Statement of LDZ Transportation Charges

Effective from
1st April 2022

WALES&WEST UTILITIES

Contents

1.0 Introduction

This publication sets out the Local Distribution Zone (LDZ) transportation charges which will apply from 1st April 2022 to 31st March 2023 for the use of the Wales & West Utilities Ltd (WWU) Distribution Network (DN), as required by Standard Special Condition A4 of the Gas Transporter Licence. This document does not override or vary any of the statutory, licence or Uniform Network Code (UNC) obligations upon WWU. This notice is being published in accordance with UNC TPD B 1.8.2 a.

Our final price change on 1st April 2022, excluding Supplier of Last Resort ("SoLR") charges, will be an average increase of 12.8% over 2021/22 prices. This comprises:

<table>
<tr><th colspan="5">Average Price Change (Transportation and Exit)</th></tr>
<tr><td colspan="5">12.80%</td></tr>
<tr><th colspan="3">Transportation Income</th><th colspan="2">Exit Capacity</th></tr>
<tr><td colspan="3">Final: 7.8%
(Indicative: 29.3%)</td><td colspan="2">Final: 88.9%
(Indicative: 68.5%)</td></tr>
<tr><td colspan="2">Capacity</td><td>Commodity</td><td colspan="2">Exit Zone</td></tr>
<tr><td rowspan="2">System</td><td rowspan="2">Customer</td><td rowspan="4">Final: 3.1%

(Indicative: 60.3%)</td><td>SW1</td><td>0.0240</td></tr>
<tr><td>SW2</td><td>0.0385</td></tr>
<tr><td rowspan="3">Final: 8.3%

(Indicative:

28.9%)</td><td rowspan="3">Final: 7.2%

(Indicative:

27.4%)</td><td>SW3</td><td>0.0263</td></tr>
<tr><td>WA1</td><td>0.0309</td></tr>
<tr><td>WA2</td><td>0.0297</td></tr>
</table>

N.b. Indicative price changes for capacity and commodity included charges in respect of SoLR revenues.

For more information about these changes, or our charges, please contact the pricing team on 0800 9122 999 or via email to Pricing@wwutilities.co.uk.

2.0 Allowed Revenue

2.1. Total Revenues

RIIO-GD2 requires networks to set charges to collect the forecast allowed revenue calculated under the price control. These charges are split between

(i) transportation allowed revenue;

(ii) exit capacity revenue, which recovers the costs incurred from utilising the upstream network, the National Transmission System (NTS); and

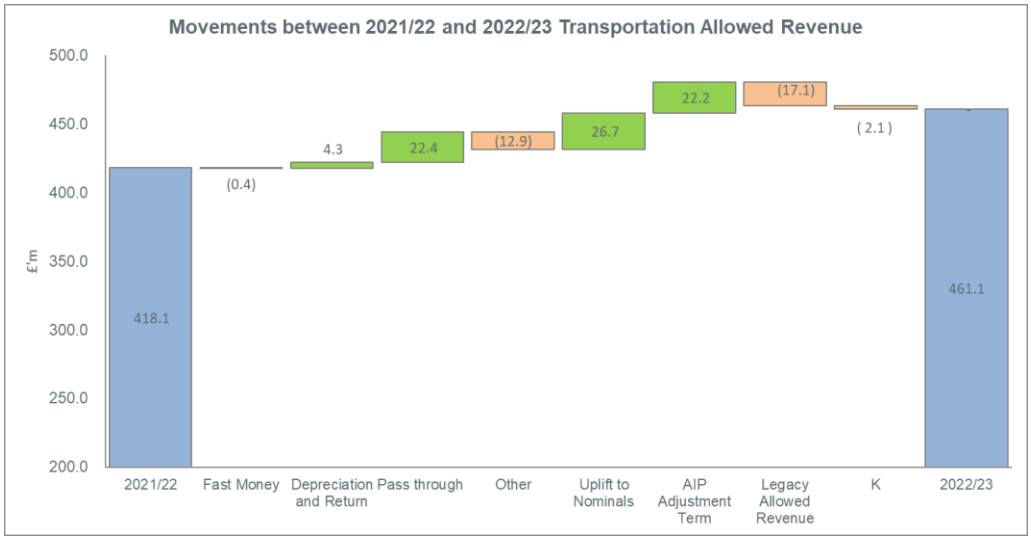
(iii) SoLR revenue which a network is obligated to charge under its licence.

	2021/22 (£'m)	2022/23 (£'m)	Movement (£'m)	Movement (%)
Transportation Allowed Revenue	418.1	461.1	43.0	10%
Exit Capacity Allowed Revenue	28.4	53.3	24.9	88%
SoLR Revenue	0.8	96.3	95.5	11784%
Total	447.3	610.7	163.4	37%

The percentage movements shown above reflect movements in revenues between 2021/22 and 2022/23. These are different to the price change percentages shown on page 3, due to the application of the change in demand forecast between 2021/22 and 2022/23 to calculate the final price changes.

2.2 Transportation Revenue (£461.1m)

Our forecasted transportation allowed revenue increases by £43.0m in 2022/23. The most notable movements in the underlying drivers are:

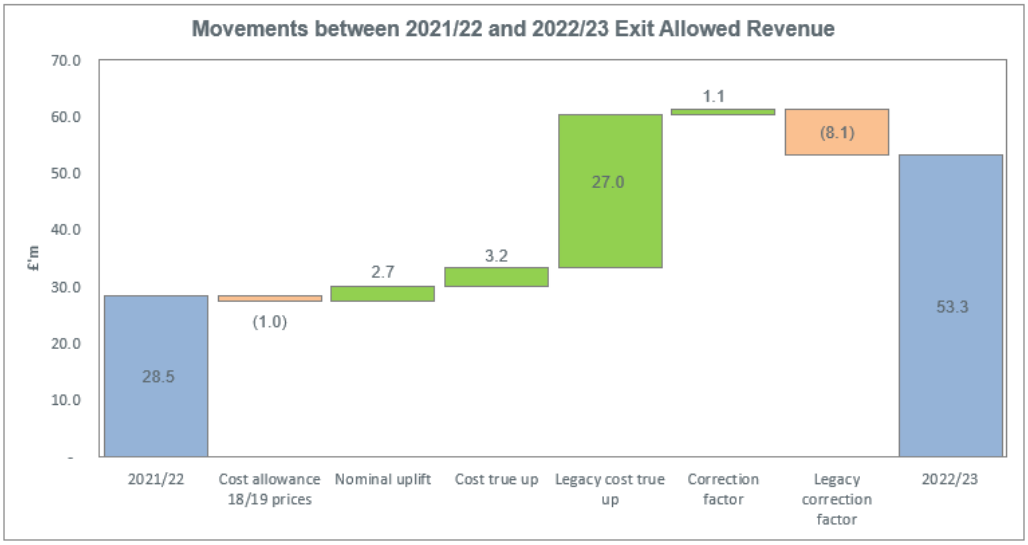


1. Fast money reflects the profile of Totex expenditure forecast year on year.
2. Depreciation increases each year as more Totex is capitalised, this is offset by a reduction in return on RAV due to the reducing allowed return on debt.
3. Pass through costs have increased significantly as a result of the sharp increase in Shrinkage gas prices forecast in 2022/23 (c. £17m in 18/19 prices), compared with those in 2021/22, and the inclusion of a bad debt pass through term of £4.6m in 18/19 prices, which stems from the termination of a major shipper at the end of 2021.
4. The reduction in other costs includes a £5.5m reduction in equity issuance allowance and £6.7m reduction to our tax allowance primarily as a result of super deductions for eligible capital expenditure which were processed as a tax trigger event in the PCFM.
5. The increase in the nominal uplift reflects the October OBR inflation forecast for 2022/23 which increased significantly from the previous year.
6. The AIP adjustment term is a new term under the RIIO GD2 and reflects any movement in 2021/22 allowed revenue after being finalised for price setting. There was no AIP adjustment in 2021/22 as this was the first year of RIIO GD2. In 2022/23 the AIP adjustment term includes amounts in respect of the increased Totex allowances following conclusion of the CMA appeal in 2021, updated shrinkage cost forecast for 2021/22, inflation true ups and smaller increases in other pass-through costs such as CDSP and Licence Fee.

