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The Statement of the Gas Transmission Metering Charges

Effective from 1 April 2009

nationalgrid

Document Revision History

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1.0	April 2007	
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About this Document

This document describes the methodology that National Grid Gas NTS ("National Grid") employs to levy charges for its metering services at connections to the Gas Transmission System in Great Britain. This document is one of a suite of documents that describe the charges levied by National Grid and the methodologies behind them. The other documents that are available are:

- Statement of Gas Transmission Transportation Charges
- Incremental Entry Capacity Release Methodology Statement
- Statement of Gas Transmission Transportation Charging Methodology
- The Statement and Methodology for Gas Transmission Connection Charging
- NTS Exit Capacity Release Methodology Statement

These are available on our Charging website at:

http://www.nationalgrid.com/uk/Gas/Charges/statements/

This statement is effective from 1 April 2009.

This document has been published by National Grid in accordance with Standard Conditions A4 and A5 of its Gas Licence in respect of the NTS and is approved by the Gas and Electricity Markets Authority (the Authority).

If you require further details about any of the information contained within this document or have comments on how this document might be improved please contact our UK Transmission Charging team on 01926 656317 or 01926 656022.

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GENERAL INTRODUCTION

Background

National Grid is the owner and the operator of the gas National Transmission System (NTS) in Great Britain.

The NTS is a network of pipelines, presently operated at pressures of up to 85 bar, which transports gas safely and efficiently from coastal terminals and storage facilities to exit points from the system. Exit points are predominantly connections to Distribution Networks (DNs) and large consumers but also include storage sites, direct connections to other systems, such as interconnectors to other countries and Independent Gas Transporters (IGTs).

These operations are carried out to meet the needs of the companies that supply gas to domestic (located within DNs) , commercial and industrial consumers and to power stations. In 2007/08 1,085 TWh of gas was transported to these consumers.

National Grid provides gas transportation to shippers supplying gas within the NTS, and metering and daily meter reading services for the companies that supply large industrial and commercial consumers directly connected to the NTS.

This statement sets out the metering charges that National Grid will apply for metering services provided under the Uniform Network Code from 1 April 2009. It also sets out the methodology used to derive the metering charges, as required by National Grid's Gas Transporter (GT) Licence in respect of the NTS (the "Licence").

Under Special Condition C12 of the Licence National Grid metering charges are regulated by a price control set by Ofgem, the gas industry regulator. To achieve price control revenue, Ofgem has set tariff caps for four key metering services; three of these relate to the provision of metering at domestic premises, the remaining one relates to the provision of metering at non-domestic premises. National Grid's charges for these services must not exceed the tariff caps which are increased each year by inflation. National Grid has increased these four charges to the new level of the tariff caps.

Domestic

Under the Standard Special Condition A10 of the Licence National Grid is required to provide and install meters at domestic premises following any reasonable request.

Under the Standard Special Condition A43 of the Licence National Grid Transmission is required to provide terms relating to Provision of Metering Services and the Provision of Meter Reading Services following any reasonable request.

National Grid has adjusted its transactional (one-off) charges for installation of domestic metering equipment to reflect the costs it incurs in providing these services

and consequently some charges have been revised. The transaction charge for customer requested domestic exchanges is limited to the level of tariff cap set by Ofgem.

Non-Domestic

Under the UNC (Section B 1.7.1 (b)) National Grid is obliged to make sure that the "Metering Charges" are the prevailing charges payable by a User as contained in the Metering Charges Statement.

Under the UNC (Section B 1.8.2 (b)) National Grid is required to publish each statement or revision thereto not less than 2 months before the date on which its proposal therein referred to are (pursuant to a revised Metering Charges Statement) to be implemented.

National Grid would welcome your views on any aspect of its metering service, its charges or the contents of this statement. Please send your comments to:

Karin Elmhirst on 01926 65 5540 or e-mail to karin.elmhirst@uk.ngrid.com (Queries related to the level of Charges).

Debra Hawkin on 01926 65 6317 or e-mail to debra.a.hawkin@uk.ngrid.com. (Queries related to the Metering Methodology Statement)

The latest version of this publication is available from National Grid Gas's website at: (www.nationalgrid.com/uk/gas/charges/meteringcharges)

CHAPTER 1: CHARGES FROM 1 APRIL 2009

1.1 Introduction

This section sets out National Grid's metering charges in accordance with its Licence and UNC. This document does not override or vary any of the statutory, Licence or UNC or other contractual obligations upon National Grid.
All charges are shown exclusive of VAT.

