

DISTRIBUTION NETWORKS PRICING CONSULTATION REPORT ON DNPC07

LDZ System Charges Capacity Commodity Split

1. The DNs' Proposals

In DNPC07 the DNs presented for consultation the proposal that the LDZ Capacity Charge element of the LDZ system charges should be set to recover 100% of the target revenue for LDZ System charges, and the LDZ Commodity Charge element should be set to 0% (zero). The reason for the proposed change was that it would be more cost reflective than the current 95%/5% split. The proposed implementation date of this change was 1 April 2011. As a consequence of this change, it was also proposed that the proportion of the LDZ Capacity Charges paid by Interruptible Supply Points should be increased from 47.37% to 50%. This is to maintain the typical value of the discount that Interruptible Supply Points receive on the LDZ System charges at its current level of 50%. This would apply until the new interruption regime comes into effect in October 2011 when all sites will be subject to Firm Capacity Charges.

2. Summary

There were 8 responses – 7 from Shippers/Suppliers and one from an end user representative.

Shippers/Suppliers	
Scottish and Southern Energy	SSE
EDF Energy	EDF
E.ON UK	EON
GDF Suez energy UK	GDF Suez
RWE	RWE
Scottish Power	SP
British Gas	BG
End User Representatives	
Major Energy Users Council	MEUC

The responses are summarised below based on the questions for consultations in the original paper.

3. Should the Charging Methodology be changed so that the capacity element of the LDZ System charges is set to recover 100% of the revenue from the LDZ system charges, and the commodity element is set to zero, compared with the current 95%/5% target split?

3.1 Summary of Responses Received

Respondents' views were mixed, with five basically supportive and three opposed. The responses are summarised and discussed below.

Four Shippers (BG, GDF Suez, SSE, EON) and the End User Representative (MEUC) supported the proposal. BG thought it not unreasonable to move to 100% capacity charges, but said they had insufficient information to determine whether there are any network costs related to throughput. GDF Suez supported on the basis that it would simplify the charging structure and reduce administration costs, remove the need to validate invoices in relation to commodity charges and remove the seasonal variation in credit requirements. SSE supported on the basis that it would be more cost reflective. EON supported but with reservations discussed below by topic. The MEUC supported the proposal but did not give any reasons.

Three shippers, (EDF, SP, RWE) did not support the proposal for reasons that are discussed below by topic.

AQ Review Process Two respondents (SP, EDF), made the point that the AQ review process itself should be reviewed, as Aqs are only reviewed once per year and there is a 20% threshold for changes in Aqs for Small Supply Points. Both these factors reduce the link between customer behaviour and charges. This could mean that Aqs would be slow to respond to changes in consumption and could mean customers being over-charged. SP said that Aqs, including SSP Aqs should be open to year round appeals and that the current +/- 20% tolerance should be reduced to allow actual transportation charges to more closely reflect actual usage. SP did not want this proposal to progress until the current Mods 0292 and 0293 have had a chance to complete. EDF said it would be better to implement reforms to the AQ process to ensure an accurate AQ and SOQ can be registered prior to the implementation of DNPC07.

EDF said the DNs had failed to carry out an undertaking in DNPC03 to address the AQ issues.

DNs' Response: While some of the current and recent activity to review the AQ and SOQ setting processes may have been prompted by the change to a 95:5 capacity/commodity split in October 2008, the proposed change to 100:0 is relatively small in comparison and therefore should not materially affect the perceived need to change these processes.

The DNs do not accept that they have failed in the undertaking in DNPC03. The DNs are supportive of the work being done to review the processes for changing Aqs and SOqs, and have co-operated with the relevant Review Groups. National Grid Distribution raised Mod 0264 in 2009 to facilitate reductions in SOqs for DM supply points.

Standing charges and energy incentives SP was concerned that the proposal might encourage suppliers to introduce standing charges which would be bad for energy incentives and would adversely affect low users and benefit high users. Although EON supported the proposal they thought it would not encourage suppliers to give customers the benefits of energy efficiency.

