set by Ofgem, the gas and electricity market regulator, for the transportation of gas. This formula dictates the maximum revenue Transco can earn for each unit of gas transported through its network. Should Transco earn more or less than the maximum permitted revenue in a formula year, then a compensating adjustment is made in the following year.

The derivation of the price cap for the formula year to 31st March 2000 is detailed in Appendix 2B of Transco's publication "Gas Transportation Charges from 1st October 1999".

Within the cap on charges set by the price control formula, transportation charges are designed to reflect the relative costs of constructing, maintaining and operating the different parts of the gas transmission and distribution systems.

For charging purposes the system is split into three elements: the National Transmission System (NTS), the Local Distribution Zones (LDZs) and customer-related activities. Transco's annual Activity Based Costing (ABC) exercise assigns Transco's costs to each of these elements. Charges have been derived for each element in order to recover the appropriate revenue based on this ABC analysis.

2.1.5 Firm transportation

Firm transportation charges comprise NTS and LDZ capacity and commodity charges plus customer charges.

2.1.6 Interruptible transportation

For supply points which have been nominated by a shipper as interruptible, the shipper will pay neither the NTS exit capacity charge nor the LDZ capacity charge. Transco has the right to interrupt these supply points for up to 45 days each year. Interruptible transportation is available for supply points which consume over 200,000 therms per annum.

To help Transco run the network safely and securely the Network Code defines two special types of interruptible supply points. These are Network Sensitive Load (NSL) and Transco Nominated Interruptible (TNI).

NSLs are supply points where specific interruption may be required to maintain the supply of gas to firm supply points in the same area. The additional reduction in transportation charges applying to NSLs referred to in the Network Code (6.7.14) has been set to zero.

TNIs are supply points where Transco reserves the right to interrupt for more than 45 days each year. These supply points are not only exempt from NTS exit capacity and LDZ capacity charges but also pay discounted NTS and LDZ commodity charges.

The discount percentage is calculated as:

$$\left(\frac{N - 45}{183} \right) \times 100 \text{ per cent}$$

where N is the lower of the maximum number of days of permitted interruption or 183.

(For example, if it is specified that the supply point can be interrupted for up to 90 days, then N equals 90 and the NTS and LDZ commodity unit charges are reduced by 24.6%.)

Transco offers a number of services relating to interruptible supply points.

Allocation arrangements allow more than one shipper/supplier to supply interruptible gas to a site which consumes in excess of two million therms per annum. This flexibility of supplier enables the end user to make greater use of the competitive market and allows for alternative provision of gas during commercial interruption. Further details of this service are given in Section 2.5.2.

The Partial Interruption service is designed to allow shippers to reduce offtake rates at supply points (to predetermined levels agreed between the shipper and the end user) where capacity exists, so that the site remains on a part-load, where otherwise it would have been fully interrupted.

The Interruptible Supply Point Firm Allowance (IFA) is available to all interruptible supply points. It allows a guaranteed supply of 500 therms per day (this figure can be higher if the capacity is available), where this allowance is subject to normal firm transportation charges. This enables end users to maintain their critical processes when their supply is interrupted.

Transfer of Firm Offtake Capability allows a shipper to release capacity allocated to a firm supply point in order to meet the requirements of an interruptible supply point during an interruption notice. This is subject to system constraints and other eligibility criteria.

Details of all of the above interruption services are available from gas suppliers/shippers, or from Transco System Operation on **(01455) 892435**.

2.1.7 Theft of gas

The licensing regime places incentives on transporters, shippers and suppliers to take action in respect of suspected theft of gas. Certain costs associated with individual cases of theft are recovered through transportation charges. Transco's charges reflect these requirements, with Transco remaining cash neutral in the process. The charges below do not include any adjustment relating to costs associated with individual cases of theft.

2.2 National Transmission System

The National Transmission System (NTS) is a network of pipelines operating at pressures of up to 85 bar which transports gas from entry points to Transco's local transmission and distribution systems, other connected systems, storage sites and directly to some large volume consumers.

