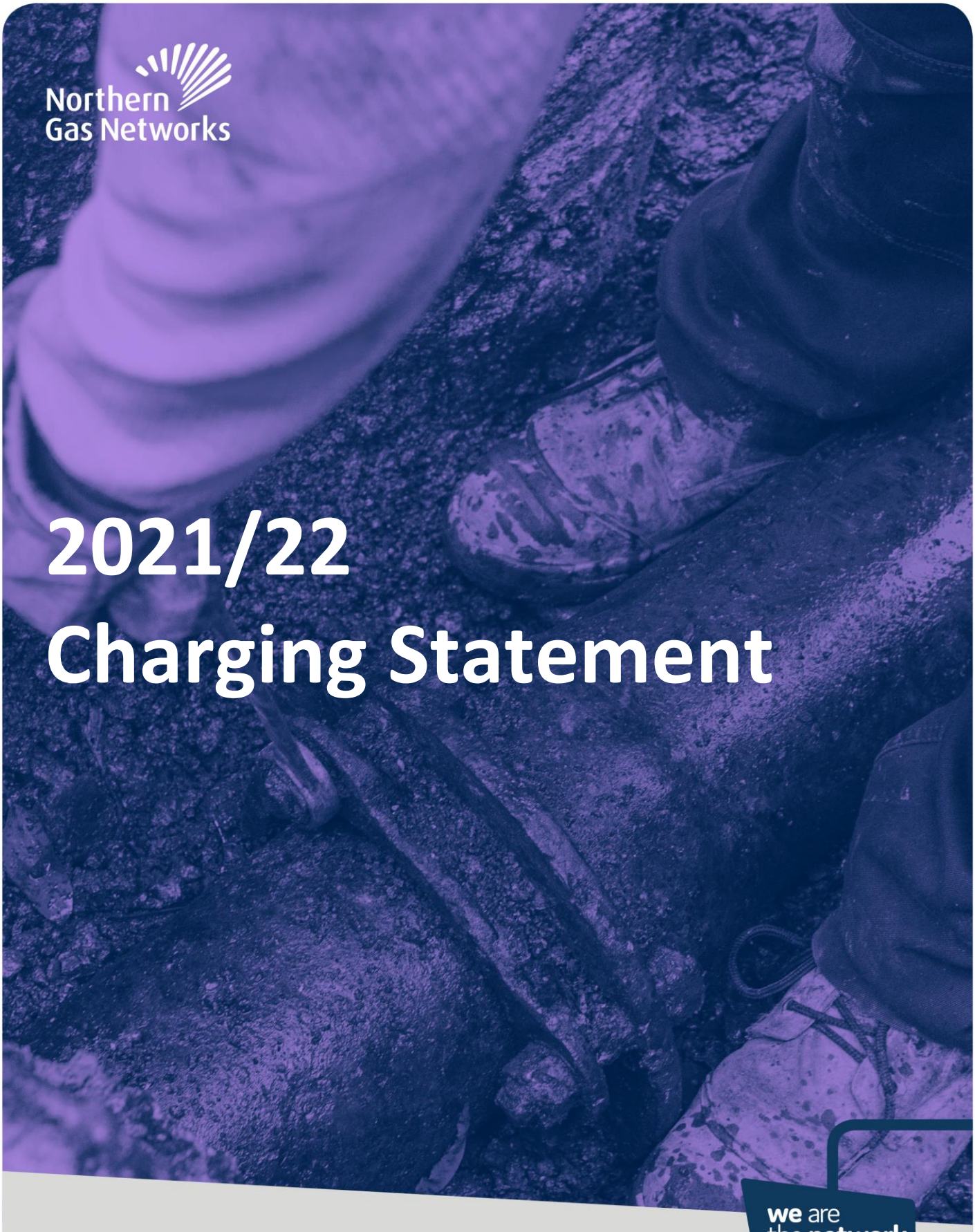

Northern Gas Networks

2021/22 Charging Statement

we are the network

Final Transportation charging statement

Introduction

** Unit rates have not changed since the 60-day notice publication in January. Additional detail regarding ECN charging methodology has also been included in the appendix of this statement **

This publication sets out the Local Distribution Zone (LDZ) transportation charges which apply from 1 April 2021 for the use of the Northern Gas Networks Limited (NGN) Distribution Network, as required by Standard Special Condition A4 of the Gas Transporters Licence. This document does not override or vary any of the statutory, Licence or Uniform Network Code obligations.