7. 2021/22 legacy allowed revenue included a large negative cost true up for exit capacity which is not present in 2022/23. This is offset by the reversal by Ofgem of certain items claimed in earlier years which are the subject of ongoing discussion.

2.2. Exit Capacity Revenue (£53.3m)

Following the implementation of Uniform Network Cost Modification 0195AV, industry arrangements for the charging of NTS Exit Capacity costs changed on 1st October 2012. National Grid Transmission invoices Distribution Networks (DNs) based on their use of the National Transmission System (NTS) and the Exit Point bookings made by the DNs. Ofgem provide an allowance to networks to recover the anticipated cost of Exit Capacity, and a mechanism to adjust where these costs fall outside those anticipated. For 2022/23 our allowances increase by £24.8m to £53.3m:



1. The base allowance in 2022/23 is calculated using the latest published final and indicative price information from National Grid NTS.
2. The increase in the nominal uplift reflects the October OBR inflation forecast for 2022/23 which increased significantly from the previous year.
3. The RIIO-GD2 cost true up reflects the difference between cost allowances and actuals in 2021/22. There was no equivalent figure in 2021/22 as this was the first year of RIIO-GD2.
4. The increase in revenue as a result of the movement in legacy cost true up relates to the £-25.1m negative cost true up in 2021/22 allowed revenue which stemmed from 2019/20 on a

two-year lag and £1.9m positive true up in 2022/23 from 2020/21. We increased our base allowance for 2019/20 to align to price indicatives at the time. Actual prices in 2019/20 were significantly lower than expected leading to a cost true up of £25.1m in 2021/22.

5. Correction factor which reflects the allowed versus recovered revenue in 2021/22 is £1.1m. There was no equivalent figure in 2021/22 as this was the first year of RIIO-GD2.
6. The movement in legacy correction factor relates to the fact that we targeted a lower revenue collection in 2019/20 to offset the negative cost true up mentioned above.

2.3. Supplier of Last Resort Revenue (SoLR) (£96.3m)

When the Office of Gas and Electricity Markets (Ofgem) revokes a supply licence (usually because of insolvency), it can appoint a 'supplier of last resort' (SoLR) on a case-by-case basis to take over the supply of gas and/or electricity to the insolvent supplier's customers. The aim is to provide seamless continuity of service for customers. The regulatory regime for this is primarily provided for in the Standard Conditions of the supply licences held by Great Britain's (GB's) electricity suppliers and gas suppliers.

The gas and electricity supply standard licence conditions allow a supplier acting as SoLR to make a claim for any reasonable additional, otherwise unrecoverable, costs they incur. Historically SoLRs have claimed for the following categories of costs:

- Customer credit balances
- Working capital
- Operational costs (including customer service, IT, complaints/enquiries specific to the SoLR, onboarding costs, communication and wholesale energy purchase costs)

In 2021/22 regulatory year there have been a significant number of suppler failures which have led to SoLRs being appointed by Ofgem. Last Resort Supply Payment (LRSP) claims have been submitted by SoLRs to Ofgem for consent and were approved by Ofgem.

DN's, in accordance with the provisions of SSC A48 of the Gas Transporters Licence, the decision letter published by Ofgem on 1st December 2021 and the modification to SSC A48 directed by Ofgem on 28th January 2022, are obligated by their licenses to raise revenue in 2022/23 to pay these SOLR claims in 2022/23. The total amount of valid claims raised for inclusion in 2022/23 tariffs is £95.9m.

Currently, DNs recover the LRSP costs through the invoicing of Transportation Charges via shippers, however this is largely invisible and not transparent. On 20 January 2022, Ofgem approved UNC modification 0797 which sought to create a new specific charge type which is to be added to the current Distribution Network Transportation Charging Methodology for first use in the 2022/23 charging year.

Revenues to be raised in 2022/23 by DNs to pay valid SoLR claims will be charged to domestic customers only; there is no SoLR charge relating to industrial customers in this year

3.0 Transportation Charges

3.1. Final Charges from 1 April 2022

	Current Price effective from 1st April 2021	Final Price effective from 1st April 2022
LDZ SYSTEM COMMODITY CHARGES	**Pence per kwh**	
UP TO 73,200 KWH PER ANNUM	0.0349	0.0360
73,200 KWH - 732,000 KWH PER ANNUM	0.0305	0.0314
732,000 KWH PER ANNUM AND ABOVE	0.3538	0.3648
	x SOQ ^	
	-0.2775	-0.2775
SUBJECT TO A MINIMUM RATE OF	0.0025	0.0026

LDZ SYSTEM CAPACITY CHARGES	**Pence per peak day kwh per day**	
UP TO 73,200 KWH PER ANNUM	0.1995	0.2161
73,200 KWH - 732,000 KWH PER ANNUM	0.1731	0.1875
732,000 KWH PER ANNUM AND ABOVE	1.5500	1.6787
	x SOQ ^	
	-0.2513	-0.2513
SUBJECT TO A MINIMUM RATE OF	0.0147	0.0159

LDZ CUSTOMER CAPACITY CHARGES	**Pence per peak day kwh per day**	
UP TO 73,200 KWH PER ANNUM	0.1044	0.1119
73,200 KWH - 732,000 KWH PER ANNUM	0.0041	0.0044
732,000 KWH PER ANNUM AND ABOVE	0.0824	0.0883
	x SOQ ^	
	-0.2100	-0.2100

These rates reflect those published 31st January 2022.

LDZ Customer Charges

For supply points with an AQ of less than 73,200 kWh per annum, the customer charge is a capacity charge.

For supply points with an AQ between 73,200 and 732,000 kWh per annum, the customer charge is made up of a fixed charge which depends on the frequency of meter reading, plus a capacity charge based on the registered supply point capacity (SOQ).

For supply points with an AQ of over 732,000 kWh per annum, the customer charge is based on a function related to the registered supply point capacity (SOQ).

In addition to the charges in 3.1, the following fixed charge applies to supply points with an AQ between 73,200 and 732,000:

LDZ CUSTOMER FIXED CHARGES	Final Prices effective 1 April 2021	Final Prices effective 1 April 2022
	Pence per day	
73,200 KWH - 732,000 KWH PER ANNUM - BI ANNUAL READ SITES	32.4201	34.9290
73,200 KWH - 732,000 KWH PER ANNUM - MONTHLY READ SITES	34.5203	37.1918

CSEP Charging

In the calculation of the LDZ charges payable, the unit commodity and capacity charges are based on the supply point capacity equal to the CSEP peak day load for the completed development irrespective of the actual stage of development. The SOQ used is therefore the estimated SOQ for the completed development as provided in the appropriate Network Exit Agreement (NExA). For any particular CSEP, each shipper will pay identical LDZ unit charges regardless of the proportion of gas shipped. Reference needs to be made to the relevant NExA or CSEP ancillary agreement to determine the completed supply point capacity.

3.2. Optional LDZ Charge

The optional LDZ tariff is available, as a single charge, as an alternative to the standard LDZ system charges. This tariff may be attractive to large loads located close to the NTS. The rationale for the optional tariff is that, for large Network loads located close to the NTS or for potential new Network loads in a similar situation, the standard LDZ tariff can appear to give perverse economic incentives for the construction of new pipelines when Network connections are already available. This could result in an inefficient outcome for all system users.

The charge is calculated using the function below:

Pence per peak day kWh per day
$902 \times [(SOQ)^{-0.834}] \times D + 772 \times (SOQ)^{-0.717}$

Where: (SOQ) is the Registered Supply Point Capacity, or other appropriate measure, in kWh per day and D is the direct distance, in km, from the site boundary to the nearest point on the NTS. Note that ^ means "to the power of".