NTS charges are split into capacity and commodity elements, and a 65:35 split will continue to apply. The capacity element for using the NTS distinguishes between system entry and exit. The exit charge is determined by the exit zone which contains the offtake point.

The Review of Gas Trading Arrangements has led to a regime in which NTS monthly system entry capacity is sold by auction. In the first auctions held in October 1999 only entry capacity at the six main coastal terminals was sold in this way. For the second set of auctions, to be held in March 2000, monthly entry capacity for all NTS entry points, that is coastal terminals, onshore fields and connections and storage sites, will be sold by auction.

Exit capacity charges are based on the calculated long run marginal cost (LRMC) of developing the system to meet a sustained increase in demand. Further information on the LRMC methodology is contained in section 3.2 of Transco's publication "Gas Transportation Charges from 1st October 1999". Transcost, a PC-based model for calculating NTS LRMCs is available from Transco's Pricing team.

The standard NTS commodity charge is a uniform charge, independent of entry and exit points. A distance-related commodity charge is also available as an alternative, the optional NTS commodity tariff.

NTS charges, including floor prices in the auctions of Entry Capacity, are set out in the following tables.

2.2.1 Monthly entry capacity services

For all NTS entry points, monthly system entry capacity is now sold by auction. Capacity is allocated in respect of each bid in descending price order starting at the highest price until all monthly system entry capacity has been allocated or all bids have been considered. Successful bidders pay the bid price of each accepted or part accepted bid. Unsold monthly capacity may be bought on a first come first served basis, after the auctions have closed, up to three days before the month of use. The charge for this capacity is the average of the top 50%, by volume, of accepted bids in ranked price order. The lowest price a shipper may bid is the floor price, set out in table 2.2.1c opposite

Aggregate Monthly System Entry Capacities on offer for each month are based upon a calculation of Seasonal Normal Demand for the relevant month plus an additional 10%. These aggregate capacities are shown in the table 2.2.1a below. These aggregate capacities at the time of going to press are subject to the approval of Network Code Modification Proposal 0380.

Table 2.2.1a Aggregate Monthly System Entry Capacities April-September 2000

	Aggregate Quantity GWh/d
April	3,334
May	2,635
June	2,128
July	1,830
August	1,854
September	2,278

Monthly system entry capacity will be allocated across the entry points through a combination of historic gas flow analysis and shipper determination during the auction process. The maximum quantity of Monthly System Entry Capacity that can be allocated to any entry point is as shown in table 2.2.1b opposite. At the time of going to press these quantities are subject to the approval of Network Code Modification Proposal 0371.

Table 2.2.1b Maximum capacity that can be allocated to each entry point each month

GWh/d	April	May	June	July	August	September
Coastal terminals						
Bacton	768.40	558.67	452.46	303.47	284.69	436.52
Easington (Inc Rough)	342.87	218.83	162.46	154.54	132.77	181.11
Theddlethorpe	375.70	262.07	221.14	184.99	220.65	258.49
St. Fergus*	1,086.00	991.00	814.00	803.00	803.00	905.00
Teesside*	386.00	386.00	353.00	319.00	342.00	364.00
Barrow	255.81	127.75	55.30	25.26	32.50	59.50
Onshore fields and connections						
Hatfield Moors	4.64	3.04	2.45	1.28	1.30	2.62
Caythorpe	0.11	0.07	0.06	0.03	0.03	0.06
Wytch Farm	5.53	4.76	3.98	4.53	3.17	3.73
Burton Point	7.66	5.66	3.68	1.93	1.95	3.94
Storage sites						
Hornsea	10.77	18.32	11.26	6.26	6.01	11.82
Glenmavis LNG	12.55	8.08	6.54	3.55	3.64	6.97
Partington LNG	26.56	17.20	13.92	7.56	7.58	14.89
Dynevor Arms LNG	6.11	3.98	3.24	1.83	1.78	3.43
Isle of Grain LNG	26.65	17.47	14.21	7.63	7.77	15.17
Avonmouth LNG	18.18	11.98	9.72	5.22	5.30	10.37
Hatfield Moors	0.77	0.56	0.45	0.26	0.34	0.41

* St. Fergus and Teesside availability limited by maintenance requirements for each month of the period April to September 2000.