For more information on the charges contained within this document, please contact the NGN Pricing Manager on 0113 397 5354 or 07947 853517.

1.1 Uniform Network Code

The Uniform Network Code (UNC) is supported by an integrated set of computer systems called UK Link. The charges and formulae in this Notice will be used in the calculation of charges within UK Link, which are definitive for billing purposes.

There are many areas of the UNC that impact upon the cost to shippers of using the transportation network, such as imbalance charges, scheduling charges, capacity over-runs and ratchet charges, top-up neutrality charges and contractual liability. Reference should be made to the UNC, as modified from time-to-time, for details of such charges and liabilities.

The methodologies underlying the charges are stated in the UNC Transportation Principal Document (TPD) Section Y Part B and may be subject to alteration under the governance of UNC Modification Rules.

All UNC documents and Modifications can be found on the Joint Office of Gas Transporters website www.gasgovernance.co.uk

1.2 Units

Commodity charges are expressed and billed in pence per kilowatt hour.

Capacity charges are expressed and billed in pence per peak day kilowatt hour per day

Fixed charges are expressed and billed in pence per day.

1.3 Invoicing

Xoserve produce and issue the invoices that are derived from the transportation charges shown within this notice. To clarify the link between charging and invoicing,

charge codes and invoice names are included in the tables. For more information on invoicing, please contact Xoserve directly at Css.Billing@xoserve.com.

1.4 The Distribution Network Price Control Formula

Transportation charges are derived from a Price Control Formula which is set by Ofgem, the gas and electricity market regulator. This dictates the maximum revenue that can be earned from the transportation of gas.

- Allowed revenue for the NGN network for the forthcoming formula year (1 April 2021 to 31 March 2022) is **£417.5m**. 21/22 is the first year of a new 5-year price control period, RIIO-GD2.

- Year on year allowed revenue has reduced by **-£22.5m** albeit within this there is an increase of **+£33.2m** due to exit capacity methodology changes.

- This results in **LDZ unit rates reducing by -13.7%** and **Exit Capacity rates increasing by +974.7%.**

- Allowances agree to the draft data provided by Ofgem on the 15 January in the PCFM GD2 Price Control Finance Model. This model now calculates Allowed Revenue in real (18/19 prices) and nominal prices based on inflation OBR forecasts.

- There will be another PCFM published on the 3 February which could potentially include further adjustments to allowances albeit we have not reflected any potential changes as a result of this or any other movements from December final determinations.

- Should more or less than the maximum permitted revenue be earned in any formula year, then under RIIO-GD2 methodology this is added to the following years allowed revenue position.

The breakdown of allowed revenue during GD2 is shown in the table below:

ALLOWANCES EXCLUDING EXIT	20/21	21/22	22/23	23/24	24/25	25/26
£m Nominal Prices						
Assumed RPI / GD2 CPI growth	1.2%	1.3%	1.6%	1.8%	1.9%	2.0%
Base allowances	**423.0**	**383.4**	**380.2**	**397.2**	**406.6**	**414.6**
GD1 2 year lag - pass through	2.0	(1.7)	(1.2)			
Supplier of Last Resort claims	0.9	0.8				
GD1 - 2 year lag - Incentives	10.2	9.8	9.6			
Under collection from 18/19	0.5					
Over collection from 19/20		(13.0)				
Under collection from 20/21		1.6				
Total Allowances	**436.6**	**381.0**	**388.6**	**397.2**	**406.6**	**414.6**
Year on Year % Growth		**(12.7%)**	**2.0%**	**2.2%**	**2.4%**	**2.0%**
LDZ Price Change 21/22						
Year on Year AR % movement above		(12.7%)				
SOQ 21/22 assumption		(1.4%)	*assuming peak day capacity will increase by 1.4%*			
SOQ prior year impact		0.4%				
LDZ Price Change		**(13.7%)**				