3.3. Exit Capacity

Prices effective 1 April 2022

EXIT CAPACITY UNIT RATES BY EXIT ZONE	Pence per peak day kwh per day	
	Current Price effective from 1st April 2021	Final Price effective from 1st April 2022
SW1	0.0110	0.0240
SW2	0.0181	0.0385
SW3	0.0125	0.0263
WA1	0.0150	0.0309
WA2	0.0178	0.0297

Exit Capacity NTS (ECN) unit rate charging methodology

Distribution Networks set ECN unit rates to recover their ECN allowed revenue. The ECN allowed revenue is set during the most recent Annual Iteration Process and is made up of:

- ECN base allowance which is a forecast of NTS exit capacity costs, using latest published NTS ECN rates and network capacity bookings;
- ECN cost true up i.e., the difference between actual cost and base allowance in a prior year, which will differ for each network, and which can have a significant and material impact on allowed ECN revenue and therefore the final ECN charge; and
- K ECN under or over recovery i.e., the difference between allowed and collected revenue in a prior year

When setting ECN rates, DNs seek to recover their allowed revenue as calculated above, rather than solely costs for the year. For this reason, the ECN rate charged by DNs will not match the NTS postage stamp unit rate in the same year.

To calculate the unit rates for each exit zone within a network the level of NTS cost per exit zone is used to apportion the total ECN allowed revenue across each exit zone. Once the revenue that needs to be recovered from each exit zone is determined, the latest demand snapshot of SOQs is used to calculate a unit rate per exit zone.

Below is an illustrative example showing how DN ECN unit rates at each exit zone are calculated. N.b. no actual data has been used.

Scenario: A Distribution Network has an annual network capacity volume booking of 230,000 GWh split across 4 exit zones, leading to costs of £46m using the relevant NTS postage stamp unit rate. Allowed revenue for the year has been calculated as £45m and the latest demand snapshot from Xoserve shows shipper demand at 215,000 GWh.

	Network Capacity Annual Bookings (GWH)	Postage Stamp Price (p/kWh/d)	DN Cost per Exit Zone (£)	Allowed Revenue Apportioned	Shipper Demand snapshot (GWH)	Unit rate (p/kWh/d)
Calculation	Sum of 365 days bookings	NTS postage stamp PS rate	Volume v PS rate	Total x (Exit zone cost / total cost)	From Xoserve 'Snapshot' data	**Allowed revenue / demand**
Exit Zone 1	70,000	0.0200	14,000,000	13,695,652	63,000	**0.0217**
Exit Zone 2	20,000	0.0200	4,000,000	3,913,043	19,000	**0.0206**
Exit Zone 3	90,000	0.0200	18,000,000	17,608,696	87,000	**0.0202**
Exit Zone 4	50,000	0.0200	10,000,000	9,782,609	46,000	**0.0213**
	230,000		46,000,000	45,000,000	215,000	

Due to the differences by exit zone in the Distribution networks capacity bookings and the shipper demand profile, DN ECN rates will differ across exit zones. Shipper demand can differ to DN capacity bookings for a number of reasons, including the timing of DN bookings v the demand snapshot and any user commitment in place that networks have to consider.

Charges to recover SoLR Revenue

The SoLR charge is based on the total value of valid Last Resort Supplier Payment (LRSP) claims received, divided by the registered supply point capacity (SOQ), converted to a pence per day rate.

The Supplier of Last Resort (SoLR) charge is calculated as follows:

Unit x number of days in that billing period x Rate / 100

Where the unit is equal to the *Sum of the Formula Year SOQ* (NB for Class 1 & 2 SMPs they do not have a FY SOQ, so the Rolling SOQ will be used in the sum).

Final Price effective from 1st April 2022

SUPPLIER OF LAST RESORT CHARGES	Pence per peak day kwh per day
LRSP Domestic Charge	0.0914
LRSP Industrial Charge	0.0000

4.0 LDZ System Entry

4.1. DN Entry Commodity Charge/Credit

DN Entry Commodity charges reflect the costs of receiving gas from an entry point at a lower pressure tier than the NTS. The charge/credit will differ according to the amount of gas entering the network system, the pressure tier at which the gas enters the system and the operational costs resulting from the entry point.

The charge, which comprises the following three elements, is an adjustment to the full transportation charge:

i. **Lower System Usage**: For the gas received from this source the Shippers will get a credit in recognition that the gas has entered the network at a lower pressure tier, thus using less of the network system;

ii. **Avoidance of Exit Capacity**: The Shipper will receive a credit for the avoidance of exit capacity charges as they have not taken gas which has entered the Wales & West network through the National Transmission offtake point; and

iii. **Operational Costs:** The Shipper will be charged an operational cost, principally maintenance, relating to the equipment owned and operated by the Gas Distribution Network.

The sum of the above three components may result in either a credit or a debit to the Shipper. The table below gives the entry commodity unit price for all known sites within the Wales & West Network set to operate during 2022/23. Where additional sites are connected which are not currently planned to flow during 2022/23 these will be published if and when information on pressure tier, specific opex costs and flows are available. Typically, this may not be until a Gemini site name is allocated to the connection.

LDZ System Entry Commodity Charge/Credit by DN Entry point

Site Name	GEMINI Name	Alias	LDZ System Entry Commodity Charge (p/kWh) Current Prices	LDZ System Entry Commodity Charge (p/kWh) Prices effective 1 April 2022
BROMHAM HOUSE FARM	BROMOS		-0.0537	-0.1187
CANNINGTON BIOMETHANE	CANNOS		-0.0573	-0.1216
BISHOPS CLEEVE BIOMETHANE	CLEEOS	Grundon Landfill / Wingmoor Farm	-0.0443	-0.1113
ENFIELD BIOMETHANE	ENFDOS		-0.0204	-0.0691
FIVE FORDS BIOMETHANE	FIVEOS		0.0214	-0.0358
FRADDON	FRADOS	Penare Farm	-0.0391	-0.1071
FROGMARY BIOMETHANE	FROGOS		-0.0537	-0.1187
GREAT HELE BIOMETHANE	HELEOS	Nadder Lane	-0.0243	-0.0722
HELSCOTT FARM	HELSOS		-0.0537	-0.1187
ROTHERDALE	ROTHOS	Vale Green 2	-0.0371	-0.0824
SPITTLES FARM	SPITOS	Bearley Farm	-0.0537	-0.1187
SPRINGHILL BIOMETHANE	SPNGOS		-0.0152	-0.0649
PENNANS FARM	TBC		-0.0537	-0.1187
NORTHWICK	NOCKOS		-0.0402	-0.0848
AVONMOUTH WESSEX	WESXOS	Wessex Water	-0.0652	-0.1279
WILLAND	WILLOS		-0.0537	-0.1187
WYKE FARM	WYKEOS		-0.0599	-0.1237
EVERCREECH BIOMETHANE	EVEROS		-0.0646	-0.1275
TROWBRIDGE BIOMETHANE	TRWBOS		-0.0273	-0.0746
ABSL SWINDON	ABSLOS		-0.0391	-0.1071

5.0 Charge Types and Invoice Mapping

5.1. Xoserve Charge Mapping

The following list presents the core invoice and charge types reflected in this document, which are billed by Xoserve on our behalf. A full list of current invoice and charge types is available through the Xoserve Shared Area. For more information on invoicing, please contact Xoserve, the invoicing service provider, via e-mail at css_billing@xoserve.com.

	Invoice Type	Charge Type
LDZ Capacity		
Supply Point LDZ Capacity	CAZ	ZCA
CSEP LDZ Capacity	CAZ	891
Unique Sites LDZ Capacity Charge	CAZ	871
Unique Sites Optional Tariff	CAZ	881
Customer Capacity		
Customer LDZ Capacity	CAZ	CCA
Customer Capacity fixed Charge	CAZ	CFI
Unique Sites Customer Capacity	CAZ	872
Commodity		
LDZ Commodity	COM	ZCO
CSEP Commodity	COM	893
Unique Sites Commodity	COM	878
LDZ System Entry Commodity Charge	COM	LEC
Exit Capacity		
LDZ Exit Capacity	CAZ	ECN
CSEP Exit Capacity	CAZ	C04
Unique Sites Exit Capacity	CAZ	901
Supplier of Last Resort (NEW)		
LRSP Domestic Charge	ANC	LRD
LRSP Industrial Charge	ANC	LRI

6.0 Example Charges

Example Charges

This section provides illustrative examples of how transportation prices are used to calculate a bill for different load bands. Charges produced by UK Link are definitive for charging purposes and take precedence to any of the examples listed in this section. Calculations below are subject to rounding and should be regarded as purely illustrative. The commodity charges in these examples are based on the supply point AQ, but the actual charges would vary depending on the actual consumption of the supply point for that period.