Table 2.2.1c Floor prices for the auction of monthly entry capacity

Invoice	Charge Code
NTS Capacity	LTF

Entry point	Floor price
	pence per kWh per day
Coastal terminals	
Bacton	0.0007
Easington (Inc. Rough)	0.0024
Theddlethorpe	0.0013
St. Fergus	0.0228
Teesside	0.0052
Barrow	0.0083
Onshore fields and connections	
Hatfield Moors	0.0024
Caythorpe	0.0020
Wytch Farm	0.0000
Burton Point	0.0000
Storage sites	
Hornsea	0.0024
Glenmavis LNG	0.0089
Partington LNG	0.0008
Dynevor Arms LNG	0.0000
Isle of Grain LNG	0.0000
Avonmouth LNG	0.0000
Hatfield Moors	0.0024

Shippers with storage deliverability also need to book system entry capacity at the relevant site.

Further updates of these charges based on subsequent auctions will be available from Transco's web site www.transco.uk.com and on the Shipper Information Service immediately after the auction has been completed.

2.2.2 Daily entry capacity services

Transco offers two daily capacity services - a daily firm entry capacity service and a daily interruptible capacity service. Both services are offered on the day before the gas day. Prices and allocation are determined through a tender process and are subject to minimum (floor) prices. For each service shippers may submit up to five applications for capacity in respect of each aggregate system entry point. The lowest price a shipper may bid is the floor price. Capacity is sold in descending order of bid price.

The quantity of firm daily capacity available at the entry points is the maximum that can be transported on a day less any quantities of monthly capacity that have previously been sold.

The charge payable by a shipper in respect of each day for the daily entry capacity service will be the quantity of the shipper's registered daily system entry capacity multiplied by its bid price.

Interruptible entry capacity provides a right to deliver gas to the system at the aggregate system entry point on a gas day provided that the system can accept the delivery flow rate. If on a day, nominations from primary holders of firm capacity increase so that gas flow exceeds booked levels at an entry point, any interruptible capacity service entitlements would be scaled back.

In respect of the interruptible system service the charge is determined by a user's registered daily interruptible system entry capacity less any amount scaled back, multiplied by its interruptible offer price.

2.2.2.1 Daily firm entry charge floor prices

Invoice	Charge Code
NTS Capacity	DAF

The floor price for firm daily capacity was set at 1.5 times the average of the top 50%, by volume, of accepted bids in ranked price order in the October auction. For the March 2000 auctions this has been reduced to 1.0 times the average of the top 50%, by volume, of accepted bids in ranked price order.

2.2.2.2 Daily interruptible entry charge floor prices

Invoice	Charge Code
NTS Capacity	DIC

The floor price for daily interruptible capacity is set at 0.1 times the average of the top 50%, by volume, of accepted bids in ranked price order in the relevant series of primary auctions.

2.2.3 Constrained LNG

Shippers that book the constrained liquefied natural gas (LNG) storage service, available from the LNG storage sites at Dynevor Arms, Isle of Grain and Avonmouth, undertake an obligation to provide transmission support gas to Transco on days of very high demand. In recognition of this, shippers receive a credit in respect of minimum booked storage deliverability. The credit is deducted from the price of the storage service.

Entry point	Credit
	pence per registered kWh per day
Dynevor Arms LNG	0.0009
Isle of Grain LNG	0.0006
Avonmouth LNG	0.0011

2.2.4 NTS exit capacity charges

NTS exit capacity charges apply to loads supplied through existing NTS offtakes into the Local Distribution Zones and to large loads and interconnectors supplied directly from the NTS.

For new loads supplied from the NTS, the exit zone charges provide an indication of the likely level of charges. However, in general, an individual exit zone will be created with its own charge for new NTS offtakes.

At present, Transco makes no charge for NTS exit capacity at storage points. This is on the basis that the transportation service to the storage points is interruptible. If a firm transportation service to storage were provided, an NTS exit capacity charge would be payable.