ALLOWANCES - EXIT CAPACITY	20/21	21/22	22/23	23/24	24/25	25/26
£m Nominal Prices						
Assumed RPI / GD2 CPI growth	1.2%	1.3%	1.6%	1.8%	1.9%	2.0%
Base Allowances	**12.1**	**43.9**	**41.0**	**42.5**	**43.3**	**41.8**
GD1 2 year lag adj.	(8.7)	(7.4)	12.6			
Total Allowances	**3.4**	**36.5**	**53.6**	**42.5**	**43.3**	**41.8**
Year on Year % Growth		**972.9%**	**46.9%**	**(20.7%)**	**1.9%**	**(3.5%)**
Exit Price Change 21/22						
Year on Year AR % movement above		972.9%				
SOQ 21/22 assumption		(1.4%)	*assuming peak day capacity will increase by 1.4%*			
SOQ prior year impact		3.2%				
LDZ Price Change		**974.7%**				

TOTAL ALLOWED REVENUE	**440.0**	**417.5**	**442.2**	**439.7**	**449.9**	**456.4**
Year on Year % Growth		**(5.1%)**	**5.9%**	**(0.6%)**	**2.3%**	**1.4%**

Distribution revenue recovery is split between LDZ system charges and customer charges. LDZ system charges comprise capacity and commodity charges. Customer charges comprise capacity charges, although certain supply points receive a fixed

charge and in addition a variable capacity-based charge. All transportation is provided on a firm basis only.

1.5 Theft of gas

The licensing regime places incentives on transporters, shippers and suppliers to take action in respect of suspected theft of gas. Certain costs associated with individual cases of theft are recovered through transportation charges with the transporter remaining cash neutral in the process.

1.6 Project Nexus Charging Methodology

Our price change includes an assumption that capacity levels will increase by **+1.4%** from April 2021; based on data provided by Xoserve in December 2020. This is due to new load factors being included within the charging calculations from April onwards inclusive of the seasonal norm reset that happens once every 5 years. As capacity is forecast to increase by +1.4%, the price change includes a compensating reduction of 1.4% to ensure NGN collects the required Allowed Revenue figure for 21/22.


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Transportation Charges

2.1 LDZ System Charges

The standard LDZ system charges comprise capacity and commodity charges, with the same rates and functions for directly connected supply points and connected system exit points (CSEPs).

Where LDZ charges are based on functions, these functions use Supply Point Offtake Quantity (SOQ) in the determination of the charges. At Daily Metered (DM) supply points the SOQ is the registered supply point capacity. For Non-Daily Metered (NDM) supply points, the SOQ is calculated using the supply point End User Category (EUC) and the appropriate load factor.

2.1.1 Directly Connected Supply Points

The unit charges and charging functions used to calculate system charges to directly connected supply points are as follows:

Charge type	**LDZ Capacity**	**LDZ Commodity**
Charge code	**ZCA**	**ZCO**
Unit rate	**Pence per peak day kWh per day**	**Pence per kWh**
Up to 73,200 kWh p.a.	0.1834	0.0289
73,200 to 732,000 kWh p.a.	0.1576	0.0248
732,000 kWh and above p.a.	1.8492 x SOQ ^ -0.2834	0.3180 x SOQ ^ -0.2940
Subject to a minimum rate of	0.0047	0.0009
Minimum reached at SOQ of	1,433,068,188	464,830,475

2.1.2 Connected System Exit Points

In the calculation of LDZ charges payable, the unit rate 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.