Example 1

A shipper has a daily metered customer in Cardiff, with an annual consumption (AQ) of 20,000,000 kWh and a registered supply point capacity (SOQ), booked directly by the shipper of 100,000 kWh per day.

	Charge Type	Calculation	Result
+	LDZ Capacity **Invoice:** LDZ Capacity (ZCA) **See**: Page 8 **Basis:** p / peak day kWh / day	**Annual Volume:** 365 days x 100,000 (SOQ) **Unit Rate**: 1.6787 × 100,000^-0.2513 **Annual Charge:** Annual Volume x Unit Rate	36,500,000 kWh 0.0930 p / pd kWh / day £33,945.00
+	LDZ Commodity **Invoice:** Commodity (ZCO) **See**: Page 8 **Basis:** p / kWh	**Annual Volume:** 20,000,000 kWh (AQ) **Unit Rate**: 0.3648 × 100,000 (SOQ) ^ -0.2775 **Annual Charge:** Annual Volume x Unit Rate	20,000,000 kWh (AQ) 0.0149 p / kWh £2,980.00
+	Customer (Capacity) **Invoice:** LDZ Capacity (CCA) **See:** Page 8 **Basis:** p / peak day kWh / day	**Annual Volume:** 365 days x 100,000 (SOQ) **Unit Rate**: 0.0883 × 100,000(SOQ) ^ -0.2100 **Annual Charge:** Annual Volume x Unit Rate	36,500,000 kWh 0.0079 p / pd kWh / day £2,883.50
+	Exit Capacity Charges **Invoice:** LDZ Capacity (ECN) **See**: Page 10, for WA2 value **Basis:** p / peak day kWh / day	**Annual Volume:** 365 days x 100,000 (SOQ) **Unit Rate**: 0.0297 p / pd kWh / day **Annual Charge:** Annual Volume x Unit Rate	36,500,000 kWh 0.0297 p / pd kWh / day £10,840.50
+	Supplier of Last Resort Charges **Invoice**: Ancillary (ANC) See: Page 12 **Basis**: p / peak day kWh / day	**Annual Volume:** 365 days x 100,000 (SOQ) **Unit rate:** 0.0000* pdkWh / day **Annual Charge:** Annual Volume x Unit rate	36,500,000 kWh 0.0000p / pd kWh / day £0.00
=	Total Network Charge	Total Annual Network Charge	£50,649.00

*The LRSP industrial charge is zero for 2022/23 as all claims received related to domestic customers.

Unit Charge: Dividing by the annual load of 20,000,000 kWh gives a unit charge 0.2532 pence per kWh.

Example 2

A shipper has a non-prepayment domestic customer in the South West. Suppose the load has an AQ of 12,000 kWh per annum. This annual load places the end user in category SW:E2101BND. Load factor of 29.5%. The peak daily load (SOQ) is therefore 12,000 ÷ (365 × 0.295) = 111 kWh.

	Charge Type	Calculation	Result
+	LDZ Capacity **Invoice**: LDZ Capacity (ZCA) **See**: Page 8 **Basis**: p / peak day kWh / day	**Annual Volume:** 365 days x 111 (SOQ) **Unit rate**: 0.2161 p / pdkWh **Annual Charge:** Annual Volume x Unit rate	40,515 kWh 0.2161 p / pdkWh £87.55
+	LDZ Commodity **Invoice:** Commodity (ZCO) **See**: Page 8 **Basis:** p / kWh	**Annual Volume:** 12,000 kWh (AQ) **Unit rate**: 0.0360 p / kWh **Annual Charge:** Annual Volume x Unit rate	12,000 kWh (AQ) 0.0360 p / kWh £4.32
+	Customer (Capacity) **Invoice:** Capacity (CCA) **See:** Page 8 **Basis:** p / kWh	**Annual Volume:** 365 days x 111 (SOQ) **Unit rate**: 0.1119 p / pdkWh **Annual Charge:** Annual Volume x Unit rate	40,515 kWh 0.1119 p / pdkWh £45.34
+	Exit Capacity Charges **Invoice:** LDZ Capacity (ECN) **See**: Page 10, for SW3 value **Basis:** p / peak day kWh / day	**Annual Volume:** 365 days x 111 (SOQ) **Unit rate**: 0.0263 pdkWh / day **Annual Charge:** Annual Volume x Unit rate	40,515 kWh **Unit rate**: 0.0263 pdkWh / day £10.66
+	Supplier of Last Resort Charges **Invoice:** Ancillary **(**ANC) **See**: Page 12 **Basis:** p / peak day kWh / day	**Annual Volume:** 365 days x 111 (SOQ) **Unit rate:** 0.0914 pdkWh / day **Annual Charge:** Annual Volume x Unit rate	40,515 kWh **Unit rate**: 0.0914 pdkWh / day £37.03
=	Total Network Charge	Total Annual Network Charge	£184.90

Unit Charge: Dividing by the annual load of 12,000 kWh gives a unit LDZ charge of 1.5408 pence per kWh.

Example 3

Suppose that instead of supplying just one domestic customer in the South West (as in Example 2) the shipper supplies a connected system presently comprising 100 domestic customers and the completed connected system will comprise 150 domestic premises. Suppose that each of these premises has the same (AQ) of 12,000 kWh/yr.

Prevailing AQ (pre AQ)	100 houses × 12,000 (AQ) = 1,200,000 kWh
Maximum AQ (max AQ)	150 houses × 12,000 (AQ) = 1,800,000 kWh
Prevailing SOQ (pre SOQ)	1,200,000 ÷ (365 × 0.295) = 11,145 kWh
Maximum SOQ (max SOQ)	1,800,000 ÷ (365 × 0.295) = 16,717 kWh

Note that the prevailing annual and peak day loads of the connected system in effect would change over the year however, for simplicity, these have been assumed as constant in this example.

