# **DISTRIBUTION NETWORKS PRICING CONSULTATION PAPER DNPC04**

### Methodology for Determining the Balance of Revenue Recovery between LDZ System Charges and Customer Charges

## A consultation paper on behalf of all Distribution Networks

# 1. Current balance of LDZ System and Customer Charges

The present methodology for setting the balance of LDZ System and Customer charges is to reflect the balance of costs which these charges relate to. The LDZ System charges primarily reflect costs related to the use of the LDZ system and the Customer charges mainly reflect those costs incurred in providing an emergency service and the provision of service pipes.

The balance of these costs was last analysed, on a national basis, in 2003 and set out in discussion paper PD16 prior to implementation for the April 2003 distribution charges. The national cost split set out in PD16 was 71.8%:28.2% LDZ System costs:Customer costs.. Charges were therefore set to recover approximately 70% of the revenue from the LDZ System charges and 30% from the Customer charges. When distribution charges were first set on a network specific basis at October 2005 the target balance of revenue recovery between the LDZ System and Customer charges was left unchanged in each network and has not been changed to date.

It is now proposed that the apportionment of revenue recovery between LDZ System and Customer charges within each DN should be updated to be reflective of each DN's own costs. This will mean a different percentage split of the revenue recovered from LDZ System charges and Customer charges for each DN.

Costs relating to CSEP administration and the costs associated with shared supply meter point allocation arrangements are reflected in specific administration charges and are excluded from the cost analysis.

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

# 2. Details of Proposed Changes

#### 2.1 To set DN specific LDZ System and Customer charge revenue apportionments

Table 1 shows the breakdown of costs by DN between those reflected in the LDZ System charges and those reflected in the Customer charges. As expected, this shows variations in the split between LDZ System and Customer cost activities between networks. Specifically, the volume of assets per customer and costs associated with operational activities depend on geographic and legacy network conditions. The different managements of the networks may also be expected to lead to cost balance variations over time between networks. Given that DNs have separate price controls and set network specific transportation charges, the introduction of network specific LDZ System and Customer charge target revenue recovery splits would provide a more cost reflective basis for charging.

Appendix 1 gives a more detailed cost breakdown by DN and describes the methodology applied by the DNs in determining the cost breakdown.

Based on FY 2006/7 Cost Base	LDZ System	Customer
East of England	75.5%	24.5%
London	68.4%	31.6%
North West	77.1%	22.9%
West Midlands	78.8%	21.2%
Scotland	70.7%	29.3%
Southern England	75.1%	24.9%
Northern England	71.7%	28.3%
Wales & West	76.0%	24.0%
Average – Weighted by Total DN Allowed Revenue	74.4%	25.6%

Table 1. Network Specific LDZ System and Customer Charge Split

Note: FY 2006/07 has been used as it was the latest available full year when the analysis was started.

If these DN specific proportions are adopted the target split of revenue recovery will vary from 79:21 in the West Midlands to 68:32 in London. These different proportions reflect differences in the structure of costs between networks and therefore adopting them into the charging methodology would make it more cost reflective.

An alternative methodology would be for all DNs to use the DN weighted average split shown above. This would be less cost reflective but would at least update the current national split in use and would eliminate the differential impact of the change by network.

#### Question 1

Should the charging methodology be changed so that the balance between LDZ System charges and Customer charges for each DN is based upon a network-specific estimate of the split of relevant costs?

# 2.2 To establish a rule for the adjustment of the level of the charges to maintain the actual revenue recovery split in line with the published target revenue recovery split

Under the proposed methodology the balance of LDZ System and Customer charges will be reset to reflect up-to-date DN specific cost information. Over time, movements in portfolios and ongoing changes to the level of peak and annual demand mean that the revenues generated from these charges drift from the target revenue recovery split. In the past it has been left to the discretion of the DNs as to when they should rebalance, subject to the requirement to maintain cost reflectivity. In order to clarify this situation, three options have been considered:

a) Identify a specific threshold at which the split of charges would be rebalanced if the deviation of the forecast split of revenue from the target cost-reflective split exceeded the threshold. We would suggest that +/- 1% or 2% would be appropriate and consistent with historical deviations.

b). Rebalance the LDZ System and Customer charges each time the level of charges is changed. This would possibly make it necessary to apply different levels of price change to the LDZ System and Customer charges every time the charges are changed.

c). Continue the current position which leaves the timing and implementation of any future rebalancing at the discretion of DNs, who consider the position in the light of their obligations regarding the charging methodology and the desire for simple transparent changes to charges.

