

DISTRIBUTION NETWORKS PRICING CONSULTATION PAPER DNPC03

LDZ System Charges - Capacity / Commodity Split and Interruptible Discounts

A consultation paper on behalf of all Distribution Networks

1. Background

1.1 LDZ System Charges

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 increasing the proportion of capacity-related charges would better reflect the actual balance of capacity and commodity related costs of gas distribution. Ofgem also suggested that more cost-reflective charges could have a significant impact on the efficient use of the distribution assets and help reduce future investment costs. These savings would eventually be reflected in lower charges to all customers. A higher proportion of capacity related charges would also bring additional benefits to users in the form of more stable charges.

Since then the DNs have undertaken a review of the factors which result in variations in the costs reflected in their LDZ system charges. The results of these analyses suggest that only around 5% of the DN's cost base varies with the volume of gas transported. The remainder of the costs are either related to the development and maintenance of the transportation network, for example building a new pipeline, or not directly related to transportation of gas, for example support departments' costs such as Finance or Human Resources.

Based upon this latest cost driver analysis, the DNs are proposing to change the split of the LDZ system charges to target a more cost reflective capacity / commodity split of 95:5. The current target split is 50:50. Note that no change to the customer charges, which are already 100% capacity based, is being proposed as part of this consultation.

1.2 Interruptible discounts

Currently, interruptible customers do not pay LDZ capacity charges, but they do pay LDZ commodity charges. If the proportion of revenue recovered from the LDZ capacity charges is significantly increased, and that from the commodity charges correspondingly decreased, this would mean a large and non cost reflective increase in the discount for interruptible customers. This paper therefore proposes a change to the interruptible charging methodology for the purpose of maintaining the value of the discount to interruptible customers at the present level.

The proposals in this consultation paper are supported by all the DNs.

2. Details of Proposed Changes

2.1 To change the target proportions of revenue recovered by the LDZ system charges to a more cost reflective 95% capacity 5% commodity split

The capacity / commodity splits of the LDZ system charges revenue recovery under the current and the proposed methodology are set out in the table below:

Table 2.1 Revenue recovery under current and proposed methodologies

	Current Methodology	Proposed Methodology
	Target % Revenue Recovery	Target % Revenue Recovery
Capacity Charges	50	95
Commodity Charges	50	5
Total	100	100

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

2.2 Interim charging methodology for interruptible sites

At present, interruptible loads pay LDZ system commodity charges but not the capacity charges. As a result, increasing the capacity element of the LDZ system charges and reducing the commodity charges without any other changes would result in interruptible loads receiving a large reduction in the LDZ transportation charges they pay. Given the decision on Mod 0090 to introduce a new interruption regime in a few years, in the interim, it is proposed that interruptible supply points incur a portion of the capacity charges to offset the reduction in commodity charges such that the value of the discount received for being interruptible remains approximately the same as at present.

It is proposed that this is achieved by moving from a 100% discount on LDZ system capacity charges to a 52.63% discount on LDZ system capacity charges (i.e. they would pay 47.37% of the LDZ capacity charge). At this level the size of the interruptible discount would, on average, be maintained (52.63% of 95/50 times the current rate = 100% of current rate).

A UNC Mod will be required to apply LDZ system capacity charges to interruptible loads and this is being raised at around the same time as this consultation paper.

3. Cost Analysis to Support the Change to the Capacity/Commodity Split

Table 3.1 shows the results of the cost analysis carried out by the DNs. This analysis shows that for all the DNs only a small proportion of the costs reflected in the LDZ system charges, on average about 5%, are related to throughput (commodity), and the rest are capacity related costs or fixed overheads which are more appropriately recovered through capacity charges.

Throughput-related (commodity) costs represent on average only 5% of the total direct plus indirect costs reflected in the LDZ system charges. On average 63% of costs are direct capacity related costs such as depreciation and replacement expenditure which are directly related to the capacity of the system, and operational costs which again are directly related to the capacity of the system rather than the throughput. Of the 32% indirect costs none are throughput related.