DNs' Response: Transportation charges for small domestic users will still reflect their usage because these users have small Aqs and therefore small SOqs. There is no reason therefore for the proposal to adversely affect low users. Whether the benefits of energy efficiency are passed on to users ultimately depends on how suppliers structure their gas supply charges.

TO SO EDF made the point that the DNs had not addressed the fact that their role includes both Network Owner and System Operator functions. They argued that the costs incurred by the GDNs as System Operators should be recovered through commodity charges, as was the case with the NTS, and that work was required to identify what these costs were.

DNs' Response: The regulatory split of allowed revenue into TO and SO elements which is applied to the NTS does not exist for the DNs. The DN network control activities which could be considered as SO activities are typically asset and operational staff costs which do not vary with throughput. NTS SO costs include compression costs which are both material and volume related but the DNs have no such material volume-related costs.

Shrinkage Costs EDF said that the GDNs had not provided sufficient evidence to demonstrate that their shrinkage incentive costs are related to capacity bookings rather than throughput costs. They noted that shrinkage incentive costs shown in the Mod 186 reports were driven by under or over performance against the target, but said it was not clear what caused the under or over performance, in particular whether it related to improved theft detection or lower throughput.

DNs' Response The differences in the shrinkage allowances shown in the Mod 186 reports relative to the original allowances are entirely due to differences in the cost of gas, not to differences in volumes. Once the allowed shrinkage volumes were set by Ofgem post October 2008 they do not change over the PCR period. Within the current PCR period therefore shrinkage allowances shown in the Mod 186 reports will not be affected by capacity bookings, throughput, or improved theft detection.

Shrinkage Volumes EDF said that the GDNs had not addressed the fact that when setting the shrinkage volumes Ofgem had recognised that there were throughput related elements associated with the allowed shrinkage volumes, in particular theft of gas and own use gas. EDF argued that the GDNs were proposing a charging methodology which reflected PCR allowances rather than costs, and the Licence requires the charging methodology to be cost reflective.

DNs' Response The DNs recognise that Own Use and Theft of Gas in the shrinkage allowance may be to some extent volume related, but together they amount to only 0.031% of volume, or approximately 0.1% of DN Revenue. Odourisation is a separate throughput related cost but also accounts for less than 0.1% of DN Revenue. The two volume related elements together therefore account for only about 0.2% of Allowed Revenue.

The proposed change to the Charging Methodology reflects the drivers underlying the DNs' costs. Reference is made to the PCR allowances since these were based on forecasts of DNs' costs and the treatment of shrinkage in the Price Control reflects analysis by Ofgem that leakage, the major component of shrinkage, does not vary directly with throughput.

Cost Evidence SP did not believe that all costs could be attributed to capacity. They said they had not received a sufficient level of detail to allow them to understand the justification for the proposals. BG also said that they did not possess sufficient data to determine whether any DN costs are related to throughput and therefore whether the move to 100% is more cost reflective.

DNs' Response The question of the structure of costs was fully discussed in DNPC03 and the main table was reproduced in DNPC07. The DNs did not state that all costs are related to capacity, simply that all, or virtually all of their costs are either related to capacity or are fixed, and not related to throughput, and therefore more appropriately recovered through capacity charges. In DNPC03 the only commodity related costs were shrinkage and odourisation, with odourisation being a relatively minor element. The change in the PCR treatment of shrinkage now means that it is no longer related to throughput and therefore that it would be more appropriate to recover it through capacity charges. The cost of odourisation is still throughput related but is too small to justify a commodity charge on its own.

Cash Flow RWE did not support the proposal on the basis that it would mean a cash flow benefit for the GDNs and conversely a cash flow and credit cost for shippers.

DNs' Response Given the small scale of the change proposed, and the fact that the difference in the timing of the capacity and commodity invoices is significantly less than 6 days in most months, the cash flow impact on shippers should not be material. Also there may be a marginal reduction in the cost of credit for those shippers who base security on their winter peak Value at Risk, which under this proposal is expect to reduce slightly.