The unit charges and charging functions used to calculate charges to CSEPs are as follows:

Charge type	LDZ Capacity	LDZ Commodity
Charge code	**891**	**893**
Unit rate	**Pence per peak day kWh per day**	**Pence per kWh**
Up to 73,200 kWh p.a.	0.1834	0.0289
73,200 to 732,000 kWh p.a.	0.1576	0.0248
732,000 kWh and above p.a.	1.8492 x SOQ ^ -0.2834	0.3180 x SOQ ^ -0.2940
Subject to a minimum rate of	0.0047	0.0009
Minimum reached at SOQ of	1,433,068,188	464,830,475

2.1.3 Optional LDZ Charge

The optional LDZ tariff is available, as a single charge, as an alternative to the standard LDZ system charges. The rationale for this tariff is that, for large LDZ loads located close to the NTS, the standard tariff can appear to give perverse economic incentives for the construction of new pipelines when LDZ connections are already available. This tariff may be attractive to large loads located close to the NTS, but it is strongly advisable to contact the NGN Pricing Manager on 0113 397 5354 or 07947 853517 prior to opting for this tariff.

Invoice	Charge Code
ADU	**881**

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

Where SOQ is the registered supply point capacity and D is the direct distance, in km, from the site boundary to the nearest point on the NTS.

2.2 LDZ Customer Charges

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

For supply points with an AQ of 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 SOQ.

For supply points with an AQ of greater than 732,000 kWh per annum, the customer charge is based on a function related to the registered SOQ.

2.2.1 Directly Connected Supply Points

The unit charges and charging functions used to calculate customer charges to directly connected supply points are as follows:

Charge type	LDZ Capacity
Charge code	**CCA**
Unit rate	**Pence per peak day kWh per day**
Up to 73,200 kWh p.a.	0.0979
73,200 to 732,000 kWh p.a.	0.0035
732,000 kWh and above p.a.	0.0748 x SOQ ^ -0.2100

In addition to the above, the following fixed charge applies to supply points with an AQ of between 73,200 and 732,000 kWh:

Charge type	LDZ Capacity
Charge code	**CFI**
Unit rate	**Pence per day**
Non-monthly read supply points	30.7638
Monthly read supply points	32.7563

2.3 Exit Capacity NTS Charges (ECN)

The LDZ ECN charge is based on system capacity. It is applied to each exit zone on an administered peak day basis, a breakdown of the calculation methodology is outlined in the Appendix. The exit zone for a DN supply point is determined by its postcode.

Please note whilst Mod678A has been implemented which results in a consistent unit rate charged from NTS to networks, unit rates below include the effect of the 2-year lag true up mechanism from RIIO-GD1. NGN would also incur different cost levels per exit zone dependant on the level of capacity booked.

Charge type	LDZ Exit Capacity
Charge code - directly connected supply points/CSEPs	**ECN/C04**
Unit rate	**Pence per peak day kWh per day**
NE1	0.0191
NE2	0.0215
NE3	0.0215
NO1	0.0199
NO2	0.0177