Table 3.1 Analysis of costs reflected in the LDZ system charges

	DN Weighted Average	Wales & West Utilities	Scotia Gas Networks	Northern Gas Networks	National Grid
Direct Costs	%	%	%	%	%
Operational costs	21	20	23	17	22
Repex 50%	20	16	15	27	21
Depreciation	22	24	22	17	23
Total Direct Capacity costs	63	60	60	61	66
Shrinkage & Odorant	5	5	6	5	4
Total Direct Commodity Costs	5	5	6	5	4
Total Direct Capacity & Commodity	68	65	66	66	71
Indirect Costs					
Formula Rates	15	12	14	19	16
PGT Licence Fee	1	1	1	1	1
Service Agreements	3	6	6	5	0
Other Net Overheads	13	17	13	10	13
Total Indirect Capacity Costs	32	36	34	34	29
Total Direct & Indirect Costs	100	100	100	100	100
Total Direct Commodity Costs	5	5	6	5	4
Total Direct & Indirect Capacity Costs	95	95	94	95	96
Total Direct & Indirect Costs	100	100	100	100	100

4. Impact of the Proposed Changes

4.1 Distributional Effects

The distributional effect of the proposed change on transportation charges to specific supply points will depend on load factors rather than on AQs. Supply points which have a lower load factor than the network average are likely to experience a small increase in their total charges, whereas supply points which have a higher load factor than the network average should experience a reduction. Overall the new charges would be set to recover the same level of revenue as using the existing methodology. The impact on small supply points (mainly domestic) will be mixed. In some DNs, these small supply points, which tend to have low load factors, may experience small increases in their transportation charges. However, in other DNs they may experience small decreases. The change in either case should not be more than £1 per annum to their existing charges (see Appendix 1).

Some respondents to the earlier Pricing Discussion paper (DNPD02) suggested that the proposed change could lead to the introduction of standing charges by gas suppliers. The proposed change will increase the capacity-related proportion of the distribution transportation charges but will not introduce fixed charges for gas shippers/suppliers to domestic supply points. For these supply points, the proposed change will mean that transportation charges will be related much more to the peak capacity of the supply point rather than to the annual throughput as at present. However, the charges will still be based on the size of the domestic supply point and so smaller domestic supply points will still have lower transportation charges. There is thus no reason for the change to lead to the introduction of standing charges by gas suppliers. In the same way, there is no reason for the change to have a disproportionate effect on the fuel poor since the percentage impact of the change on transportation charge levels will be the same (and very small) for all domestic loads in a DN and will not vary between the small and large domestic loads.

Appendix 1 summarises the impact across the load bands by DN of the change to the capacity/commodity split and applying capacity charges to interruptible supply points combined. The percent changes shown represent the average change in the level of annual

distribution transportation charges which would be experienced in each of the load bands. The analysis is based upon the currently estimated load factors for each band in each DN.

4.2 Impact on IGTs

IGTs' maximum transportation charges are constrained by the Relative Price Control under which the maximum the IGT can charge is based on the difference between the DN Transportation charges to the CSEP and the sum of the charges to the individual supply points on the network if they were directly connected DN supply points. Our analysis suggests that the rebalancing of the capacity / commodity split in favour of a greater capacity weighting will have a very small impact upon the IGT's. This is because IGTs typically consist largely of domestic supply points. The impact on transportation charges to domestic-based CSEPs is estimated to be similar to the impact for directly-connected domestic loads, which is generally very small.

5. Implementation of the change

The DN Licence places a reasonable endeavours obligation upon the DNs to only make changes to the charges and charging methodology on the 1st October. However all of the DNs consider that there is considerable merit in introducing the proposed change on 1st April 2008, the beginning of a formula year and the beginning of a new price control period. This would enable the methodology to be applied for the full formula year.

The introduction of the change from the 1st April 2008 would also align the charging methodology with the start of next price control period and would bring the benefits of increased price stability as soon as practicable.

However in the responses to the Discussion Paper DNP02 there was a considerable degree of opposition to an April 2008 implementation date. Several shippers and one end user representative favoured aligning the change with the introduction of exit and interruption reform in 2011. Other shippers and end user representatives were concerned that April 2008 might be too soon for all the required system changes to be made and also that an April change would not align with many supply contracts which are based on the gas year.

The DNs do not favour delaying the changes until 2011 because of the delay this would mean in achieving the benefits of greater stability and predictability of the charges and improved cost reflectivity. The DNs are not aware of any advantages in delaying these changes until the implementation of interruption reform.