### Question 2

Should the DNs rebalance the LDZ System and Customer each time the level of charges is changed or should DNs rebalance the LDZ System and Customer charges only if the forecast revenue split deviates from the cost-reflective target split by more than a set threshold value, if so the DNs would welcome feedback as to whether the threshold should be set at +/- 1%, 2% or at another level.

# 3. Impact of the Proposed Changes

## 3.1 2009/10 Forecast Splits

The target balance of the LDZ System and Customer charges has been unchanged since 2005. The forecast split of revenue recovery between these charges within each network will change slightly year to year due to changes in the load factors, booked SOQ and demand differences within each network. The estimate of the split of revenue recovery within each network if this balance if left unchanged for Formula Year 2009/10 is shown in Table 2. As can be seen, the revenue splits have not deviated significantly in each network since 2005.

	LDZ System	Customer
East of England	70.1%	29.9%
London	70.4%	29.6%
North West	69.8%	30.2%
West Midlands	71.2%	28.8%
Scotland	70.2%	29.8%
Southern England	70.9%	29.1%
Northern England	69.9%	30.1%
Wales & West	70.6%	29.4%

Table 2. 2009/10 LDZ System-Customer Charges Revenue Split if Unchanged

## 3.2 Impact on Charges

Table 3 shows the impact of the proposed rebalancing, based on DN-specific cost information, by load band. For larger loads, the LDZ System charges are proportionally a more significant element of their transportation charges whereas for smaller (domestic) loads the Customer charges are proportionally more significant. Consequently, an increase in the LDZ System apportionment with a corresponding decrease in the Customer apportionment would be expected to lead to an overall charge reduction for smaller end users and a charge increase to larger users. The scale of the change depends upon the level of rebalancing expected. For example, the relative movement in the rebalancing for London (Tables 1 and 2) is small and leads to only a small change to charges.

Table 3. Proposed LDZ System and Customer Charge Split Impact by DirectlyConnected Load Bands

Directly Connected Load Band Impact	East of England	London	North West	West Midlands	Scotland	Southern England	Northern England	Wales and West
0-73 MWh	-1.4%	0.5%	-1.9%	-2.1%	-0.2%	-0.8%	-0.6%	-1.4%
73-732 MWh	4.6%	-1.5%	6.0%	6.3%	0.7%	3.5%	2.4%	4.3%
732-5,861 MWh	5.8%	-2.2%	8.0%	7.9%	0.8%	4.0%	2.0%	6.0%
>5,861 MWh Firm	6.2%	-2.3%	8.4%	8.6%	0.9%	3.8%	2.0%	6.1%
Interruptible	4.9%	-1.6%	6.7%	6.6%	0.7%	3.7%	1.5%	4.8%
Large Loads	5.6%	-2.0%	6.1%	N/A	N/A	4.5%	2.1%	5.8%

An increase in LDZ System charges will be accompanied by a decrease in Customer charges for transportation to directly connected users and vice versa. However, for transportation to CSEP connected users there is no Customer charge and therefore the netting-off impact between the two charge types does not apply. Consequently, our analysis shows (Table 4) that there will be a more pronounced impact in each network (either positive or negative) on the level of transportation charges to CSEPs relative to the impact on directly-connected loads.

CSEP Connected Load Band Impact	East of England	London	North West	West Midlands	Scotland	Southern England	Northern England	Wales and West
0-73 MWh	7.7%	-2.9%	10.5%	10.7%	1.2%	6.0%	2.6%	7.7%
73-732 MWh	7.7%	-2.8%	10.4%	10.7%	1.2%	5.8%	2.6%	7.7%
732-5,861 MWh	7.8%	-2.8%	10.4%	10.8%	1.2%	5.8%	2.6%	7.7%
>5,861 MWh Firm	7.8%	N/A	10.3%	N/A	1.2%	5.8%	2.6%	7.7%
Interruptible	7.5%	N/A	10.5%	N/A	N/A	N/A	2.6%	7.7%
Large Loads	N/A	N/A	N/A	N/A	N/A	N/A	2.6%	N/A

 Table 4. Proposed LDZ System and Customer Charge Split Impact by CSEP

 Connected Load bands

Given that the movement in apportionment applies to all charges and the overall impact of the proposal does not greatly influence the levels of capacity and commodity following the implementation of DNPC03, analysis shows that individual daily metered sites are not exposed to extreme changes in charges (Table 5).