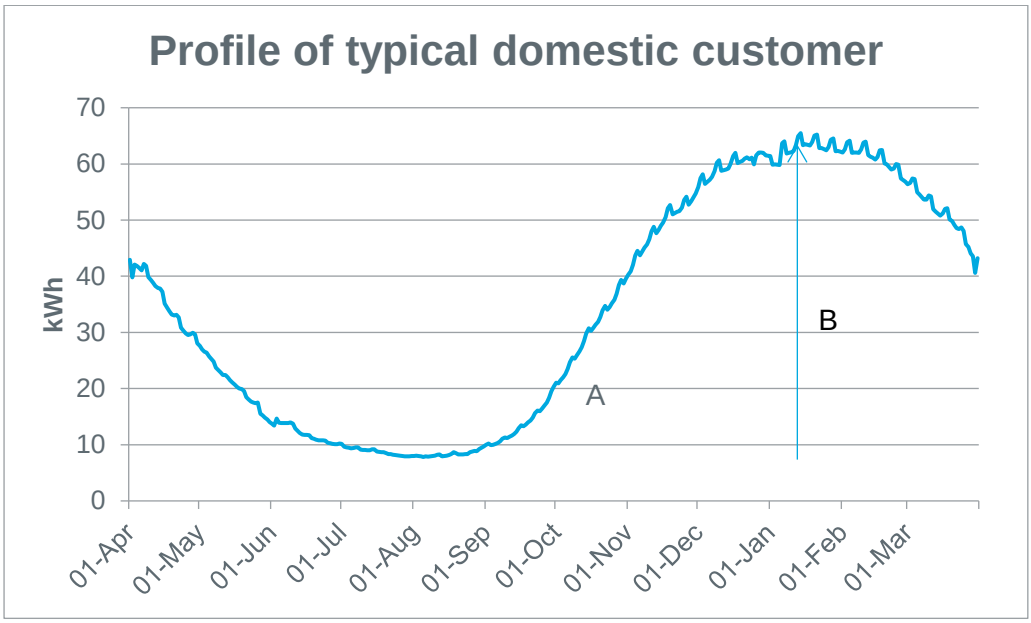
	Charge Type	Calculation	Calculation
+	CSEP Capacity **Invoice:** ADC (891) **See:** Page 8 **Basis:** p / peak day kWh / day	**Annual Volume:** 365 days × 11,145 (pre SOQ) **Unit Rate**:1.6787 × 16,717 (max SOQ)^-0.2513 **Annual Charge:** Annual Volume x Unit rate	4,067,796.61 kWh 0.1458 p / pdkWh / day £5,930.85
+	CSEP Commodity **Invoice:** ADC (893) **See**: Page 8 **Basis:** p / kWh	**Annual Volume:** 1,200,000 kWh (pre AQ) **Unit rate**: 0.3648 × 16,717 (max SOQ) ^ -0.2775 **Annual Charge:** Annual Volume x Unit rate	1,200,000 kWh (pre AQ) 0.0246 p / kWh £295.20
+	CSEP Exit Capacity Charges **Invoice**: CSEP Capacity (ECN) See: Page 10 Basis: p / supply point / day	**Annual Volume:** 365 days x 11,145 (pre SOQ) **Unit rate**: 0.0263 pdkWh / day **Annual Charge:** Annual Volume x Unit rate	4,067,796.61 kWh 0.0263 pdkWh / day £1,069.83
+	Supplier of Last Resort Charges **Invoice**: Ancillary (ANC) See: Page 12 **Basis**: p / peak day kWh / day	**Annual Volume:** 365 days x 11,145 (pre SOQ) **Unit rate:** 0.0000* pdkWh / day **Annual Charge:** Annual Volume x Unit rate	4,067,796.61 kWh 0.0000 p / pd kWh / day £0.00
=	Total Network Charge	Total Annual Network Charge	£ 7,295.88

*The LRSP industrial charge is zero for 2022/23 as all claims received related to domestic customers.

Unit Charge: Dividing by the annual load of 1,200,000 kWh gives a unit LDZ charge of 0.61 pence per kWh.

7.0 Supporting information

7.1. AQ, SOQ and Load Factors



Each year users will consume gas (with a total consumption represented above by the area A). The consumption by day will vary, for example weekend vs weekday, holiday vs non holiday, and impacts of the seasons. Typically, especially for domestic consumers, consumption will be lowest in the warm summer months and highest in the winter, peaking around January.

Our network is built to at least supply all our connections in a 1:20 winter day (not just an average winter). Therefore, charges are levied in consideration of:

1. The total volume of gas consumed; and
2. The peak requirement, which is known as the Supply Offtake Quantity (SOQ).

For daily metered customers, there is a requirement to specify both the annual quantity (AQ) and the peak requirement (SOQ). For non-daily metered customers, analysis is performed annually to provide an estimated SOQ for a given annual quantity.

Non-daily metered customers are designated an SOQ. This designation is arrived with reference to the loads assessed Peak Load Factor (PLF/LF). The Load Factor (LF) is derived annually by the Demand Estimation Committee (DESC), a committee under UNC governance. The most relevant weather scenarios are modelled, together with the sensitivity to weather across a sample of meter points. This modelling provides a LF which is used to estimate the peak requirement, under a 1:20 for a given Annual Quantity (which would be represented by area A above, where B would be the supply point SOQ).

For example, a domestic, non-prepayment user in South Wales is assessed to have a load factor of 29.5% (for 2022/23 charging year). The SOQ will therefore be 111kWh:

$$SOQ = \frac{AQ}{DAYS\ IN\ YEAR\ x\ LF}$$

$$SOQ = \frac{12{,}000}{365\ \text{x}\ 29.5\%} = 111.446\ (3dp) = 111kWh\ (0dp)$$

Therefore, as our network is built to supply a 1:20, our charges are levied on the 1:20 requirement, denoted by the SOQ for a given supply point.

7.2. End User Categories

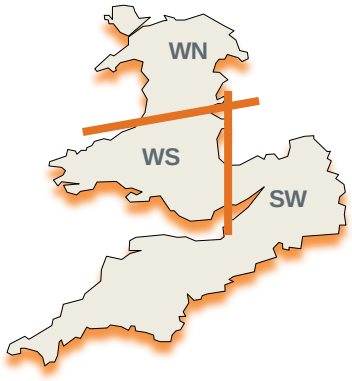
Larger loads will typically exhibit different profiles and sensitivities impacting the profile of their usage, and their peak requirement. The End User Category (EUC) enables a definition of consumers into categories, the basis of which includes geography (LDZ), typical annual consumption (AQ) and in some cases, winter consumption (WAR).

Consultation on end user categories

Section H of the Network Code requires the Transporter to publish, by the end of June each year, its demand estimation proposals for the forthcoming supply year. These proposals comprise end user category definitions, NDM profiling parameters (ALPs and DAFs), and capacity estimation parameters (EUC load factors). The analysis is presented to users and the Demand Estimation Sub-Committee (a sub-committee of the Network Code Committee) is consulted before publication of the proposals.

EUC Attribute (xx=LDZ)	Lower AQ Band (kWh)	Upper AQ band (kWh)	
xx:E2101BND	0	73,200	SMALL NDM SECTOR
xx:E201BNI	0	73,200	
xx:E2101BPD	0	73,200	
xx:E2101BPI	0	73,200	
xx:E2102BND	73,201	293,000	
xx:E2102BNI	73,201	293,000	
xx:E2102BPD	73,201	293,000	
xx:E2102BPI	73,201	293,000	
xx:E2103B	293,001	732,000	
xx:E2103W0y	293,001	732,000	
xx:E2104B	732,001	2,196,000	
xx:E2104W0y	732,001	2,196,000	
xx:E2105B	2,196,001	5,860,000	LARGE NDM SECTOR
xx:E2105W0y	2,196,001	5,860,000	
xx:E2106B	5,860,001	14,650,000	Large NDM customers who exceed the threshold for mandatory daily metering

For WWU, our LDZs are WN (Wales North), WS (Wales South) and SW (South West) covering the area:



EUC WAR Bands

EUCs 03 to 08 (Annual Quantities between 293,000 kWh and 58,600,000 kWh) have a further four sub-divisions for the Winter Annual Ratio "WAR" bands, which aim to assign supply points to an EUC which is more aligned to their within-year usage pattern. WAR Bands are derived from the ratio of the supply point's Winter Consumption to its

Annual Quantity (AQ), i.e., it's "WAR". The WAR for a gas year is calculated based on reads loaded during the previous winter and requires a start read to be accepted for a date between November 1st and December 31st and an end read to be accepted for a date between March 1st and April 30th. The calculation will then attempt to derive a consumption for a 121 day period. The consumption for the winter 2021/22 will be used to determine a ratio to apply from 1st October 2022 onwards. The absence of a valid winter consumption or a ratio of greater than 1 will result in the generic B EUC being applied rather than a WAR Band EUC. NDM Supply Points in these EUCs should all be subject to monthly meter reading.

It is mandatory for supply points with an annual consumption greater than 293,000 kWh to be monthly read. However, at the shipper's request sites below this consumption may also be classified as monthly read.