There are four small towns in Scotland where LNG needs to be transported by road tanker to supply end users on distribution systems which are not physically connected to the main Transco network. For these locations, NTS exit charges will be calculated on the basis that they are allocated to exit zone SC4, the location of the LNG storage site which supplies them.

Table 2.2.4 NTS exit capacity charges

Invoice	Charge Codes		
NTS Capacity	NDX (DM) / NNX (NDM)		

Exit zone	Charge		
	pence per peak day kWh per day	pence per peak day kWh per annum	pence per peak day therm per annum
SC1	0.0001	0.037	1
SC2	0.0007	0.256	7
SC4	0.0001	0.037	1
NO1	0.0001	0.037	1
NO2	0.0006	0.219	6
NW1	0.0060	2.190	64
NW2	0.0079	2.884	85
NE1	0.0001	0.037	1
NE2	0.0019	0.694	20
NE3	0.0010	0.365	11
EM1	0.0022	0.803	24
EM2	0.0007	0.256	7
EM3	0.0060	2.190	64
EM4	0.0061	2.227	65
WM1	0.0079	2.884	85
WM2	0.0080	2.920	86
WM3	0.0118	4.307	126
WA1	0.0114	4.161	122
WA2	0.0195	7.118	209
EA1	0.0038	1.387	41
EA2	0.0094	3.431	101
EA3	0.0043	1.570	46
EA4	0.0102	3.723	109
NT1	0.0139	5.074	149
NT2	0.0133	4.855	142
NT3	0.0115	4.198	123
SE1	0.0112	4.088	120
SE2	0.0139	5.074	149
SO1	0.0133	4.855	142
SO2	0.0184	6.716	197
SW1	0.0121	4.417	129
SW2	0.0210	7.665	225
SW3	0.0261	9.527	279

See map on page 12 of Transco's publication "Gas Transportation charges from 1st October 1999" for location of exit zones. The exit zone for a supply point is determined by its post code. Exit zones SC3, EA5, EA6 and EA7 have no offtakes.

Table 2.2.4 NTS exit capacity charges (continued)

Invoice	Charge Code		
NTS Capacity	NDX (DM)		

NTS offtakes	Charge		
	pence per peak day kWh per day	pence per peak day kWh per annum	pence per peak day therm per annum
AM Paper/Skelmersdale	0.0023	0.840	25
Avonmouth PS	0.0191	6.972	204
Barking PS	0.0097	3.541	104
BASF Teesside	0.0001	0.037	1
BP Grangemouth	0.0001	0.037	1
BP Saltend	0.0010	0.365	11
Bridgewater Paper	0.0104	3.796	111
Brigg PS	0.0005	0.183	5
Brunner Mond	0.0023	0.840	25
Connah's Quay PS	0.0104	3.796	111
Corby PS	0.0039	1.424	42
Coryton	0.0104	3.796	111
Cottam PS	0.0005	0.183	5
Deeside PS	0.0104	3.796	111
Didcot PS	0.0113	4.125	121
Enfield Energy	0.0104	3.796	111
Hays Chemicals	0.0023	0.840	25
ICI Runcorn	0.0106	3.869	113
Keadby PS	0.0001	0.037	1
Kemira Ince	0.0106	3.869	113
Kings Lynn PS	0.0035	1.278	37
Kingsnorth	0.0095	3.468	102
Little Barford PS	0.0047	1.716	50
Longannet PS	0.0001	0.037	1
Medway PS	0.0095	3.468	102
Peterborough PS	0.0035	1.278	37
Peterhead PS	0.0001	0.037	1
Phillips/Teesside	0.0001	0.037	1
Rocksavage PS	0.0106	3.869	113
Roosecote PS	0.0017	0.621	18
Rye House PS	0.0104	3.796	111
Saltend	0.0010	0.365	11
Sellafield PS	0.0017	0.621	18
South Humber Bank PS	0.0010	0.365	11
Sutton Bridge PS	0.0017	0.621	18
Teesside PS	0.0001	0.037	1
Terra Billingham	0.0001	0.037	1
Terra Severnside	0.0219	7.994	234
Zeneca/Teesside	0.0001	0.037	1
Bacton I/C	0.0038	1.387	41
Moffat I/C	0.0001	0.037	1
Thornton Curtis	0.0005	0.183	5