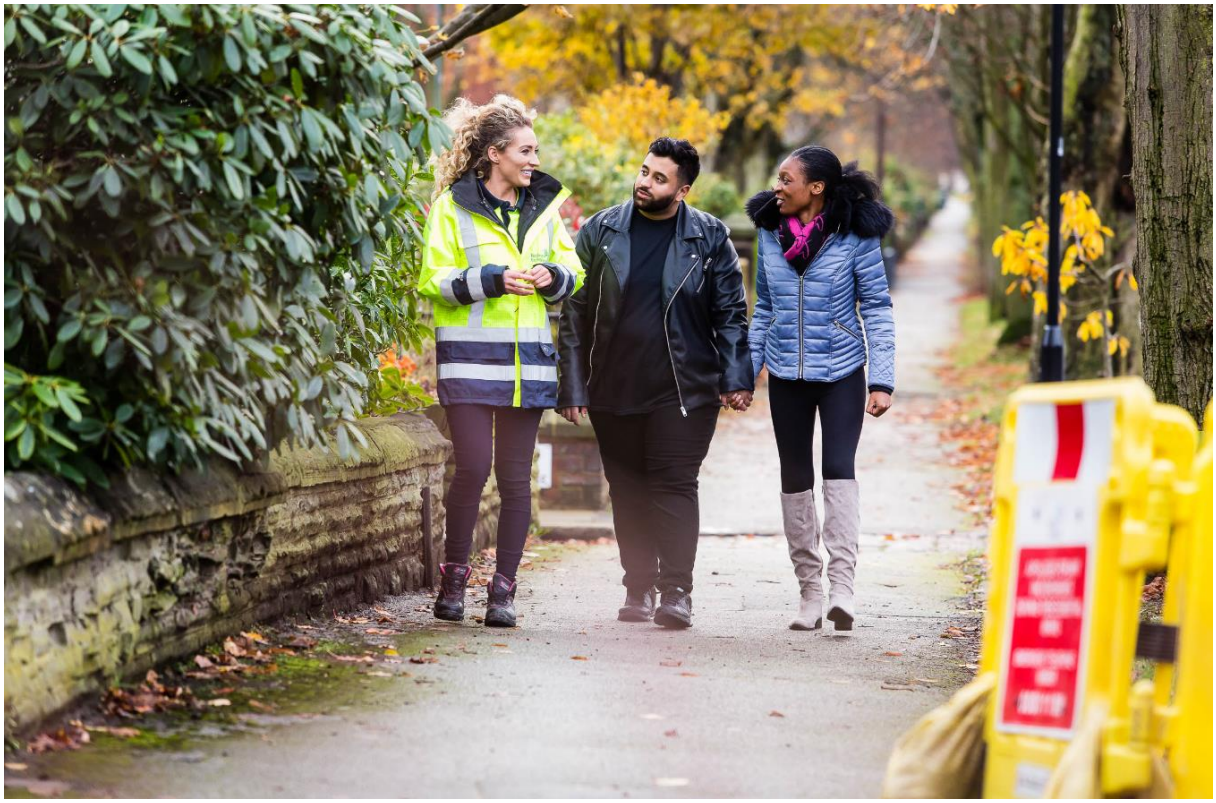
2.4 DN Entry Charges

The LDZ System Entry Commodity charge rates reflect the operating costs associated with the entry of the distributed gas and the benefits from not using the distribution network from point of entry to the offtake. The rate associated with the LDZ system Entry Commodity Charge is calculated on a site by site basis.

The table below shows sites that are currently live – for sites that become live during 21/22 unit rates will be calculated accordingly and an Xoserve notification made so the shipper gets charged correctly. Please contact the NGN pricing manager on 0113 397 5354 or 07947 853517 if rates are needed prior to the go live date.

Combined with the significant impact on unit rates of Mod678A implementation, NGN have also undertaken detailed analysis to ensure cost reflectivity on operating costs incurred for bio-methane sites. An updated opex cost assumption has been included in the rates below and will be reviewed annually throughout RIIO-GD2.

Xoserve Site name	Charge Type		LDZ System Entry Commodity	
	Charge Code		LEC	
	Site Name	Go Live Date	Pence per kWh	Unit Rate: Charge or Credit
HOWDOS	Howdon	17/02/2015	(0.03507)	Credit
FOOTOS	Teeside	29/09/2015	(0.00081)	Credit
LEEMOS	Leeming	22/12/2015	(0.02188)	Credit
ASPAOS	Cumbria	31/05/2016	(0.00187)	Credit
RIDGOS	Ridge Road Sherburn in Elmet	21/07/2016	0.01743	Charge
SHEROS	Agri Sherburn in Elmet	01/12/2016	(0.02579)	Credit
GRAVOS	Gravel Pit	06/12/2016	0.03768	Charge
NEWTOS	Emerald Biogas	08/12/2016	(0.04274)	Credit
BURTOS	Burton Agnes	18/01/2017	0.03877	Charge
LANEOS	Lanes Farm	14/10/2019	(0.03864)	Credit
SPALOS	Spaldington	22/10/2019	0.03310	Charge
BRANOS	Bran Sands	28/11/2019	(0.04187)	Credit
WARDOS	Wardley	09/12/2019	0.02831	Charge
PARKOS	Park Farm	18/12/2019	0.23016	Charge
PLAXOS	Plaxton Bridge	24/01/2020	0.06501	Charge
HEDLOS	High Hedley	29/01/2020	0.19236	Charge
MILLOS	Mill Nurseries	n/a	n/a	n/a