Table 5. Proposed LDZ System and Customer Charge Split Maximum and MinimumImpact on Daily Metered Sites

Maximum / Minimum change for Daily Metered Sites	East of England	London	North West	West Midlands	Scotland	Southern England	Northern England	Wales and West
DM Firm Maximum	7.9%	-2.0%	10.3%	8.9%	1.0%	4.8%	2.6%	6.3%
DM Firm Minimum	6.0%	-2.4%	8.0%	8.1%	1.0%	4.5%	2.0%	6.0%
Interruptible Maximum	7.9%	-1.3%	10.4%	7.3%	1.1%	4.0%	2.6%	5.0%
Interruptible Minimum	4.4%	-2.1%	6.0%	5.7%	0.7%	3.2%	1.4%	4.1%

# 4. Objectives of the Charging Methodology

The proposed move to using DN specific costs to determine the apportionment of revenue recovery between system charges and customer charges for each DN does not mean a change to the charging methodology itself but it would mean a change to the way the charging methodology is applied. It should therefore be considered with respect to the achievement of the objectives of the charging methodology, set out in Standard Special Condition A5 of the Gas Transporter Licence. The relevant objectives 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 cost analyses by the DNs indicate that they have different proportions of LDZ System and Customer costs. The structure of charges within each DN would be more cost reflective if the revenue recovery proportions reflected the cost proportions on a network specific basis.

#### (b) Take account of developments within the transportation business

A move to DN specific revenue recovery apportionment would reflect the fact the gas distribution business now consists of eight different networks each with its own cost structure.

#### (c) Facilitating Competition

The proposed change would facilitate competition in gas supply by updating the DN Transportation charges to better reflect the actual costs incurred.

# 5. Implementation of the change

From 2009 the DN Licence places a reasonable endeavours obligation upon the DNs to only make changes to the charges and charging methodology on the 1<sup>st</sup> April. The implementation of these proposals is not expected to require any system change and It is anticipated that this consultation and any subsequent review by the DNs or Ofgem, if required, could be concluded prior to 1<sup>st</sup> February 2009 when revised charges would need to be published in accordance with DN's code obligations.

DNs expect to have undertaken separate reviews of the structure of the LDZ System and Customer charges in time to implement changes in April 2010. An alternative might be to delay implementation of the LDZ System/Customer charge rebalancing until these reviews are concluded.

#### Question 3

Is there any reason why the proposal should not be implemented from 1<sup>st</sup> April 2009?

# 6. Questions for Consultation

The DNs are consulting on the adoption of the methodology set out in in sections 2.1 and 2.2 above to determine the revenue recovery apportionment between LDZ system charges and customer charges with effect from 1 April 2009. This would result in a specific apportionment percentage for each DN and would result in each DN's structure of charges being more reflective of its costs.

The DNs would welcome respondents' views on the following:

- 1. Should the charging methodology be changed so that the balance between LDZ System charges and Customer charges for each DN is based upon a network-specific estimate of the split of relevant costs?
- Should the DNs rebalance the LDZ System and Customer each time the level of charges is changed or should DNs rebalance the LDZ System and Customer charges only if the forecast revenue split deviates from the cost-reflective target split by more than a set threshold value, if so the DNs would welcome feedback as to whether the threshold should be set at +/- 1%, 2% or at another level
- 3. Is there any reason why the proposal should not be implemented from 1<sup>st</sup> April 2009?

Responses to this Consultation Paper should be sent to <u>enquiries@gasgovernance.com</u> to arrive by close of play on Tuesday 4<sup>th</sup> November 2008.

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

Rob Hetherington Pricing Manager Scotia Gas Networks Tel: 07814 573830 rob.hetherington@scotiagasnetworks.co.uk

Steve Armstrong Pricing & Margins Manager National Grid Tel: 01926 655834 steve.armstrong@uk.ngrid.com

Anna Taylor Pricing Manager Northern Gas Networks Tel: 0113 3975328 ataylor@northerngas.co.uk

John Edwards Pricing Manager Wales & West Utilities Tel: 02920278838 john.edwards@wwutilities.co.uk

# Appendix 1. Cost Analysis to support the change to the LDZ System / Customer split

#### LDZ System and Customer Definitions

The following principles have been used during the calculation of cost allocations to Customer and LDZ System services.