2.2.5 NTS commodity charges

2.2.5.1 Standard charge

The uniform commodity charge for use of the NTS is:

Invoice	Charge Code
Commodity	NCO
pence per kWh	pence per therm
0.0154	0.451

2.2.5.2 Optional charge

The optional NTS commodity tariff is available as an alternative to the standard commodity charge and may be attractive for large daily metered sites located near to entry terminals. Since the commodity tariff is not distance-related it can result in a relatively high charge for short distance transportation. This could give perverse economic incentives to build dedicated pipelines bypassing the NTS. This could result in an inefficient outcome for all system users.

The optional tariff applies in respect of gas delivered from the local specified terminal. The charge is site specific, and is calculated by the function shown below:

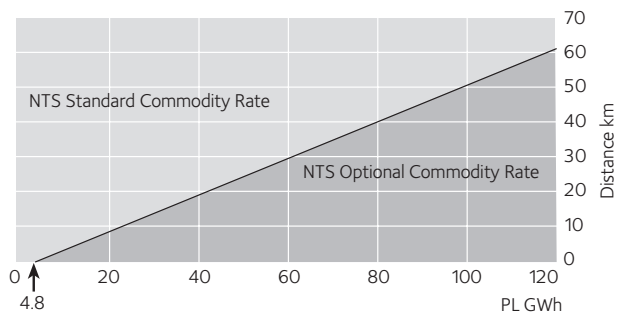
Invoice	Charge Code
ADU	880
pence per kWh	
$1203 \times [(PL)^{-0.834}] \times D + 363 \times (PL)^{-0.654}$	
pence per therm	
$2107 \times [(PL)^{-0.834}] \times D + 1168 \times (PL)^{-0.654}$	

Where D is the direct distance from the site or non-Transco pipeline to the elected terminal in km, and PL is the registered supply point capacity in kWh or therms as appropriate. Note that ^ means "to the power of".

The chart opposite provides a "ready-reckoner" indicating whether a given site is likely to benefit from the optional NTS commodity tariff for a given PL and Distance. For example, for a load with a PL of 40 GWh, if the applicable distance is 50km the site will not benefit from taking the optional tariff, but if the distance is only 20km then the optional tariff will reduce the charge payable.

Further information on the optional tariff can be obtained from Transco's Customer Portfolio Management (CPM) team on **(0121) 711 9695**.

Look up chart - which is the lower commodity rate?



2.2.6 Compression charge

An additional charge is payable where gas is delivered into the Transco system at a lower pressure than that required, causing a need for additional compression. For gas delivered at the Total Oil Marine sub-terminal at St. Fergus, a compression charge of 0.0058 pence per kWh (0.170 pence per therm) is payable.

2.2.7 System balancing charge

A system balancing commodity charge will be payable to reflect the costs of ensuring a balance between the gas entering the system and the gas offtaken.

For shippers operating wholly under Network Code arrangements, the system balancing charge is zero.

The system balancing commodity charge is calculated as: The sum of energy balancing charges which are or would be payable under the Network Code less energy balancing charges paid by or to the shipper pursuant to the Network Code or any other arrangement divided by the total quantity offtaken.

Energy balancing charges are defined in the Network Code and include imbalance charges, scheduling charges and any additional charges payable by or to the shipper for the purpose of enabling Transco to balance system inputs and offtakes.

The system balancing charge will be determined following each calendar month by monitoring gas inputs and offtakes on a daily basis.

2.3 Local Distribution Zones

Each Local Distribution Zone (LDZ) contains the local transmission system, a network of pipelines operating generally at pressures up to 38 bar, and the distribution system, a network of mains operating in three pressure tiers: intermediate (2 to 7 bar), medium (75 mbar to 2 bar) and low (below 75 mbar).

The LDZ charging functions - both capacity and commodity - use site peak capacity as the measure of customer size. Following consultation, the methodology underlying the LDZ charges has been changed, resulting in a rebalancing of the charges from 1st October 1999.