Code Governance Review (CGR) BG commented that the prospective implementation of the CGR might give the DNs an incentive to seek approval of charging modification proposals before it was implemented and that Ofgem should instruct the DNs to delay any proposals until after implementation of the new regime. However they also said that because the current proposal did not represent a significant update to the charging methodology they were not arguing for it to be delayed.

DNs' Response While the point made by BG is directed at Ofgem rather than the DNs the DNs do not see the CGR as a reason to delay further cost reflective charging proposals. The DNs have been working on a full review of the charging methodology based on Ofgem's 2006 "Review of the Structure of Gas Distribution Charges". For example, a review of LDZ System Charges has been ongoing for a couple of years, with a consultation due very shortly. We see no reason why the CGR, which will still enable DN-initiated change proposals, should be used as a reason to delay the benefits of significant improvements to the methodology.

Reconciliation Invoice and Zero Rate Charges EON said more information should be provided on the Reconciliation Invoice, and that retaining the commodity charge type but setting it to zero should be reviewed as part of Nexus.

DNs' Response These are not specifically issues for this consultation and should be addressed through the appropriate industry channels.

4. Should interruptible supply points pay 50% of the firm LDZ System capacity charge so as to maintain the value of the discount received by interruptible supply points at its current level, on average?

4.1 Summary of Responses Received

Four shippers (EON, BG, GDF Suez, SSE) supported the proposal, mainly on the basis that there was no good reason to change the level of discount which applied to interruptible supply points.

SP, although against the 100%/0% proposal, acknowledged the proposal to maintain the interruptible discounts at their current level. EDF thought it would be appropriate to change the percentage to 50% if the main proposal were to be implemented, but thought more information should be supplied on the impact on particular supply points. EDF thought a more appropriate solution would be to implement on 1 October 2011, thereby avoiding the issue.

RWE did not support because they did not support the main proposal.

The MEUC did not comment on the question.

4.2 DNs' Response

Given that it is now proposed that the change to the capacity:commodity split be made from April 2012 (see below), after October 2011 when all supply points will become firm, there is no longer a need to change the proportion of the LDZ System capacity charge payable by interruptible supply points alongside the proposed capacity: commodity split change.

5. Should this change be made with effect from 1st April 2011?

5.1 Summary of Responses Received

Four shippers, (BG, GDF Suez, EON, SSE) supported or had no objections to the proposed change date.

EDF thought the proposal should not be implemented before 1 October 2011 at the earliest to allow the shippers more time to incorporate the change into their contracts and to avoid the need to change the percentage of the LDZ Capacity Charge paid by interruptible supply points. It would also allow more time for the AQ amendment Mods to complete. SP did not want these proposals to be implemented before the AQ Mods, but hoped this would be before April 2011.

RWE did not support implementation at any time. The MEUC did not comment on the implementation date.

5.2 DNs' Response

In the consultation paper it was proposed to implement the change in April 2011 in order to align the change with the planned implementation date for the proposals considered in DNPC08. The proposed implementation date for the DNPC08 proposals is now April 2012 and so the DNs consider it appropriate to change the proposed implementation date for the change to the capacity:commodity split to April 2012 in order to retain alignment of the changes.

An implementation date of April 2012 should provide sufficient time for shippers and suppliers to address any contractual or system changes that may be necessary. It should also allow sufficient time for the UNC Mods already raised to amend the AQ process to reach the stage of an Ofgem decision. It also avoids the need to change the percentage of the LDZ Capacity Charge paid by interruptible supply points.