- Customer Charges reflect supply point costs, namely costs relating to service pipes funded by the transporter and the costs of emergency work relating to supply points. Service pipe costs include all operational and depreciation costs associated with service pipes funded by the transporter, these costs also include the replacement of service pipe. The relevant portion of indirect, employee overheads and work management costs supporting Customer service activities, based on direct work activity costs are allocated to the Customer cost category.
- LDZ System costs include the cost of all work relating to assets upstream of the service and those costs associated with managing the flow of gas through the system including capacity management. Accordingly, costs for activities upstream of the services related to maintenance, replacement and repair, as well as energy management work such as storage and construction of new pipe are categorised alongside the relevant overheads, indirect and work management costs into the LDZ System service cost allocation. Depreciation costs associated with mains pipe and Local Transmission System (LTS) pipes and LDZ System activity assets are attributed to the LDZ System costs. All odorant and shrinkage costs have been allocated to the LDZ System cost category.

#### LDZ System and Customer Cost Allocations

The following summary provides an outline of the cost allocations applied by all DNs in determining the Customer / LDZ System cost analysis.

- Operational Costs including Repair and Maintenance
- Service agreements
- Emergency service costs
- Shrinkage & Odorant
- Work management (central support activities) and indirect costs
- Replacement costs (within year expenditure)
- Regulatory Depreciation
- Formula Rates
- Licence Fee
- Scaling to Allowed Revenue

Excluded Services and De-Minimus costs have been excluded. Only 'formula' activities and costs, those described by the DN Licence and covered by the DN Allowed Revenue have formed part of this review.

#### **OPEX – Emergency Services (directly split into LDZ System & Customer costs)**

Emergency work costs include the cost of operational staff responding to an emergency call. The total emergency cost is a combination of "Internal" related emergency work (down stream of the network) and emergencies either on the Service pipe or the Main pipe. The cost of attending an individual job is assumed to be equal. The numbers of jobs by category are listed on DN systems and can be readily identified. The Mains pipe associated emergency jobs have been allocated to the LDZ System cost category while Internal and Service related jobs have been allocated to the Customer cost category.

#### **OPEX – Repair (directly split into LDZ System & Customer costs)**

Repair work refers to the Mains and Service repair costs following an emergency incident and the costs can be directly identified on DN accounting systems. Mains repair costs have been allocated to LDZ System category and Service repair costs have been allocated to Customer cost category. It is noted that a number of Service repair incidents attract a contribution from a third party (damage or interference). The costs included are only those funded by the transporter.

#### **OPEX – Maintenance (directly split into LDZ System & Customer costs)**

Storage and LTS maintenance are associated with the system operation and energy network balancing. These have been allocated to the LDZ System category. Wayleaves, leakage control, instrumentation, LDZ metering, and district governor maintenance are associated with Mains or LTS pipe and have also been allocated to the LDZ System category. Distribution Mains and Services maintenance costs can be identified by DN systems and management reports. Maintenance costs associated with the Mains pipe has been allocated to the LDZ System cost category while the Service pipe maintenance has been allocated to the Customer cost category.

# **OPEX** – Work Management (directly split into LDZ System & Customer costs / allocation)

Work management refers to departmental costs for central activities i.e. support and strategy activities. Indirect costs include the costs for running the business such as corporate centre, IS, legal, finance, property management etc. Where possible, some costs have been directly allocated to the appropriate category such as shrinkage and odorant which have been allocated to the LDZ System category. Other costs such as those of a business support nature e.g. Finance, I.T, legal, etc have been either apportioned according to the operational cost split between Customer and LDZ System or on the basis of the total cost (including work management costs for certain indirect costs) split between Customer and LDZ System expenditure.

#### **REPEX** - Replacement Expenditure (directly split into LDZ System & Customer costs)

Replacement costs are partly recovered during the year of expenditure and partly capitalised and recovered through asset depreciation. During FY2006/07 the repex mechanism incorporated the DNMRA adjustment as a method of ensuring DNs could only recover funding for actual replacement work carried out.

The price control defines the value of replacement work for mains pipe and service pipe. In 2006/07 50% of the value of the service pipe was capitalised and 50% was expended during the year. The service pipe costs expended during the year have been allocated to the Customer cost category and the mains pipe expended in the year net of DNMRA was allocated to the LDZ System cost category. All capitalised costs impact on the level of regulatory depreciation.

#### **Regulatory Depreciation & Formula Rates**

The majority (~90% value) of assets allocated by the accounting depreciation method can be directly attributed to the LDZ System and Customer cost categories due to asset reporting descriptions e.g. asset tag of "mains pipe". Where assets have been identified as operating across both LDZ System and Customer activities, for example; vehicles and property, the depreciation cost has been allocated by the relevant operational and emergency work proportional split (for operational assets i.e. vehicles, tools and plant) or the relevant operational, emergency plus work management proportions (facilities, buildings and land).

Formula Rates represent the rentable value of the business and have been set with consideration to the network asset value. Consequently, the proportional splits used for depreciation have been used to allocate the Formula Rates between LDZ System and Customer categories.