At daily metered (DM) sites shippers book a daily capacity which is monitored by use of dataloggers. For non-daily metered (NDM) sites, the peak daily load is estimated through the use of a set of algorithms. These algorithms employ a

range of end user categories, and are also used on a daily basis to estimate the consumption of NDM sites. Appendix 2A in Transco's publication "Gas Transportation Charges from 1st October 1999" provides details of the load factors which apply to each end user category.

The functions used to calculate the LDZ capacity and commodity charges are shown in the following tables. Note that $\ln\{\ln(PL)\}$ means the natural logarithm (to the base e) of the natural logarithm of the registered supply point capacity, PL (in kWh or therms as appropriate). Registered supply point capacity (a Network Code term) is capacity sufficient for the peak daily load of a supply point.

An example to illustrate the shape of a "log-log" function is shown below.

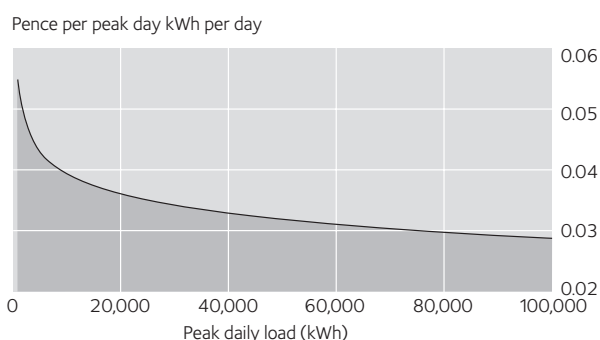
Table 2.3.1 LDZ capacity charges

Invoice		Charge Codes	
LDZ Capacity		ZCA	
Load size	Charge	Charge	Charge
	pence per peak day kWh per day	pence per peak day kWh per annum	pence per peak day therm per annum
Up to 73,200 kWh (2,500 therms) per annum	0.0549	20.04	587.3
73,200 kWh (2,500 therms) per annum up to 97,152,962kWh (3,314,997 therms) per peak day	$0.1277 - 0.0407 \times \ln\{\ln(PL)\}$	$46.61 - 14.86 \times \ln\{\ln(PL)\}$	$1366.0 - 435.4 \times \ln\{\ln(PL \times 29.3071)\}$
97,152,962kWh (3,314,997 therms) per peak day and above	0.0091	3.32	97.3

Table 2.3.2 LDZ commodity charges

Invoice		Charge Codes	
Commodity		ZCO	
Load size	Charge	Charge	Charge
	pence per kWh		pence per therm
Up to 73,200 kWh (2,500 therms) per annum	0.1368		4.009
73,200 kWh (2,500 therms) per annum up to 8,905,833kWh (303,880 therms) per peak day	$0.3519 - 0.1195 \times \ln\{\ln(PL)\}$		$10.313 - 3.502 \times \ln\{\ln(PL \times 29.3071)\}$
8,905,833kWh (303,880 therms) per peak day and above	0.0206		0.604

Figure 2.3.1 LDZ capacity charge



2.4 Customer Charges

2.4.1 Network Code contracts

Customer charges reflect customer-related costs. For Network Code contracts, these are service pipes, meters, emergency work, CPM activities, and also a proportion of other Shipper Service costs. Most of these costs are related to the quantity of gas used at the supply point.

For supply points which consume less than 2,500 therms per annum, the customer charge is made up of a fixed charge of £10.00 per supply point plus a commodity charge.

For supply points which consume between 2,500 and 25,000 therms per annum, the customer charge is made up of a charge which depends on the frequency of meter reading plus a capacity charge based on the supply point capacity.

For supply points which consume over 25,000 therms per annum, the customer charge is based on a function related to the registered supply point capacity, PL (in kWh or therms as appropriate) and, for supply points which contain datalogged meters, datalogger charges.

Charges for dataloggers apply on a per logger basis. An additional charge is payable on a per supply point basis for an annual maintenance visit, including a check read of the datalogger against the primary meter.

Datalogger charges apply to all dataloggers on daily metered meter points (as defined by the Network Code).