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 relevant objectives of the charging methodology, set out in Standard Special Condition 5 of the Gas Transporter Licence. The relevant 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.
- (d) that the charging methodology reflects any alternative arrangements put in place in accordance with a determination made by the Secretary of State under paragraph 2A(a) of Standard Special Condition A27 (Disposal of Assets).

a) Cost Reflectivity

The only commodity-related elements of the DNs' costs are the costs of Own Use Gas, Theft of Gas and Odourisation which, in aggregate, account for only about 0.2% of the elements underlying the Allowed Revenue. In keeping with the proposals made in DNPC03, which established the current 95:5 capacity:commodity split, it is proposed now that the non-commodity related costs are reflected in the level of capacity charges. At present around 3.5% of DNs' overall revenue is related to throughput whereas under the proposal this will drop to zero, which will be more reflective of the 0.2% throughput-related cost element.

The DNs' actual shrinkage costs have varied from the allowances underlying the price control. The variations are primarily due to the DN's management of the distribution network, including improved pressure management, the impact of mains replacement and other factors, rather than to any variation in throughput. Each DN has separately provided Ofgem with details of their actual shrinkage costs, compared to the price control allowances, for 2007/8, 2008/9 and 2009/10.

b) Taking Account of Developments in the Transportation Business

The proposed change in the Methodology takes account of the change in the regulatory treatment of shrinkage in the current Price control compared with the previous Price Control.

7. Final Proposals

Based on the representations received and the comments made in response within this report the DNs' final proposals are:

1. That the current methodology which was determined in the DNPC03 consultation report, namely:

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 set to recover 5% of the revenue

is changed to:

That the capacity element of the LDZ system charges is set to recover 100% of the revenue from the LDZ system charges, and the commodity element set to recover 0% of the revenue.

2. That the change should be made with effect from 1st April 2012.

The proposed changes to the Methodology Statement are shown in Appendix 1 (in red).

Appendix 1 Changes to Charging Methodology Statement**GAS DISTRIBUTION TRANSPORTATION CHARGING
METHODOLOGY****1. Introduction**

Gas distribution transportation charges consist of:

- LDZ System charges;
- Customer charges;
- LDZ Exit Capacity NTS (ECN) charges;
- Administration charges.

For transportation to Supply Points directly connected to the distribution system the LDZ System, Customer and Administration charges are applicable. For transportation to Connected System Exit Points (CSEPs) the LDZ System and Administration charges are applicable.

The LDZ System charges and the Customer charges are set so as to maintain the proportional split of revenue recovery between them determined by the methodology. The levels of these charges are scaled proportionately to recover the target level of revenue. The LDZ ECN charges are set to aim to recover the level of cost incurred by the DN for NTS Exit Capacity in respect of NTS/LDZ offtakes in the Distribution Network. The levels of the Administration charges are based on the costs of providing the services and these charges are not scaled to recover any given proportion of the targeted revenue.

2. Split of revenue recovery between LDZ System and Customer Charges

The target balance of revenue recovery between LDZ System charges and Customer charges for each DN is based upon a network-specific analysis of the split of relevant costs. The costs are taken from the regulatory reporting packs submitted to Ofgem.

Customer charges reflect costs relating to service pipes funded by the transporter and the costs of emergency work relating to service pipes and supply points (i.e. not including any costs associated with gas mains). Service pipe costs include all operational and depreciation costs associated with DN-connected service pipes; these costs also include the replacement of such pipes and service pipe leakage. The relevant portion of support, employee overheads and work management costs of supporting Customer cost activities, based on direct work activity costs are attributed to the Customer cost category.

LDZ System charges reflect costs which include the cost of all work relating to assets upstream of the service pipe (including the gas mains to which the service pipes are connected) and those costs associated with managing the flow of gas through the system including capacity management. Accordingly, costs for all activities upstream of service pipes relating to the maintenance, replacement and repair of mains and larger pipes, as well as energy management work and the construction of new pipes are included in this cost category. The relevant portion of support, employee overheads and work management costs of supporting LDZ System cost activities, based on direct work activity costs are attributed to the LDZ System cost category. Depreciation costs associated with gas mains and Local Transmission System (LTS) pipes and LDZ System activity assets are attributed to the LDZ System cost category. All odorant and shrinkage costs except for service pipe leakage are attributed to the LDZ System cost category.