1.1.1 Domestic Meter Installations - Annual and Transactional Charges

Annual charges for provision and maintenance of domestic size meters[1] may be applied by National Grid on a per meter basis. These charges where applicable, vary according to the payment mechanism; that is whether the meter is a credit or a prepayment meter. This approach reflects some of the additional costs of providing prepayment metering services compared to credit meters.

Annualised installation charges do not apply to any domestic metering equipment installed on or after 1 October 2000. Instead transactional (one-off) charges are made in respect of specific meter work activities carried out by National Grid, as set out in section 2.3, including the installation of metering equipment.

1.1.2 Industrial and Commercial (Non-Domestic) High Pressure Meter Installations

Annual charges for maintenance of Industrial and Commercial high pressure meters vary according to the meter's 'badged capacity' or Q_{max}[2], since meter capacity is the main cost driver for a given meter type.

Separate charges apply for provision, installation and maintenance of Daily Read Equipment and volume converters (correctors), however, these charges, set out in Sections 1.2.2.2 & 1.2.2.3, will apply in respect of existing dataloggers and converters on NTS sites.

1.1.3 Invoicing

Xoserve produces and issues the invoices derived from the charges shown in this publication. If a shipper has an invoice query, please contact the Xoserve invoicing team via e-mail at cfsbilling@xoserve.com.

[1] Where the meter capacity is less than 11 standard cubic metres per hour (scmh).
[2] An indication of the upper limit of a measuring device's accuracy envelope.

1.2 Annual Charges

The tables in this section show the annual charges, expressed both in £ sterling per annum for general purposes, and in pence per day for billing purposes.

1.2.1 Domestic Size Meters

	Credit meter		Prepayment meter	
	Pence per day	£ per annum	Pence per day	£ per annum
Provision	2.3342	8.52	2.0658	7.54
Installation	1.5589	5.69	1.5589	5.69
Maintenance	0.1425	0.52	5.7945	21.15
Total (domestic meters installed prior to 2000)	4.0356	14.73	9.4192	34.38
Total (domestic meters installed from 2000)	2.4767	9.04	7.8603	28.69

(1) Meter capacity less than 11 scmh
(2) Any requests for a domestic meter to be fitted will be treated in accordance with Condition 4B of the GT Licence and will be quoted on an individual basis
(3) Installation Charges are only applied where a domestic meter has been installed prior to 2000.

1.2.2 Industrial and Commercial (Non-Domestic) High Pressure Meter Installations

1.2.2.1 Maintenance

Maintenance						
Capacity (scmh)	<10,192	≥ 10,192 <14,906	≥ 14,906 <25,878	≥ 25,878 <36,866	≥ 36,866 <63,524	≥ 63,524
£ per annum	9,791.72	10,389.46	11,750.62	12,230.18	13,426.42	17,342.32
Pence per day	2,682.6630	2,846.4274	3,219.3479	3,350.7342	3,678.4712	4,751.3205

1.2.2.2 Volume Converters

	Pence per day	£ per annum
Provision	35.6164	130.00
Installation	14.3562	52.40
Maintenance	32.3616	118.12
Total	82.3342	300.52

Charges are only applied where a volume converter has been installed. Any requests for a volume converter to be fitted will be treated in accordance with Condition 4B of the GT Licence and will be quoted on an individual basis.

1.2.2.3 Daily Read Equipment

	Pence per day	£ per annum
Provision	9.8548	35.97
Installation	43.9781	160.52
Maintenance	66.5260	242.82
Total	120.3589	439.31

(1) The above charges are only applied where Daily Read equipment has been installed.

1.2.2.4 Daily Meter Reading Charge

	Pence per day	£ per annum
Daily Meter Reading Charge	122.05	445.49

For clarification the daily metering reading charge is set at the tariff cap of £445.49 per annum as at 1st April 2009 and is in addition to the charges illustrated in 1.2.2.3.

1.3 Transactional Charges

Any work downstream of the outlet of the meter is excluded unless specifically mentioned.

In all cases, the required connection to the NTS, service pipe installation, alteration and disconnection will be subject to additional charges and will be in accordance with the Special Condition LC4B of the Licence.

All transactional charges for work on non-domestic meter installations and volume converters are quoted on an individual basis.

The following charges are related to domestic-size meter installations, i.e. where the meter capacity is less than 11 standard cubic metres per hour (scmh).