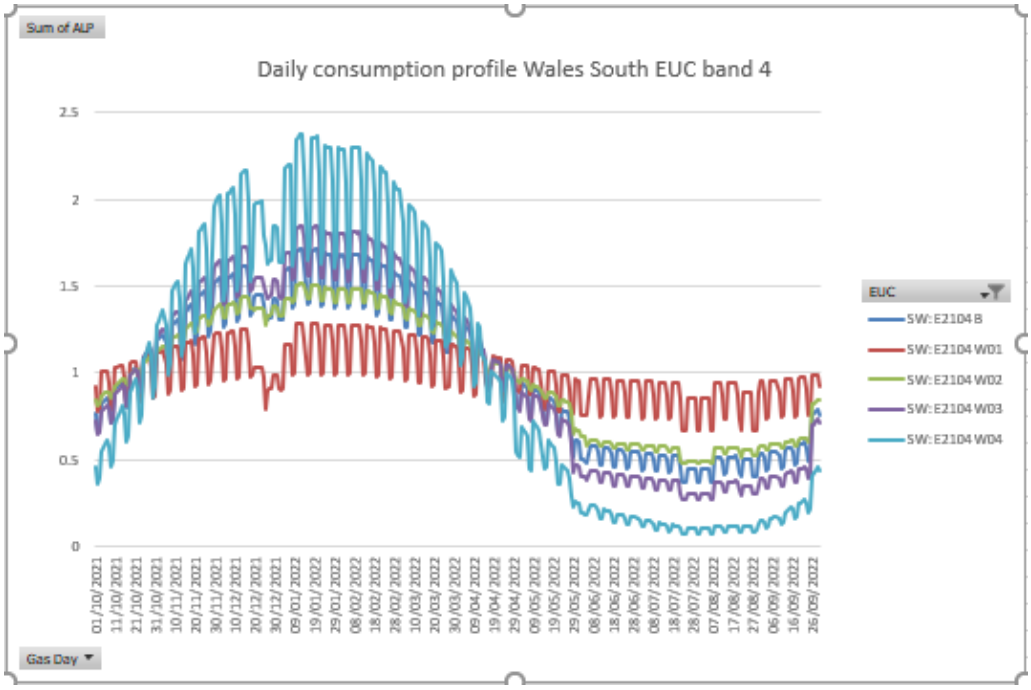
The peak load for an NDM supply point may then be calculated as:

EUC Definitions for Gas Year 2021-22						
EUC Attribute (xx=LDZ)	**Lower AQ Band (kWh)**	**Upper AQ band (kWh)**	**WAR Band 1 (y=W01)**	**WAR Band 2 (y=W02)**	**WAR Band 3 (y=W03)**	**WAR Band 4 (y=W04)**
xx:E2103W0y	293,001	732,000	0.000 - 0.442	0.443 - 0.517	0.518 - 0.626	0.627 - 1.000
xx:E2104W0y	732,001	2,196,000	0.000 - 0.442	0.443 - 0.517	0.518 - 0.626	0.627 - 1.000
xx:E2105W0y	2,196,001	5,860,000	0.000 - 0.392	0.393 - 0.480	0.481 - 0.564	0.565 - 1.000
xx:E2106W0y	5,860,001	14,650,000	0.000 - 0.355	0.356 - 0.441	0.442 - 0.537	0.538 - 1.000
xx:E2107W0y	14,650,001	29,300,000	0.000 - 0.339	0.340 - 0.383	0.384 - 0.465	0.466 - 1.000
xx:E2108W0y	29,300,001	58,600,000	0.000 - 0.339	0.340 - 0.383	0.384 - 0.465	0.466 - 1.000

Where valid reads are not received for a supply point, and the generic 'B' band is allocated there are three implications:

1. The SOQ derived may not be reflective of actual requirements, resulting in charges levied being less reflective of actual system requirements for that supply point;
2. In a constrained network the failure to have an accurate estimated SOQ may place further constraint on network capacity; and

3. The gas allocated to the NDM supply point as part of daily balancing will be inappropriate, resulting in an impact on Unidentified Gas (UiG). The graph below demonstrates the variability in allocation which would arise between the 'B' band and any one of the alternative WAR bands:



Example

Using a supply point in Wales South LDZ with an annual consumption of 1,000,000 kWh per annum.

Assuming consumption December to March inclusive is 500,000 kWh.

Winter: annual ratio will therefore equal 500,000 ÷ 1,000,000 = 0.5

For a site with an annual consumption of 1,000,000 kWh, a ratio of 0.5 falls within winter: annual ratio band W02 and the site is thus within End User Category WS: E2104W02 where:

WS:	E21	04	W02
South Wales LDZ	Load factor effective for charging year 22/23	EUC band 04, between 732,000kWh and 2,196,000kWh	WAR band 02, for supply points with a winter consumption between 44.3% and 51.7% of their annual consumption.

For a site in this category, the load factor is 44.8% and the peak daily load is therefore its SOQ will be:

$$SOQ = \frac{AQ}{DAYS\ IN\ YEAR\ x\ LF}$$

$$SOQ = \frac{1{,}000{,}000}{365\ \text{x}\ 44.8\%} = 6{,}115.460\ (3dp) = 6{,}115kWh\ (0dp)$$

7.3. Load Factors for 2021/22

Load factors are updated annually, effective on the 1st October. For charging purposes, the regulatory year charges are levied based on the prevailing Load Factor in the December prior to the charging year. Therefore, for charging purposes the load factors for 2021/22 gas year remain relevant:

South West									
Band	**B**	**BND**	**BNI**	**BPD**	**BPI**	**W01**	**W02**	**W03**	**W04**
E2101		0.295	0.312	0.320	0.311				
E2102		0.356	0.356	0.321	0.356				
E2103	0.376					0.618	0.452	0.335	0.233
E2104	0.376					0.618	0.452	0.335	0.233
E2105	0.433					0.650	0.511	0.378	0.267
E2106	0.454					0.640	0.616	0.448	0.314
E2107	0.610					0.678	0.718	0.574	0.381
E2108	0.610					0.678	0.718	0.574	0.381
E2109	0.650								

Wales North									
Band	**B**	**BND**	**BNI**	**BPD**	**BPI**	**W01**	**W02**	**W03**	**W04**
E2101		0.305	0.326	0.356	0.326				
E2102		0.393	0.365	0.356	0.365				
E2103	0.374					0.597	0.474	0.346	0.236
E2104	0.390					0.597	0.474	0.346	0.236
E2105	0.424					0.608	0.499	0.387	0.250
E2106	0.509					0.652	0.597	0.474	0.308
E2107	0.637					0.700	0.722	0.605	0.397
E2108	0.637					0.700	0.722	0.605	0.397
E2109	0.665								

Wales South									
Band	B	BND	BNI	BPD	BPI	W01	W02	W03	W04
E2101		0.299	0.322	0.342	0.322				
E2102		0.358	0.361	0.342	0.361				
E2103	0.370					0.562	0.448	0.327	0.233
E2104	0.357					0.562	0.448	0.327	0.233
E2105	0.410					0.652	0.494	0.378	0.264
E2106	0.436					0.641	0.619	0.437	0.313
E2107	0.586					0.678	0.717	0.579	0.381
E2108	0.586					0.678	0.717	0.579	0.381
E2109	0.654								

7.4. Application of the LDZ Charging Methodology

Standard Special Condition A4 of the Gas Transporter (GT) Licence requires the licensee to establish a methodology showing the methods and principles on which transportation charges are based. The present charging methodology was introduced in 1994 and it has been modified from time to time in accordance with the GT Licence.

Objectives of the charging methodology

The transportation charging methodology must comply with objectives set out in the Licence under Standard Special Condition A5 paragraph 5. These are that:

- Compliance with the charging methodology results in charges which reflect the costs incurred by the licensee in its transportation business, and as far as is consistent with this;
- Compliance with the charging methodology facilitates effective competition between gas shippers and between gas suppliers; and
- The charging methodology properly takes account of developments in the transportation business.

In addition to these Licence objectives Wales & West Utilities has its own objectives for the charging regime. These are that the distribution charging methodology should:

- Promote efficient use of the distribution system;
- Generate stable charges; and
- Be easy to understand and implement.

Before the Transporter makes any changes to the methodology it consults with the industry in accordance with Standard Special Condition A5 of the Licence. Ofgem has the right to veto any proposed changes to the methodology.

Structure of charges

The structure of the Network's LDZ charges are split between system related activities and customer related activities.