Notes

1. Charges produced by UK Link are definitive for charging purposes. Calculations below are subject to rounding and should be regarded as purely illustrative.
2. The examples provided refer to a customer in the North East LDZ within the NE1 Exit Zone. The calculations described are applicable to loads in either network.

Example A

A shipper has a daily metered customer in the NE1 Exit Zone 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.

Process	Calculations Used
LDZ Capacity **Invoice:** LDZ Capacity (ZCA) **See:** Section 2.1.1 **Basis:** p / peak day kWh / day	**Volume:** 365 days x 100,000 (SOQ) = 36,500,000 **Unit Rate:** 1.8492 x 100,000 (SOQ) ^-0.2834 = 0.0708 p / pdkWh / day **Annual Charge: £25,842.00**
Plus	
LDZ Commodity **Invoice:** Commodity (ZCO) **See:** Section 2.1.1 **Basis:** p / kWh	**Volume:** 20,000,000 (AQ) **Unit Rate:** 0.318 x 100,000 (SOQ) ^-0.2940 = 0.0108 p / kWh **Annual Charge: £2,160.00**
Plus	
Customer (Capacity) **Invoice:** LDZ Capacity (CCA) **See:** Section 2.2.1 **Basis:** p / peak day kWh / day	**Volume:** 365 days x100,000 (SOQ) = 36,500,000 **Unit Rate:** 0.0748 x 100,000 (SOQ) ^-0.2100 = 0.0067 p / pdkWh / day **Annual Charge: £2,445.50**
Plus	
LDZ Exit (Capacity) **Invoice:** Exit Capacity (ECN) **See:** Section 2.3 **Basis:** p / peak day kWh / day	**Volume:** 365 days x100,000 (SOQ) = 36,500,000 **Unit Rate:** 0.0191 p / pdkWh / day **Annual Charge: £6,971.50**
Total Annual Charge	**Total annual charge = £37,419.00**

Example B

A shipper has a non prepayment domestic customer and the load has an AQ of 20,000 kWh per annum. Using the appropriate small NDM supply points load factors, it can be seen that the load factor for such a site in the NE1 Exit Zone is 32.8%. The peak daily load (SOQ) is therefore 20,000 ÷ (365 × 0.328) = 167 kWh.

Process	Calculations Used
LDZ Capacity **Invoice:** LDZ Capacity (ZCA) **See:** Section 2.1.1 **Basis:** p / peak day kWh / day	**Volume:** 365 days x 167 (SOQ) = 60,955 **Unit Rate:** 0.1834 p / pdkWh / day **Annual Charge: £111.79**
Plus	
LDZ Commodity **Invoice:** Commodity (ZCO) **See:** Section 2.2.1 **Basis:** p / kWh	**Volume:** 20,000 (AQ) **Unit Rate:** 0.0289 p / KWh **Annual Charge: £5.78**
Plus	
Customer (Capacity) **Invoice:** LDZ Capacity (CCA) **See:** Section 2.2.1 **Basis:** p / peak day kWh / day	**Volume:** 365 days x 167 (SOQ) = 60,955 **Unit Rate:** 0.0979 p / pdkWh / day **Annual Charge: £59.67**
Plus	
LDZ Exit (Capacity) **Invoice:** Exit Capacity (ECN) **See:** Section 2.3 **Basis:** p / peak day kWh / day	**Volume:** 365 days x 167 (SOQ) = 60,955 **Unit Rate:** 0.0191 p / pdkWh / day **Annual Charge: £11.64**
Total Annual Charge	**Total annual charge = £188.88**

Example C

Suppose that instead of supplying just one non prepayment domestic customer (as in Example B) the shipper actually supplies a connected system in the NE1 Exit Zone 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 20,000 kWh per annum.