1.3.1 Customer Requested Domestic Meter Exchange

Title	Description	Charge
Customer requested exchange	Includes time and materials required to exchange a credit meter to prepayment or a prepayment meter to credit or a like for like exchange i.e. exchange credit for credit or prepayment for prepayment including an exchange to a semi concealed credit meter. Excludes the cost of the meter itself. Includes up to 1 metre of additional inlet pipework and up to 2 metres of additional outlet pipework where an Electronic Token Meter (ETM) cannot be installed in the place of an existing credit meter. Includes testing (excludes any trace and repair work), purging and re-lighting.	£60.28

1.3.2 Exchange Damaged Meter

Title	Description	Charge
Exchange damaged meter	Includes time and materials required to exchange a damaged meter. Excludes the cost of the meter itself. Includes testing (excludes any trace and repair work), purging and re-lighting.	£76.11

CHAPTER 2: METERING CHARGING METHODOLOGY

In addition to publishing its charges, National Grid's GT Licence requires it to publish an explanation of the methods and principles on which its charges are calculated. National Grid's metering charges are set so that they are in line with the price control set by Ofgem, the gas and electricity market regulator. To achieve price control for Domestic metering services, Ofgem has set tariff caps for four key services. National Grid's charges for these services must not exceed the tariff caps, which are increased each year by inflation as set out in National Grid NTS' Metering Charges Schedule effective from 1 April 2009.

Metering Tariff Caps from 1 April 2009

Service	**Tariff Cap (£ per annum)**
Provide, install and maintain domestic credit meter	14.73
Provide, install and maintain prepayment meter	34.38
Domestic credit to prepayment meter exchange	60.28
Daily Meter (DM) Reading	445.49

Charges for Domestic Meter Types

For the 2009/10 formula year, domestic credit and prepayment meter rental charges have been set so that they are equal to the tariff caps.

Charges for Industrial and Commercial (non-domestic) Meter Types

Other non-tariff capped charges are regulated through a non-discrimination condition in the Licence. National Grid has reviewed its maintenance charges for larger meters and this has led to National Grid increasing its overall annual meter rental charges by the inflation rate of 4.4% with rebalancing of charges between meter types and sizes to achieve better cost reflectivity.

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Annual maintenance charges for High Pressure Industrial and Commercial meters vary with capacity. Charges are calculated by scaling forward-looking costs in proportion to meter numbers. The remainder of this section explains the rationale for such a charging structure and for National Grid's choice of capacity bands.

Industrial and Commercial Meter Types

Installations connected to the NTS are considerably complex. They typically include a flow computer and may comprise additional equipment, such as multi-stage pressure reduction, slam shut isolation and pre-heaters.

Meter Capacity

Meter capacity is the main cost driver for a particular meter type. Larger meters have higher purchase prices and typically take longer to install. Larger, higher capacity metering installations also have larger, more costly regulators, valves and connecting pipe work. They may include additional equipment, such as pressure protection systems and filters.

Capacity Bands

The charges reflect the forward looking costs of maintaining a representative range of meter models of each type.
The methodology used to calculate metering rental charges consists of the following steps:

- Determine the forward looking cost components of maintaining meters, Daily Read Equipment and volume converters
- Determine a meter provision component and where appropriate scale this component to produce the annual charges
- Calculate transactional charges for meter work

The sections below describe how the component cost of maintaining the meter equipment is determined:

- Section 2.1 explains how the component cost of maintaining meter equipment is determined.
- Section 2.2 explains how charges are scaled.
- Section 2.3 describes how transactional charges are calculated.
- Section 2.4 describes how DM daily meter reading charges are calculated.

2.1 Cost Components

This section explains how National Grid has determined the forward-looking annual costs of providing, installing and maintaining meters, Daily Read Equipment and volume converters. The provision component is subsequently scaled as described in Section 2.2.
Domestic credit meter costs are based on U6 diaphragm meters, or equivalent, and prepayment meter costs are based on Electronic Token Meters.
The examples set out below illustrate the calculation of domestic credit meter costs. Equivalent calculations determine the costs associated with prepayment meters and with industrial and commercial meters, Daily Read Equipment and volume converters. This methodology derives the components of the total charge on a cost reflective basis. However, the total charge and some or all of the components must be scaled up to levels that are consistent with National Grid's price control formula.

2.1.1 Annual Provision Costs

Provision charges reflect depreciation costs and an allowance for a return on the value of the meter asset on an average annualised basis.