The DNs consider that there is some merit in an implementation date of 1st October 2008. This would represent a reasonable compromise between the achievement of the benefits and allowing enough time for system changes and aligning customer contracts. The usual disadvantages of an October change in the split of capacity and commodity revenue may be mitigated at that date because transportation charges in the first half of formula year 2008/09 (following the increases at October 2007) are expected to be above the level required for formula year 2008/09 as a whole (dependent upon the PCR outcome) for most networks. A change to more capacity based charges at October 2008 would reduce income in the second half of 2008/09 so that the percentage reduction in the level of the charges would be lower than would otherwise be required.

The DNs do not anticipate that this change will require amendments to the transportation billing mechanisms managed by xoserve for firm supply points. An amendment to the billing systems is likely to be required for interruptible supply points. Xoserve is investigating if any change to the invoice file formats will be required.

6. Objectives of the Charging Methodology

The proposed change to the capacity / commodity split would involve 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.

(a) Cost Reflectivity

The analyses by the DNs indicate that the majority of costs relate to the provision of capacity with only a low level of cost relating to the gas throughput. The proposed structure of charges would therefore be significantly more cost reflective than the current structure.

(c) Facilitating Competition

The proposed change would facilitate competition in gas supply by removing a source of instability in the charges. DN allowed revenue in 2007/08 is fixed with respect to volumes, and it is anticipated that under the 2008 to 2013 price control allowed revenue will continue to be fixed with respect to volumes. If the DN charging structure remains approximately 35% dependent on volumes, as it is now, this will cause under- and over-recoveries as collected revenue will vary with the weather but allowed revenue will not. These under- and over-recoveries will then need to be corrected by changes in the level of charges. The proposed change will align allowed and collected revenue much more closely and remove the weather effect on volume as a source of instability in the charges. This will make charges more predictable and should make planning and budgeting easier and more accurate for shippers and suppliers and hence improve the efficiency of the gas supply market and stimulate competition.

7. Questions for Consultation

The questions for consultation are:

- a) Should the Charging Methodology be changed so that the capacity element of the LDZ System charges is set to recover 95% of the revenue from the LDZ system charges, and the commodity element is set to recover 5% of the revenue, compared with the current 50%/50% target split?
- b) Should Interruptible supply points pay 47.37% of the increased LDZ capacity charge so as to maintain the value of the discount received by interruptible supply points at its current level, on average?
- c) Should this change be made with effect from 1st April 2008 or 1st October 2008?

8. Responses

Responses to this Consultation Paper should be sent to enquiries@gasgovernance.com to arrive by close of play on 28th August 2007.

Questions on the content of the paper can be directed to any of the following:-

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Appendix 1**Average Impact of Proposed Changes by Load Band**

Load Band (Therms)	Wales and West Utilities		Northern Gas Networks		Southern (Scotia Gas Networks)		Scotland (Scotia Gas Networks)	
	Load Factor	Charge Difference	Load Factor	Charge Difference	Load Factor	Charge Difference	Load Factor	Charge Difference
Domestic (0 – 2,500)	31.72%	-0.1%	35.60%	-0.8%	31.45%	1.0%	38.98%	0.8%
2,500 - 5,000	29.02%	-0.4%	29.30%	5.8%	31.82%	0.5%	37.70%	2.4%
5,000 - 10,000	26.94%	2.0%	29.30%	6.4%	31.72%	0.7%	37.70%	2.4%
10,000 - 15,000	28.58%	0.1%	33.00%	2.0%	31.62%	0.9%	39.81%	-0.1%
15,000 - 20,000	31.01%	-2.9%	34.40%	0.4%	32.13%	0.1%	40.67%	-1.1%
20,000 - 25,000	29.55%	-1.1%	33.60%	1.3%	32.72%	-0.7%	41.44%	-2.0%
25,000 - 75,000	30.95%	0.8%	34.30%	1.3%	33.38%	-0.8%	41.44%	-1.5%
75,000 - 100,000	35.31%	-2.7%	36.60%	-0.5%	34.71%	-2.0%	40.82%	0.2%
100,000 - 200,000	33.47%	0.2%	36.10%	1.3%	37.16%	-4.7%	43.44%	-2.1%
Firm 200,000 - 500,000	41.24%	-6.0%	41.10%	-2.2%	40.97%	-9.2%	47.75%	-5.9%
Firm 500,000 - 1,000,000	38.80%	-1.2%	50.50%	-8.2%	42.02%	-10.2%	50.51%	-7.2%
Firm 1.0 m - 2.0 m	51.00%	-9.2%	53.80%	-8.6%	53.33%	-29.1%	64.06%	-17.2%
Firm 2.0 m - 10.0 m	53.12%	-7.5%	47.00%	0.5%	47.84%	-12.4%	79.60%	-24.8%
Firm 10.0 m - 50.0 m	55.74%	-3.7%	90.20%	-19.4%	60.65%	-18.5%	93.95%	-30.9%
Interruptible 200,000 - 500,000	25.84%	20.3%	32.20%	22.0%	23.58%	59.7%	0.00%	24.2%
Interruptible 500,000 - 1,000,000	25.52%	26.1%	37.70%	11.4%	29.96%	30.1%	0.00%	6.9%
Interruptible 1.0 m - 2.0 m	31.78%	10.2%	30.20%	37.2%	49.25%	-16.2%	38.98%	13.4%
Interruptible 2.0 m - 10.0 m	43.69%	-7.1%	40.30%	17.7%	34.00%	21.5%	38.84%	10.1%
Interruptible 10.0 m - 50.0 m	52.86%	-4.6%	50.70%	11.0%	68.15%	-32.0%	41.93%	-30.8%