Whilst total LDZ revenue is determined by the relevant price control, the share of this revenue to be recovered from the LDZ system charges and the LDZ customer charges respectively is based on the relative cost of each area of activity. The current split is shown in the table below. This split is being reviewed for appropriateness in using actual cost data from GD1.

Table 1 - % Split of LDZ System and LDZ Customer Charges in WWU

Year	System Related (%)	Customer Related (%)	Total (%)
2012 onwards	71.8	28.2	100.0

Having established the target revenue to be derived from each main category of charge, the next step is to structure the charges within each of these charge categories across the load bands such that they reasonably reflect the costs imposed on the system by different sizes of loads. The methodologies used to do this are described in the following sections.

7.5. LDZ System Charges Methodology

Introduction

The LDZ system charges effective are based on the methodology fully described in consultation paper DNPC08 - Review of LDZ Transportation Charges. This methodology is based on an analysis of costs and system usage at a Gas Distribution Network level. The distribution networks contain a series of pipe networks split into four main pressure tiers:

Table 2 - Network Pressure Tiers

Pressure Tier	Operating Pressure
Local Transmission System (LTS)	7 - 38 bar
Intermediate Pressure System (IPS)	2 - 7 bar
Medium Pressure System (MPS)	75 mbar - 2 bar
Low Pressure System (LPS)	Below 75 mbar

Each Network has a similar proportion of LTS, MPS and LPS pipelines but some Networks contain less IPS pipelines. The Low Pressure System comprises a major part of the Network pipeline system. In order to provide a more cost reflective basis for charging, the LPS is sub-divided on the basis of pipe diameter into eight sub-tiers:

1) >600mm
2) 450-600mm
3) 310-450mm
4) 250-310mm
5) 180-250mm
6) 125-180mm
7) 75-125mm
8) <=75mm

The principle underlying the Network charging methodology is that charges should reflect the average use of the network made by customers of a given size, rather than the actual use made by a particular customer. The latter methodology would be too complex to be a

practical basis of charging. Analysis has shown that there is a good correlation between customer size and offtake tier. Large customers are typically supplied from higher-pressure tiers and small customers from lower pressure tiers. Such an approach avoids inconsistencies that may arise if neighbouring sites of similar size are connected to different pressure tiers.

Outline of Methodology

The methodology calculates the average cost of utilisation for each of the main pressure tiers of the distribution system. Combining this with the probability of loads within a consumption band using that pressure tier generates a tier charge for an average load within that band. The summation of these tier charges gives the total charge for a load within the consumption band to use the distribution system. The methodology uses average costs rather than marginal costs to reflect the total costs of using the system. The detail below describes the derivation of the capacity charge function and is therefore based on peak daily flows. A similar calculation, based on annual flows, is carried out to determine the commodity charge function. The data used is that from the most recent review carried out in 2010.

Determination of Costs

The costs relating to each pressure tier were derived from the DNPC08 analysis. These costs were split into capacity and commodity elements under DNPC08.

Table 3 - Determination of Tier Costs

Pressure Tier	% Total	Cost (£m)	
		Total	Capacity (95%)
LTS	13.0%	28.2	26.8
IPS	7.3%	16.0	15.2
MPS	15.3%	33.3	31.6
LPS	64.4%	140.4	133.4
TOTAL	100.0%	217.9	207.0

The split of LPS costs down to sub-tier level is based on year 2010 DNPC08 analysis.

Table 4 - Determination of LPS Costs

LPS Sub Tier (Diameter Inches)		% Total Cost	Cost (£m)	
			Total	Capacity (95%)
LP8	>24	0.3%	0.4	0.4
LP7	450>18-24	2.1%	2.9	2.8
LP6	>12-18	3.1%	4.3	4.1
LP5	10-12	10.8%	15.2	14.5
LP4	8-9	19.1%	26.8	25.5
LP3	6-7	15.3%	21.5	20.4

Probability of Pressure Tier / Sub Tier Usage

The probability of a unit of gas, supplied to a customer of given size, having passed through the various pressure tiers / sub tiers within the distribution network is estimated. This estimation is based on the results from a survey of the pressure tier / sub tier at which individual supply points are attached to the pipeline system in conjunction with the results of network analysis.

The calculations carried out under DNPC08 were based upon a 95:05 Capacity: Commodity split of LDZ System revenue. The LDZ System Capacity charges are scaled such that 95% of the target revenue will be recovered by the LDZ System Capacity charges and 5% will be recovered from the LDZ System Commodity charges. DNPC08 gives full details of the charging methodology revision.

Table 5 - System Usage Probability Matrix

Consumption Band (MWh)	Network Tiers			LPS Sub Tiers							
	LTS	IPS	MPS	LP8	LP7	LP6	LP5	LP4	LP3	LP2	LP1
0-73.2	92.88%	55.49%	71.07%	1.84%	8.69%	21.22%	53.07%	67.89%	78.07%	63.96%	18.33%
73.2 - 146.5	92.90%	55.28%	71.96%	2.30%	10.67%	24.42%	51.54%	58.83%	62.87%	47.64%	13.67%
146.5 – 293	92.92%	55.07%	72.62%	2.28%	10.43%	23.15%	50.10%	58.25%	61.82%	46.59%	15.61%
293 – 439	92.94%	54.92%	73.25%	2.11%	8.96%	20.96%	48.54%	59.35%	63.86%	48.94%	15.33%
439 – 586	92.93%	54.97%	73.25%	2.19%	9.33%	20.77%	47.87%	59.38%	61.50%	47.93%	10.55%
586 – 732	92.93%	55.02%	73.29%	2.95%	10.57%	21.51%	47.26%	54.10%	57.84%	44.31%	9.24%
732 - 2,931	92.94%	54.87%	74.17%	2.22%	8.81%	19.16%	45.53%	53.99%	57.34%	42.22%	5.47%
2,931 - 14,654	92.83%	55.69%	75.97%	1.00%	4.72%	12.10%	33.70%	39.09%	34.19%	13.85%	0.57%
14,654 - 58,614	92.59%	57.69%	75.98%	0.69%	3.24%	8.28%	14.04%	15.33%	6.03%	4.79%	0.00%
58,614 - 293,071	93.06%	54.58%	54.98%	0.27%	1.31%	3.37%	4.84%	4.30%	3.31%	3.52%	0.00%
>293,071	96.88%	25.42%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Table 5 shows that for example: the 0-73.2MWh consumption band 92.88% total peak offtake goes through the LTS, 55.49% through the IPS and 71.07% though the MPS.

Pressure Tier / Sub Tier Usage Volumes

The application of usage probabilities to the network peak day offtake volumes provides an estimate of the extent to which the different load bands make use of capacity across the pressure tiers.

Table 6 - Peak Daily Capacity Utilisation (GWh)

	Network Tiers			LPS Sub Tiers							
Consumption Band (MWh)	LTS	IPS	MPS	LP8	LP7	LP6	LP5	LP4	LP3	LP2	LP1
0-73.2	297.9	178.0	227.9	5.9	27.9	68.1	170.2	217.7	250.4	205.1	58.8
73.2 - 146.5	13.3	7.9	10.3	0.3	1.5	3.5	7.4	8.4	9.0	6.8	2.0
146.5 - 293	13.0	7.7	10.1	0.3	1.5	3.2	7.0	8.1	8.6	6.5	2.2
293 - 439	8.1	4.8	6.4	0.2	0.8	1.8	4.2	5.2	5.6	4.3	1.3
439 - 586	6.3	3.7	5.0	0.1	0.6	1.4	3.2	4.0	4.2	3.2	0.7
586 - 732	5.0	2.9	3.9	0.2	0.6	1.1	2.5	2.9	3.0	2.3	0.5
732 - 2,931	28.8	17.0	23.0	0.7	2.7	5.9	14.1	16.8	17.8	13.1	1.7
2,931 - 14,654	25.2	15.1	20.6	0.3	1.3	3.3	9.2	10.6	9.3	3.8	0.2
14,654 - 58,614	25.4	15.9	20.9	0.2	0.9	2.3	3.9	4.2	1.7	1.3	0.0
58,614 - 293,071	32.6	19.1	19.3	0.1	0.5	1.2	1.7	1.5	1.2	1.2	0.0
>293,071	57.6	15.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	513.2	287.2	347.4	8.3	38.2	91.8	223.4	279.4	310.7	247.7	67.3

Cost per Unit of Capacity Utilised

The cost of providing capacity utilised on the peak day within each pressure tier / sub tier per unit of capacity is calculated by the division of capacity related costs by the volume of capacity utilised. In these calculations the LPS is not treated as a single entity but rather as individual sub tiers.