2.4.2 Pre-Network Code contracts

In relation to pre-Network Code contracts, in addition to the customer charges set out in the table, and meter reading and datalogger charges if applicable, the fixed site charge will include an administration charge of 171.5068 pence per day (£626 per annum) per supply point.

Table 2.4 Customer charges

Up to 73,200 kWh (2,500 therms) per annum

Invoice	Charge Code	
LDZ Capacity	CFI	
	pence per day	£ per annum
Fixed charge	2.7397	10.00
Invoice	Charge Code	
Commodity	CCO	
	pence per kWh	pence per therm
Commodity charge	0.1510	4.425
Invoice	Charge Code	
LDZ Capacity	PPM	
	pence per day	£ per annum
Additional charge for supply points with a Transco prepayment meter	2.7397	10.00

73,200 kWh up to 732,000 kWh (25,000 therms) per annum

Invoice	Charge Code		
LDZ Capacity	CFI		
	pence per day	£ per annum	
Fixed charge non-monthly read supply points	18.9259	69.08	
monthly read supply points	19.9564	72.84	
Invoice	Charge Code		
LDZ Capacity	CCA		
	pence per peak day kWh per day	pence per peak day kWh per annum	pence per peak day therm per annum
Capacity charge	0.0129	4.709	138.0
Invoice	Charge Code		
LDZ Capacity	PPM		
	pence per day	£ per annum	
Additional charge for supply points with a Transco prepayment meter	2.7397	10.00	

Table 2.4 Customer charges (continued)

732,000 kWh (25,000 therms) per annum and above

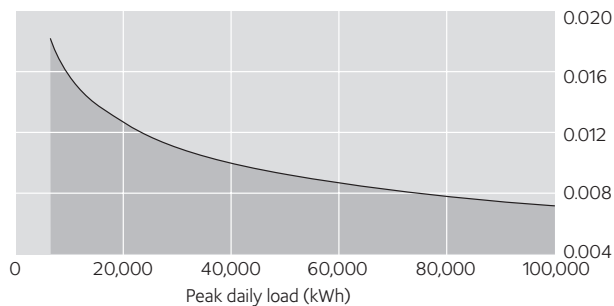
Invoice	Charge Code		
LDZ Capacity	CCA		
	pence per peak day kWh per day	pence per peak day kWh per annum	pence per peak day therm per annum
Charging function	$0.2383 \times (PL)^{-0.30}$	$87.0 \times (PL)^{-0.30}$	$925 \times (PL)^{-0.30}$
	where ^ means "to the power of".		

Datalogger charges

Invoice	Charge Codes	
LDZ Capacity	CDA / CAR	
	pence per day	£ per annum
Standard charge	119.4521 per datalogger	436.00 per datalogger
Annual check read	2.3178 per supply point	8.46 per supply point

Figure 2.4 Customer charge function

Pence per peak day kWh per day



The above graph illustrates the shape of the power function in the formulae for supply points which consume over 732,000 kWh per annum.

2.4.3 Metering Charges/Rebates

The element within the customer charge relating to the provision of the Transco metering service is detailed below:

Up to 73,200 kWh (2,500 therms) per annum

Metering rebate	pence per day	£ per annum
per supply point	2.7397	10.00

73,200 kWh (2,500 therms) per annum and above as determined by the formula below

Metering rebate	pence per day
per supply point	$\{1.729 \times (PL)^{0.59} - 51.72\} / 3.65$

Where PL is expressed in kWh. Note that ^ means "to the power of".

This element is available as a rebate per supply point where a meter is supplied other than by Transco, consistent with the implementation programme presently under discussion with the industry.

An additional charge is payable in respect of Transco-supplied prepayment meters (electronic token, mechanical token or coin-operated). The charge is £10 per prepayment meter per annum (2.7397 pence per prepayment meter per day).

The metering element of the customer charge reflects the present costs of Transco's operations, and may not be representative of the charges which an unbundled metering business might set, based on a different cost structure.

2.5 Other Charges

Administration Charges at Connected System Exit Points, Shared Supply Meter Points, and Interconnectors

2.5.1 Connected System Exit Points

A connected system exit point (CSEP) is a system point comprising one or more individual exit points which are not supply meter points. This includes connections to a pipeline system operated by a Public Gas Transporter other than Transco. NTS capacity and commodity charges are calculated for each shipper transporting to the CSEP as though the gas were being shipped to a single supply point.