Load Band (Therms)	East of England (National Grid)		London (National Grid)		North West (National Grid)		West Midlands (National Grid)	
	Load Factor	Charge Difference	Load Factor	Charge Difference	Load Factor	Charge Difference	Load Factor	Charge Difference
Domestic (0 – 2,500)	36.02%	0.0%	33.29%	0.3%	37.23%	-0.5%	33.50%	-0.4%
2,500 - 5,000	32.32%	5.3%	35.22%	-0.1%	33.46%	4.7%	29.94%	4.6%
5,000 - 10,000	32.05%	6.1%	35.12%	0.0%	33.43%	5.3%	29.94%	5.1%
10,000 - 15,000	33.41%	4.7%	33.56%	1.8%	34.70%	4.0%	28.41%	7.3%
15,000 - 20,000	33.79%	4.3%	34.27%	1.0%	34.93%	3.8%	28.92%	6.7%
20,000 - 25,000	34.61%	3.4%	34.32%	1.0%	35.38%	3.3%	29.57%	5.9%
25,000 - 75,000	34.69%	2.3%	36.02%	-2.0%	34.56%	3.2%	30.29%	4.1%
75,000 - 100,000	39.14%	-1.9%	39.12%	-4.4%	39.08%	-1.1%	34.89%	-0.6%
100,000 - 200,000	40.26%	-2.4%	39.85%	-4.7%	40.55%	-2.0%	35.69%	-0.9%
Firm 200,000 - 500,000	40.85%	-2.0%	42.24%	-6.6%	45.44%	-6.0%	31.98%	4.2%
Firm 500,000 - 1,000,000	50.80%	-10.4%	46.49%	-9.6%	51.54%	-10.4%	47.96%	-11.3%
Firm 1.0 m - 2.0 m	50.60%	-9.4%	54.26%	-14.8%	46.70%	-5.0%	42.91%	-5.8%
Firm 2.0 m - 10.0 m	45.61%	-3.6%	64.58%	-20.8%	56.22%	-11.9%	54.27%	-14.5%
Firm 10.0 m - 50.0 m	66.98%	-17.9%	84.93%	-29.7%	100.00%	-32.9%	89.15%	-31.8%
Interruptible 200,000 - 500,000	15.93%	105.6%	24.33%	43.9%	15.32%	113.5%	27.70%	29.4%
Interruptible 500,000 - 1,000,000	40.03%	1.6%	27.64%	33.7%	29.52%	31.3%	25.98%	39.6%
Interruptible 1.0 m - 2.0 m	41.10%	0.9%	38.70%	3.3%	46.80%	-8.6%	48.77%	-15.0%
Interruptible 2.0 m - 10.0 m	53.25%	-16.3%	23.39%	59.0%	37.93%	12.4%	45.59%	-7.7%
Interruptible 10.0 m - 50.0 m	47.74%	-4.5%	49.39%	-9.6%	52.98%	-12.2%	42.10%	1.6%