#### DISTRIBUTION NETWORKS PRICING CONSULTATION PAPER DNPC 01

#### Customer Charge Structure for the 0-73MWh Load Band

#### 1. Introduction

In February 2006 Ofgem published their document "Conclusions on the review of the structure of gas distribution charges". One of the conclusions of this document was that the costs underlying the customer charge should be reviewed and the DNs should design a common charging function to reflect these costs.

The DNs have reviewed the costs underlying the customer charge. It has been concluded that the costs reflected in the customer charges are not related to the level of throughput and that a fixed or capacity-based customer charging function is appropriate for all load bands. The DNs have also determined that the level of detailed cost information available to them at present is not sufficient to justify any rebalancing of the charges between load bands.

At present the customer charges for the 0-73.2MWh ("domestic") load band are commodity based whereas the charges for the other load bands are primarily capacity based, with a small fixed element. It is therefore proposed to change the basis of the customer charge for the 0-73.2 MWh load band to be capacity-based. This would improve cost-reflectivity, make the customer charging structure more consistent in the different load bands, and would also help to make the overall level of distribution transportation charges more stable under the existing price control. It is also consistent with Ofgem's view that there seems no clear justification why the charge to domestic customers should be on a throughput basis while the customer charge for the other load bands is on a capacity basis. The proposed change is supported by all the DNs.

The DNs will be seeking to improve the quality of the cost information they collect so as to improve their understanding of cost causality. However, this will take some time and so is unlikley to lead to proposals to change the overall balance of the customer charges within the next year or so.

# 2. Proposal – To change the 0-73.2 MWh load band customer charge from commodity based to capacity based.

Currently the customer charge for the 0-73.2 MWh load band is a commodity charge, that is it is a charge per actual kWh transported to the supply point. As such the monthly charge varies with changes in monthly throughput through the year. It is proposed that the customer charge for the 0-73.2 MWh load band should be changed to a charge based on the registered capacity (SOQ) of the supply point. This will make the monthly charge to any particular supply point relatively stable, only varying with the number of days in the month. The level of the new capacity charge within this load band would be set to recover the same amount of revenue over the formula year as with the existing commodity charge and so would not change the targeted balance of charges between load bands.

All the DNs intend to implement the change at the same time in order to maintain a common DN charging methodology.

## 3. Objectives of the Charging Methodology

The proposal involves a change to the charging methodology, and therefore needs to be considered with respect to the achievement of the objectives of the charging methodology, set out in Standard Special Condition 5 of the Gas Transporter Licence. The objectives for charges not set by auction are:

(a) that compliance with the charging methodology results in charges which reflect the costs incurred by the licensee in its transportation business;

- (b) that, so far as is consistent with (a), the charging methodology properly takes account of developments in the transportation business;
- (c) that, so far as is consistent with (a) and (b), compliance with the charging methodology facilitates effective competition between gas shippers and between gas suppliers.

### 3.1 Cost Reflectivity

The costs which are reflected in the Customer Charges are primarily the costs of providing and maintaining service pipes and providing the supply point emergency service.

**Service pipe costs** - The costs of service pipes are mainly the depreciation of the capital costs of the service pipes which have not been funded directly by customers. These costs do not vary with throughput.

**Supply point emergency service** – These are the costs of handling emergency calls and attending to emergency call-outs either on the service pipe, the meter or downstream of the meter. Within the domestic load-band these costs are related to the fact that there is a supply point and not to the annual throughput of the supply point and so these costs do not vary with throughput.

Therefore as the costs reflected in the charge do not vary with throughput it would be appropriate and more reflective of these costs if the charge itself did not vary with throughput. The analysis underlying the existing customer charges indicates that, considering costs relating to industrial and commercial supply points against those relating to domestic supply points, the unit costs per supply point are higher for industrial and commercial supply points than for domestic supply points. The proposed change to a capacity based charge for the domestic load band would be consistent with this existing high-level analysis and so would improve cost-reflectivity. It would also make the domestic customer charge consistent with the non-domestic customer charges which are already primarily capacity based.

#### 3.2 Facilitating Competition

The proposed change would facilitate competition in gas supply by removing a source of instability in the charges. More stable charges would make it easier for shippers and suppliers to compete with each other by reducing the uncertainty and instability of the distribution transportation charge element within shippers' and suppliers' cost bases.

The current structure of the revenue recovery from the distribution charges for a typical network is set out below. The actual percentages will vary slightly for individual networks.

Table 1: Proportion of Revenue recovered by Charges (Typical Network)

	LDZ System Charges	Customer Charges	Total
	%	%	%
Capacity	35	2	37
Commodity	35	28	63
Total	70	30	100

The revenue from the customer charges accounts for approximately 30% of the total distribution revenue. Of this 28% is commodity based and 2% is capacity based or fixed. The 28% that is commodity based comes entirely from the 0-73.2 MWh load band.