The network-specific estimate of the split of relevant costs is assessed using an average of an appropriate number of years for which data on a consistent basis is available for each network.

The current target revenue recovery splits are as shown in the table below.

Target Revenue Recovery Split between LDZ System and Customer Charges

	LDZ System	Customer
East of England	70.5%	29.5%
London	68.1%	31.9%
North West	73.7%	26.3%
West Midlands	74.0%	26.0%
Scotland Gas Networks	71.2%	28.8%
Southern Gas Networks	72.8%	27.2%
Northern Gas Networks	71.2%	28.8%
Wales & West	71.8%	28.2%

3. Split of revenue recovery between LDZ System Capacity and Commodity Charges

Prior to 1st April 2012:

The capacity element of the LDZ System charges is targeted to recover 95%, and the commodity element of the LDZ System charges is targeted to recover 5%, of the revenue from the LDZ system charges. This split is based on an assessment of the extent to which LDZ System associated costs are related to throughput or to system capacity. The 95:5 split applies to all the DNs.

On and after 1st April 2012:

The capacity element of the LDZ System charges is targeted to recover 100%, and the commodity element of the LDZ System charges is targeted to recover 0%, of the revenue from the LDZ system charges. This split is based on an assessment of the extent to which LDZ System associated costs are related to throughput or to system capacity. The 100:0 split applies to all the DNs.

4. Standard LDZ System Charges

The distribution networks contain a series of pipe networks split into four main pressure tiers - Local Transmission System (LTS), Intermediate Pressure System (IPS), Medium Pressure System (MPS) and Low Pressure System (LPS). Because it accounts for the majority of the total system costs the LPS is then sub-divided on the basis of pipe diameter into a further six sub-tiers.

All LDZ System related costs are attributed across these pressure tiers and sub-tiers.

The methodology below describes the derivation of the capacity charge function and is based on peak daily flows. A similar calculation, based on annual flows, is carried out to determine the commodity charge function

The average cost of utilisation is calculated for each of the main pressure tiers of the system. The probability of a load within a consumption band using any given pressure tier is determined by an analysis of where supply points of different sizes tend to connect to the system. Combining the average cost of utilisation with the probability of connection generates a tier charge for an average load within any given band. These tier charges are added together to give the total relative charge for a load within the consumption band to use the system.

To provide a workable basis for charging individual customers of differing sizes, the total average unit costs of utilising each tier of the distribution network are plotted. Functions are fitted to the data points representing the total unit costs such that the overall measure of error is minimised.

For the purposes of deriving charging functions the data points for the consumption bands are grouped into 3 charging bands:

- For the 0 to 73.2 MWh/a charging band a fixed unit charge is determined. The rate applies to directly connected Supply Points and CSEPs;
- For the 73.2 to 732 MWh/a charging band a fixed unit charge is determined. The rate applies to directly connected Supply Points and CSEPs;
- For the 732 MWh/a and above charging band, functions based on a power of the peak daily load (SOQ) are fitted. There are separate power functions for directly connected Supply Points and for CSEPs as the cost data justified separate functions for the >732 MWh charging band.

The form of the LDZ System functions is currently derived on a national basis.

5. Standard LDZ System Charges for Interruptible Supply Points

The Standard LDZ System charges for interruptible Supply Points are based on the principle that interruptible Supply Points typically receive a discount of 50% on the standard LDZ System charges they would pay if they were Firm.

Prior to 1st October 2011, this means interruptible Supply Points pay 47.37% of the appropriate LDZ System Capacity charge which would apply if the Supply Point were firm plus the appropriate LDZ System Commodity charge.

On and after 1st October 2011 all Supply Points will pay firm capacity and commodity charges.