In the calculation of LDZ charges payable, the unit commodity and capacity charges are based on a notional supply point capacity, equal to the CSEP peak day load divided by the number of physical connections to Transco's system. Therefore, for any particular CSEP, each shipper will pay identical LDZ unit charges regardless of the proportion of gas shipped. These unit charges will be recalculated as supply points are added to the connected system. Reference needs to be made to the relevant Network Exit Agreement or CSEP ancillary agreement to derive the notional supply point capacity.

There is no customer charge payable for connected systems. However, separate administration processes are required to manage the daily operations and invoicing associated with CSEPs, including interconnectors, for which an administration charge is made.

The administration charge which applies to CSEPs containing NDM and DM sites is:

CSEP administration charge per supply point within a connected system:

1.3699 pence per day (£5.00 per annum).

The invoice and charge codes are:

	Invoice	Charge Code
DM CSEP	ADU	879
NDM CSEP	ADC	894

2.5.2 Shared supply meter point allocation arrangements

Transco offers an allocations service for daily metered sites consuming more than two million therms per annum. This allows up to four shippers/suppliers to supply gas through a shared supply meter point.

Allocating daily gas flows between the shippers/suppliers can be done either with an appointed agent or by Transco.

The administration charges which relate to these arrangements are shown below. Individual charges depend on the type of allocation service nominated, and whether the site is telemetered or non-telemetered.

Charges expressed as £ per shipper per supply point

Invoice	Charge Code
ADU	879

No agent

	Telemetered	Non-telemetered
Set-up charge	61.00	135.00
Shipper-shipper transfer charge	76.00	144.00
Daily charge	1.89	2.18

With agent

	Telemetered	Non-telemetered
Set-up charge	61.00	122.00
Shipper-shipper transfer charge	76.00	144.00
Daily charge	1.62	2.07

2.5.3 Interconnectors

- Allocation arrangements at Interconnectors :

The following allocations charges apply at both interconnectors (GB-Ireland and UK-Continent) and apply for each supply point. Allocating daily gas flows between shippers/suppliers can be done either by an appointed agent or by Transco. The same set up charge applies in either case. The daily charge depends on whether the service is provided through an agent or not:

	Invoice ADU	Charge Code 879	
Set up charge per shipper -			£86.00
Daily charge per shipper -		Agent service	£1.07
Daily charge per shipper -		Transco service	£1.69

- Administration charges at Moffat:

The following administration charges apply only to the GB-Ireland interconnector at Moffat. The charges, which vary if the service is provided via an agent or Transco, are detailed below:

	Invoice ADU	Charge Code 879	
Daily charge per shipper -		Agent service	£11.72
Daily charge per shipper -		Transco service	£23.44

The charges with or without an agent cover the operation of the flow control valve. In addition the Transco service provides the Exit Flow Profile Notice (EPN).

In the event that the appointed agent fails to provide an EPN to Transco the following additional charge will apply:

EPN Default Charge per shipper per event	£0.49
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2.5.4 Must reads

If a shipper is unable to provide meter readings in compliance with the Network Code, then Transco may initiate processes to obtain a meter read, referred to as a 'must read'. A charge will be made for each must read and will depend on the number of meters at a supply point requiring a must read at the same time. If there is one meter at the supply point the charge will be £40.00, for two meters the charge will be £60.00 and for three or more meters the charge will be £80.00. These charges are based on the typical cost of such reads which may include multiple visits to the site and obtaining and executing a warrant of entry.

2.5.5 Domestic opening read estimates

Incoming shippers are required by the Network Code to provide an actual domestic opening meter read to Transco within a window around the date that the supply point transfers. If no read is provided within the period, Transco is required to provide an estimated reading. In respect of supply points with an annual consumption of up to 73,200 kWh, a charge of £7.62 applies for each estimate provided, to the extent that an individual shipper's opening read performance has fallen below 90% in any month.

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