This means that typically 63% of Network billed revenue is sensitive to changes in volumes, and only 37% of revenue is relatively fixed. This is almost exactly the reverse of the proportions under the existing price control formula, where 35% of allowed revenue is sensitive to movements in volumes and 65% is fixed.

This disparity in the proportions of billed and allowed revenue which are sensitive to changes in volumes causes problems when actual volumes are different from forecast volumes, as they will be. Charges are set to recover the allowed revenue based on forecast volumes. Actual throughput being lower than forecast leads to billed revenue falling more than allowed, causing under-recovery. Higher throughput than forecast leads to billed revenue rising more than allowed, causing over-recovery. The under- or over-recovery in turn creates a need to change charges possibly more frequently and by larger amounts than would be necessary if the volume sensitive proportions of billed and allowed revenue were more closely aligned.

If the customer commodity charge for the 0-73.2 MWh load band is changed to one based on the supply point capacity, as is proposed, it would remove 28% of billed revenue from being volume sensitive and bring the volume sensitivity of billed and allowed revenue virtually into line. The proposed change would very largely remove the under- or over-recovery caused by temperature variations and therefore make some price changes unnecessary and reduce the size of the changes which are necessary.

#### 4. Distributional Effects

There would be virtually no distributional effects, in terms of the balance of transportation charges between load bands, as a result of the change. Only the domestic load band would be affected, and the capacity charge would be set to collect the same amount of revenue as the commodity charge would have collected based on forecast volumes. Therefore the transportation charge to shippers for loads within this band over the year would be neither more nor less than it would have been previously had throughput been as forecast. The main impact on shippers would be that the charge would be predictable and would be spread more evenly through the year.

# 5. Structure of charges after the change

The table below shows the structure of charges after the change with respect to a typical network. The proportion of revenue sensitive to volume changes would be approximately 35%, the same as the variable proportion in the allowed revenue formula.

Table 2: Proportion of Revenue recovered after proposed change Typical Network

	LDZ System Charges	Customer Charges	Total
	%	%	%
Capacity	35	30	65
Commodity	35	0	35
Total	70	30	100

The volume sensitivity of allowed revenue will probably change under the next price control formula, due to start from April 2008. However as it is unlikely to increase, the proposed change should still result in the volume sensitivities of billed and allowed revenue being more closely aligned than they would otherwise be even under the new price control formula. There would therefore still be a beneficial impact on price stability.

#### 6. Implementation of the change

Although 1 October is, under the Licence, the date for making changes to the charges all the DNs consider that there is considerable merit in introducing the proposed change on 1 April 2007, the beginning of a formula year. This would enable the charge to be set at the appropriate level for the full formula year which should help to make the charge more stable.

The problem with replacing a commodity charge with a capacity one in the middle of a formula year is that a commodity charge raises about one third of its revenue in the first

half of the formula year and two thirds in the second half, whereas the flow of revenue from a capacity charge is even through the year. If the commodity charge were to be replaced by a capacity charge on 1 October, the capacity charge would need to be set at a level to recover two thirds of the target revenue in the period October to March. This level would then be too high for the subsequent full year so the charge would need to be reduced at the first opportunity. Implementing the change on 1 April would avoid this source of instability and provide shippers with a more stable charge.

The regular change in the level of transportation charges, including the customer charges, would then continue on 1 October in each year as at present.

The introduction of the charging methodology change from 1 April 2007 rather than 1 October will require direction from Ofgem.

#### 7. Conclusion

The DNs propose:

- a) that the customer charge for supply points within the 0-73.2Mwh load band be based on registered capacity (SOQ) rather than commodity for all DNs;
- b) that this change be made with effect from 1 April 2007 subject to direction from Ofgem.

Appendix 1 shows the level of the customer capacity charges for the 0-73.2Mwh load band which would give the equivalent revenue as the existing customer commodity charges introduced at 1 October 2006 over a full formula year.

# Appendix 1 Indicative Level of Capacity Charges to Replace Customer Commodity Charges in the 0-73 MWh load band

Customer Charges - 0-73 MWh

Network	Eviating Commodity	Indicative Equivalent
Network	Existing Commodity	Indicative Equivalent
	Charge	Capacity Charge
	1 Oct 2006 level	p/pkday/kWh/day
	p/kWh	-
Scotland Gas	0.1569	0.0611
Northern Gas	0.1536	0.0548
North West	0.1611	0.0567
West Midlands	0.1672	0.0518
East of England	0.1799	0.0609
London	0.1316	0.0398
Southern Gas	0.1562	0.0479
Wales & West	0.1539	0.0501

Note: the level of the capacity charges has been calculated to raise the same level of revenue as would be raised by the October 2006 level of the commodity charges over a full formula year.