Prior to 1st October 2011, where the transporter requires a Supply Point to be interrupted for more than 15 days in a particular year there is a transportation charge credit. For each day of interruption over 15 days, a transportation charge credit equivalent to 1/15 of the annual LDZ standard capacity charge avoided by having interruptible rather than firm transportation is payable to the Shipper User.

From 1st October 2011 transportation credits in respect of interruption will cease.

6. Optional LDZ System Charge

The rationale for the Optional LDZ System charge is that, for large DN-connected loads located close to the NTS, the standard LDZ System charges can appear to give perverse economic incentives for the construction of new pipelines to supply loads that are already connected to the transportation system, or for potential new loads to build lengthier and costlier pipelines than are available via nearby DN connections. This may give rise to economically inefficient bypass of the Distribution Network system, and unnecessary duplication of infrastructure.

The level of the Optional LDZ System charge is based on the estimated costs to the Distribution Network of laying and connecting a dedicated pipeline for a range of flow rates and distances from the NTS.

The costs considered in deriving the Optional LDZ System charge include the capital cost of laying the hypothetical pipeline and other capital costs relating to connection, metering, volumetric control and other requirements, and the ongoing direct and indirect costs of the hypothetical pipeline.

The level of the Optional LDZ System charge is independent of the overall level of revenue recovery targeted and so the level of the charging function remains unchanged until its cost basis is reanalysed.

Shipper Users opting for the Optional LDZ System charge pay this charge instead of the Standard LDZ System capacity and commodity charges.

7. Customer Charges

Customer charges reflect Supply Point costs, primarily costs relating to service pipes and emergency work relating to service pipes and supply points. The customer charge methodology is based on an attribution of the costs across Supply Points grouped into a number of consumption bands.

The costs are made up of two cost pools, broadly comprising costs associated with service pipes and costs associated with emergency work. Each cost pool is then divided among the consumption bands based on weighted consumer numbers by consumption band. The weightings are derived from estimates of how the costs of providing each of the services vary with consumption band. A total average cost per Supply Point is then calculated for each consumption band.

Functions are developed that best fit the relationship between supply point size and total average cost per supply point. The peak supply point capacity (SOQ) is used as a measure of supply point size.

For Supply Points up to 73.2 MWh/a, the Customer charge is a fixed unit capacity charge.

For Supply Points between 73.2 and 732 MWh/annum, the Customer charge consists of a fixed daily charge which varies with meter-reading frequency and a fixed unit capacity charge.

For Supply Points in excess of 732 MWh/annum, the Customer charge is a capacity charge whose unit rate is determined by a function based on a power of the peak daily load (SOQ).

8. LDZ Exit Capacity NTS (ECN) Charges

The LDZ ECN Charges are effective from 1 October 2012 and are a pence per peak day kWh charge applied to the supply point SOQ to determine the amount payable. The charge has a single unit rate within each Exit Zone.

The level of the LDZ ECN charges for any Exit Zone is set each year to reflect the forecast average unit NTS charges for capacity at the NTS/LDZ Offtakes which make up that Exit Zone for the coming year plus or minus the appropriate portion of the ECNK.

The ECNK is managed separately from the overall K for the purposes of setting the levels of the LDZ Exit Capacity NTS charges. It is calculated as the difference between the revenue collected from the LDZ ECN charges and the amounts paid to NG NTS in respect of the Exit Capacity Charges in the previous formula year plus or minus any ECNK from the previous period.

K means the Distribution Network Transportation Activity Revenue adjustment factor to the Distribution Network Transportation Activity Revenue in respect of over or under recovery for a Distribution Network in a Formula Year.

9. Administration Charges

There are specific administration charges for some services which are required by some Shipper Users but not by all. These administration charges are:

- Charges for the administration processes required to manage the daily operations and invoicing associated with CSEPs;
- Charges for the administration of allocation arrangements at Shared Supply Meter Points.

The methodology used to calculate the appropriate level of these charges is based on an assessment of the costs incurred of the ongoing activities involved in providing the services. The charges are forward looking and take into account anticipated enhancements to the methods and systems used.