In setting the tariff caps, Ofgem assumed that National Grid meters are depreciated over twenty years, with the exception of prepayment meters, which are depreciated over ten years.

$$\text{Annual cost} = \frac{\text{Meter Asset cost + Service Provider cost}}{\left[1 - \frac{1}{(1+ir)^t}\right] \times \frac{1}{ir} \times \sqrt{(1+ir)}}$$

= £1.67 (for domestic credit meter)

where ir = interest rate (7%), and

t = asset life (20 years)

In setting these charges National Grid has assumed that labour costs include some additional costs over and above direct labour costs, such as National Insurance and transport costs, but exclude support and sustaining costs.

2.1.2 Annual Maintenance Costs

Maintenance charges reflect planned and unplanned maintenance costs and the revenue costs associated with exchanging faulty meters. Costs reflect service provider and material costs, plus an uplift reflecting support and sustaining costs, multiplied by the expected job frequency per meter per year.

Planned maintenance costs have increased to reflect forecast maintenance activity in 2009/10 for domestic credit meters including the cost for replacing batteries for E6 ultrasonic meters (averaged across the whole domestic credit meter population), and also the planned maintenance costs of domestic credit meters connected to systems other than low pressure, e.g medium pressure or intermediate pressure (again averaged across the whole domestic credit meter population).

Maintenance charges for other meter types, such as prepayment and High Pressure meters, reflect planned maintenance costs as appropriate.

Unplanned Maintenance

$$\text{Meter cost per visit} = \frac{\text{(Lifetime Materials cost + Service Provider costs) per meter}}{\text{No. of visits over asset life}}$$

Annual cost = Cost per visit * visits per meter per annum

= £0.03 (for domestic credit meter)

Fault Related Meter Exchanges

$$\text{Meter cost per visit} = \frac{\text{Lifetime Service Provider costs per meter}}{\text{No. of visits over asset life}}$$

Annual cost = Cost per visit x visits per meter per annum

= £0.24 (for domestic credit meter)

Planned Maintenance

$$\text{Meter cost per visit} = \frac{\text{(Lifetime Materials cost + Service Provider costs) per meter}}{\text{No. of visits over asset life}}$$

Annual cost = Cost per visit * visits per meter per annum

= £0.25 (for domestic credit meter)

Total Maintenance Cost

The total annual maintenance cost for domestic credit meters is therefore **the sum of the unplanned maintenance, planned maintenance and the fault related meter exchanges, i.e. £0.52**

2.2 Scaling of Charges

Annual charges reflect the costs described in section 2.1. This section describes how these cost components are scaled to produce the annual rental charges.

2.2.1 Domestic Credit and Prepayment Meter Charges

Domestic Credit and Prepayment Meter Tariff Caps

Service	Tariff Cap £ per annum
Provide, install and maintain domestic credit meter	14.73
Provide, install and maintain prepayment meter	34.38

For the 2009/10 formula year, domestic credit and prepayment meter rental charges have been set so that they are equal to the tariff caps.

The 'provide' and 'maintain' components of the charges are those described in sections 1.2.1 and 2.1.2 above. For these meter types the 'provide' component is calculated by subtracting the 'install' and 'maintain' elements from the tariff capped charge.

2.2.2 Industrial and Commercial (Non-domestic) Meter Charges

For the 2009/10 formula year Industrial and Commercial metering rental charges i.e. volume converter and datalogger charges increase by inflation, of 4.4%, in line with the changes in the charges for domestic meters.
The components of the total charge are calculated in a similar way to those for domestic meter types.

2.2.3 Calculate Annual Domestic (Credit & Prepayment) Charges

The proportions of the annual charge that are attributable to the provision and maintenance of each meter type are calculated by using the annual forward looking costs for the maintain element and then scaling the provide element so that the total of the two elements equates to the total charge for the meter type.

For example, for domestic meters, the calculations are as follows.

Domestic Credit Meters

	Annual forward-looking cost	Annual Charge
Provide	£1.67	£8.52
Maintain	£0.52	£0.52
Total	**£2.19**	**£9.04**

Prepayment Meters

	Annual forward-looking cost	Annual Charge
Provide	£16.70	£7.54
Maintain	£21.15	£21.15
Total	**£48.09**	**£34.38**

2.3 Transactional Charges

Charges for work on metering equipment, Daily Read Equipment and volume converters, including the installation of the meters, are quoted on an individual basis. The charge exchanging domestic meters (from credit to pre-payment or vice versa) is tariff capped and consequently the charge for this work has been scaled down to £60.28

2.4 DM Daily Meter Reading

Charges reflect average costs of providing a DM daily reading administration service (including query management), an uplift reflecting support and sustaining costs, and the costs of line rental and telephone calls between Daily Read Equipment and the central collection system.
The DM meter reading charge has been set at the tariff cap of £445.49 from 1 April 2009.