	AQ (no of premises x AQ per premise)	SOQ (AQ / (365 x load factor)
Prevailing	100 houses x 20,000 (AQ) = 2,000,000 kWh	2,000,000 ÷ (365 × 0.328) = 16,706 kWh
Maximum	150 houses x 20,000 (AQ) = 3,000,000 kWh	3,000,000 ÷ (365 × 0.328) = 25,058 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.

Process	Calculations Used
LDZ Capacity **Invoice:** ADC (891) **See:** Section 2.1.2 **Basis:** p / peak day kWh / day	**Volume:** 365 days x 16,706 (pre SOQ) = 6,097,690 **Unit Rate:** 1.8492 x 25,058 (max SOQ) ^-0.2834 = 0.1048 p / pdkWh / day **Annual Charge: £6,390.38**
Plus	
LDZ Commodity **Invoice:** ADC (893) **See:** Section 2.1.2 **Basis:** p / kWh	**Volume:** 2,000,000 (pre AQ) **Unit Rate:** 0.3180 x 25,058 (max SOQ) ^-0.294 = 0.0162 p / KWh **Annual Charge: £324.00**
Plus	
LDZ Exit (Capacity) **Invoice:** Exit Capacity (ECN) **See:** Section 2.3 **Basis:** p / peak day kWh / day	**Volume:** 365 days x 16,706 (SOQ) = 6,097,690 **Unit Rate:** 0.0191 p / pdkWh / day **Annual Charge: £1,164.66**
Total Annual Charge	**Total annual charge = £7,879.04**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Appendix

End User Categories

Estimation of peak daily load for NDM supply points

For NDM supply points, the peak daily load is estimated using a set of End User Categories (EUC). Each NDM supply point is allocated to an EUC. In each LDZ each EUC has an associated load factor – a full list of Winter Annual Ratio (WAR) bands and EUC load factors can be found below and on the Xoserve SharePoint site. The examples that follow use the data from the 20/21 tables.

These EUCs depend upon the annual quantity (AQ) of the supply point and, in the case of monthly read sites, the ratio of winter to annual consumption where available.

Monthly read sites

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

For monthly read sites where the relevant meter reading history is available, the WAR ratio is the consumption from December to March divided by the annual quantity. If the required meter reading information is not available, the supply point is allocated to a EUC simply based on its annual quantity.

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

$$\frac{AQ \times 100}{LoadFactor \times 365}$$

Example

For a supply point in North East (NE) LDZ with an annual consumption of 1,000 MWh per annum.

Assume consumption December to March inclusive is 500 MWh.

WAR ratio = 500 ÷ 1000 = 0.5

For a site with an annual consumption of 1,000 MWh, a ratio of 0.5 falls within WAR ratio band W03 and the site is thus within End User Category NE: E2004W03.
For a site in this category, the load factor is 33.0% and the peak daily load is therefore

$$\frac{1000 \times 100}{365 \times 33.0} = 8.30 \text{ MWh}$$

If the required meter reading information is not available to calculate the winter: annual ratio, the supply point is allocated to a EUC simply based on its annual quantity, in this case NE: E2004B.

For a site in this category, the load factor is 37.8% and the peak daily load is therefore

$$\frac{1000 \times 100}{365 \times 37.8} = 7.25 \text{ MWh}$$

Six monthly read sites

In the case of six monthly read sites, the supply point is allocated to a EUC simply based on its annual quantity.

Example

For a non-prepayment supply point in NE LDZ with an annual consumption of 200 MWh per annum, the EUC will be NE: E2002BNI. For a site in this category, the load factor is 36.8% and the peak daily load is therefore

$$\frac{200 \times 100}{365 \times 36.8} = 1.49 \text{ MWh}$$

Notes

The term LDZ is applied in the context of its usage with reference to the UNC daily balancing regime.