#### Licence Fee Costs (allocation)

The PGT Licence Fee represents Ofgem's costs charged to the DNs. The cost has been allocated based upon the total LDZ System and Customer cost allocations excluding the PGT Licence Fee and scaling to the Allowed revenue.

#### Scaling to Allowed Revenue – Investment and Cost of Funding

The difference between the Allowed Revenue and the total costs is the return on asset value and the proportional split used for depreciation has been used to allocate the difference to the LDZ System and Customer categories.

Tables A.1 and A.2 show the results of the cost analysis carried out by the DNs.

## Table A.1 LDZ System and Customer Cost Breakdown by Network

	National Grid East of England		National Grid			Natior	al Grid	National Grid			
				London			North West			West Midlands	
	Use of System	Customer Charge		Use of System	Customer Charge		Use of System	Customer Charge		Use of System	Customer Charge
Operational (Repair, Maintenance) costs	5.9%	0.5%		10.6%	2.3%		9.6%	1.3%		7.4%	0.8%
Service Agreements	N/A	N/A		N/A	N/A		N/A	N/A		N/A	N/A
Emergency Work	0.3%	2.8%		0.5%	6.1%		0.4%	3.8%		0.2%	2.7%
Shrinkage / Odorant	2.6%	-		3.4%	-		3.3%	-		3.3%	-
Work Management & Indirect	10.3%	4.2%		11.9%	7.0%		13.8%	5.7%		13.0%	4.8%
Replacement Expenditure 50%	9.8%	1.8%		8.8%	2.5%		11.1%	2.9%		9.5%	2.1%
Regulatory Depreciation	13.7%	4.5%		15.2%	6.3%		15.4%	3.6%		15.4%	3.6%
Formula Rates	10.1%	3.3%		9.7%	4.1%		9.2%	2.2%		9.1%	2.2%
PGT Licence Fee	0.3%	0.1%		0.3%	0.1%		0.3%	0.1%		0.3%	0.1%
Total Costs	53.0%	17.1%	_	60.5%	28.3%		63.1%	19.6%		<i>58.2%</i>	16.3%
Scaling adjustment to Allowed Revenue – Cost of Funding / Investment	22.5%	7.4%		7.9%	3.3%		13.9%	3.3%		20.6%	4.9%
Total Allowed Revenue	100.0%			100	100.0%		100.0%			100.0%	
LDZ System / Customer Split	75.5%	24.5%	-	68.4%	31.6%		77.1%	22.9%		78.8%	21.2%

## Table A.2 LDZ System and Customer Cost Breakdown by Network

	Scotia Gas Network Scotland		Scotia Ga	as Network		Northe Netv	ern Gas vorks		Wales & West Utilities	
			Southern			Nor	thern		Wales & West	
	Use of System	Customer Charge	Use of System	Customer Charge		Use of System	Customer Charge		Use of System	Customer Charge
Operational (Repair, Maintenance) costs	9.2%	1.7%	6.2%	0.5%		10.1%	-		6.6%	0.4%
Service Agreements	5.8%	2.4%	3.2%	1.1%		3.1%	0.6%		3.8%	0.9%
Emergency Work	3.1%	3.3%	3.7%	2.3%		0.9%	4.5%		0.2%	1.1%
Shrinkage / Odorant	3.8%	-	3.7%	-		3.3%	-		3.4%	0.0%
Work Management & Indirect	8.7%	3.6%	5.5%	1.9%		11.4%	4.2%		17.8%	4.0%
Replacement Expenditure 50%	10.2%	5.5%	8.0%	4.9%		8.6%	4.6%		4.9%	3.6%
Regulatory Depreciation	13.8%	5.9%	14.5%	4.6%		13.6%	5.7%		12.5%	4.5%
Formula Rates	5.6%	2.4%	7.9%	2.5%		8.3%	3.4%		7.0%	2.5%
PGT Licence Fee	0.3%	0.1%	0.3%	0.1%		0.3%	0.1%		0.3%	0.1%
Total Costs	60.4%	24.9%	52.9%	17.8%		59.5%	23.2%		56.5%	17.0%
Scaling adjustment to Allowed Revenue – Cost of Funding / Investment	10.3%	4.4%	22.2%	7.1%	-	12.2%	5.1%	-	19.5%	7.0%
Total Allowed Revenue	100	0.0%	100.0%			100.0%			100	.0%
LDZ System / Customer Split	70.7%	29.3%	75.1%	24.9%		71.7%	28.3%		76.0%	24.0%

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