Table 7 - Cost per Unit of Capacity Utilised

	Network Tiers			LPS Sub Tiers						
	LTS	IPS	MPS	LP8	LP7	LP6	LP5	LP4	LP3	LP2	LP1
Capacity Cost (£m)	26.8	15.2	31.6	0.4	2.8	4.1	14.5	25.5	20.4	36.8	28.9
Capacity Utilised (PD GWhs)	513.2	287.2	347.4	8.3	38.2	91.8	223.4	279.4	310.7	247.7	67.3
Unit Cost (p / pdkWh/year)	0.0143	0.0145	0.0249	0.0113	0.0199	0.0122	0.0177	0.0250	0.0180	0.0407	0.1178

Average Cost of Utilisation

The costs calculated in the following table represent the cost per unit of capacity utilised within each pressure tier / sub tier. Charging however is based on the average expected use made of each tier of the pipeline system. The average cost, for customers in each load band, of utilising a particular pressure tier / sub tier, is calculated by multiplying the unit cost of utilising the tier by the probability that the tier is utilised by customers in the load band. This is illustrated below for the MPS.

Table 8 - Example - Average Cost (p / pd kWh / year) of Utilisation of MPS by Load Band

Consumption Band (MWh)	Utilisation Cost	Probability of Use %	Average Cost
0-73.2	0.0249	71.07%	0.0177
73.2 - 146.5	0.0249	71.96%	0.0179
146.5 - 293	0.0249	72.62%	0.0181
293 - 439	0.0249	73.25%	0.0183
439 - 586	0.0249	73.25%	0.0183
586 - 732	0.0249	73.29%	0.0183
732 - 2,931	0.0249	74.17%	0.0185
2,931 - 14,654	0.0249	75.97%	0.0189
14,654 - 58,614	0.0249	75.98%	0.0189
58,614 - 293,071	0.0249	54.98%	0.0137
>293,071	0.0249	0.01%	0.0000

The table ‘Average Cost of Network Utilisation by Consumption Band’ summarises the average cost, by consumption band, of using the complete network system.

Table 9 - Average Cost of Network Utilisation by Consumption Band

Consumption Band (MWh)	Pence / peak day kWh / Annum											
	LTS	IPS	MPS	LP8	LP7	LP6	LP5	LP4	LP3	LP2	LP1	Total
0 - 73.2	0.0133	0.0080	0.0177	0.0002	0.0017	0.0026	0.0094	0.0170	0.0141	0.0261	0.0216	0.1317
73.2 - 146.5	0.0133	0.0080	0.0179	0.0003	0.0021	0.0030	0.0091	0.0147	0.0113	0.0194	0.0161	0.1153
146.5 – 293	0.0133	0.0080	0.0181	0.0003	0.0021	0.0028	0.0089	0.0146	0.0111	0.0190	0.0184	0.1165
293 – 439	0.0133	0.0080	0.0183	0.0002	0.0018	0.0026	0.0086	0.0148	0.0115	0.0199	0.0181	0.1171
439 – 586	0.0133	0.0080	0.0183	0.0002	0.0019	0.0025	0.0085	0.0148	0.0111	0.0195	0.0124	0.1106
586 – 732	0.0133	0.0080	0.0183	0.0003	0.0021	0.0026	0.0084	0.0135	0.0104	0.0181	0.0109	0.1059
732 - 2,931	0.0133	0.0079	0.0185	0.0003	0.0018	0.0023	0.0081	0.0135	0.0103	0.0172	0.0064	0.0997
2,931 - 14,654	0.0133	0.0081	0.0189	0.0001	0.0009	0.0015	0.0060	0.0098	0.0062	0.0056	0.0007	0.0711
14,654 - 58,614	0.0133	0.0084	0.0189	0.0001	0.0006	0.0010	0.0025	0.0038	0.0011	0.0020	0.0000	0.0517
58,614 - 293,071	0.0133	0.0079	0.0137	0.0000	0.0003	0.0004	0.0009	0.0011	0.0006	0.0014	0.0000	0.0396
>293,071	0.0133	0.0037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0176

Setting the Charging Functions

To provide a workable basis for charging individual customers of differing sizes the total average costs of utilising each tier of the distribution network are plotted. For the capacity charges for directly connected supply points and CSEPs these costs are the total costs detailed above. Functions are fitted to the data points such that the error term is minimised. The functions found to best fit the underlying average cost data are in the form of a power of the peak daily load (SOQ) with straight-line elements for the domestic (<73.2 MWh / annum) consumption band and the small I&C consumption band (73.2 to 732 MWh / annum). These functions must then be scaled so that when applied to all supply points connected to the distribution network, they are expected to generate the desired target revenue. As is the case for capacity charges, the functions used for commodity charges are the same for CSEPs and directly connected supply points.

7.6. LDZ Customer and Other Charges Methodology

Customer charges reflect supply point costs, namely costs relating to service pipes and emergency work relating to supply points.

Customer Charge Methodology

The customer charge methodology is based on an analysis of the extent to which service pipe and emergency service costs vary with supply point size. This analysis is used to determine the allocation of the recovery of the target revenue (based on Table - Network Cost Breakdown) from supply points grouped in broad load bands. This is described in more detail below.

1) Using ABC cost analysis, the customer cost pool is sub-divided into the following cost pools: service pipes; or emergency works.
2) Each cost pool is then divided among a number of consumption bands based on weighted consumer numbers by consumption band. The consumption bands are based on the annual quantity of gas consumed. The weightings are derived from an analysis of how the costs of providing each of the services listed in 1. above vary with consumption size.
3) For each cost pool, an average cost per consumer is then calculated for each consumption band by dividing by the number of consumers in that consumption band.
4) A total average cost per consumer is then calculated for each consumption band by adding the unit costs of each service that is service pipes and emergency work.
5) Finally, using regression analysis, functions are developed that best fit the relationship between consumption size and total average cost per consumer.

Charges for supply points consuming below 73.2mWh (mainly domestic) consist of just a capacity related charge. Charges for smaller supply points (mainly industrial and commercial), consuming between 73.2 and 732.0 mWh per annum, are based on a capacity-related charge and a fixed charge which varies with meter-reading frequency. Charges for larger I&C supply points are based on a function that varies with supply point capacity.

Charging for Connected Systems (CSEPs)

The standard customer charge is not levied in respect of supply points within CSEPs. However, a CSEP administration charge is levied to reflect the administration costs related to servicing these loads. The methodology for setting this charge was established in 1996 and is based on the same methodology described below for setting Other Charges.

Other Charges

There are other charges applied to services which are required by some shippers but not by all, for example special allocation arrangements. It is more equitable to levy specific cost reflective charges for these services on those shippers that require them. Income from these charges is included in the regulated transportation income.

The methodology used to calculate the appropriate level of these charges is based on an assessment of the direct costs of the ongoing activities involved in providing the services. The costs are forward looking and consider anticipated enhancements to the methods and systems used. A percentage uplift based on the methodology described in the Transporter's background paper "Charging for Specific Services - Cost Assignment Methodology" (May 1999) is added to the direct costs to cover support and sustaining costs. The latest level of the uplift was published in PD16, Section 5, (November 2002).

7.7. Contact Us

Any questions or queries relating to this document or transportation charges in general please do not hesitate to contact our Pricing Team at Pricing@wwutilites.co.uk our website:

http://www.wwutilities.co.uk/