For supply points whose consumption is over 73,200 kWh and which include one or more NDM supply meter points, an end user category code can be found in the supply point offer generated by UK Link. This code may be correlated with the end user category code shown below by means of a lookup table issued separately to shippers. Copies are available from the Xoserve Supply Point Administration Management team by emailing externalrequests.spa@xoserve.com

Daily metered supply points

The SOQ of DM sites is known and hence no load factor is required.
Supply points with annual consumptions greater than 58,600 MWh should be daily metered. However, a handful of sites remain as non-daily metered because of difficulties installing the daily read equipment. In such cases the end user category code XX:E2009B is used. Firm supply points with an AQ above 73.2 MWh per annum may, at the shipper's request, be classified as daily metered. All interruptible supply points are daily metered.

Consultation on end user categories

Section H of the UNC 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). Analysis is presented to users and consults with the Demand Estimation Sub-Committee (a sub-committee of the UNC) before publication of its proposals Table 2.1 Definition of end user categories.

WAR Bands and End User Categories

The latest set of data from October 2020 can be found below:

EUC Code	Annual Load (MWh)		Winter Annual Ratios (WAR)			
			W01	W02	W03	W04
E2001W0y	0 to 73.2	Small NDM Sector	0	0	0	0
E2002W0y	73.2 to 293		0	0	0	0
E2003W0y	293 to 732		0.000 - 0.411	0.412 - 0.481	0.482 - 0.568	0.569 - 1.000
E2004W0y	732 to 2,196		0.000 - 0.411	0.412 - 0.481	0.482 - 0.568	0.569 - 1.000
E2005W0y	2,196 to 5,860	Large NDM Sector	0.000 - 0.372	0.373 - 0.443	0.444 - 0.519	0.520 - 1.000
E2006W0y	5,860 to 14,650		0.000 - 0.336	0.337 - 0.400	0.401 - 0.486	0.487 - 1.000
E2007W0y	14,650 to 29,300		0.000 - 0.325	0.326 - 0.360	0.361 - 0.428	0.429 - 1.000
E2008W0y	29,300 to 58,600		0.000 - 0.325	0.326 - 0.360	0.361 - 0.428	0.429 - 1.000
E2009W0y	> 58,600		0	0	0	0

Load Factors from Oct 2020	Notes	NE	NO
E2001B	Old code replaced by the 4 below:	-	-
E2001BND	Non-Prepayment - Domestic	32.8%	34.3%
E2001BNI	Non-Prepayment	31.7%	35.3%
E2001BPD	Prepayment Domestic	35.5%	37.4%
E2001BPI	Prepayment I&C	31.7%	35.3%
E2002B	Old code replaced by the 4 below:	-	-
E2002BND	Non-Prepayment - Domestic	40.1%	41.0%
E2002BNI	Non-Prepayment	36.8%	40.0%
E2002BPD	Prepayment Domestic	35.6%	37.4%
E2002BPI	Prepayment I&C	36.8%	40.0%
E2003B		38.7%	40.6%
E2003W01		55.9%	58.5%
E2003W02		45.6%	46.0%
E2003W03		33.0%	32.8%
E2003W04		24.5%	25.1%
E2004B		37.8%	38.4%
E2004W01		55.9%	58.5%
E2004W02		45.6%	46.0%
E2004W03		33.0%	32.8%
E2004W04		24.5%	25.1%
E2005B		42.8%	42.1%
E2005W01		59.4%	61.3%
E2005W02		48.6%	51.8%
E2005W03		38.6%	40.5%
E2005W04		26.7%	26.6%
E2006B		55.4%	49.3%
E2006W01		68.1%	65.5%
E2006W02		60.0%	60.7%
E2006W03		44.5%	48.1%
E2006W04		29.4%	32.6%
E2007B		66.2%	63.2%
E2007W01		70.9%	70.3%
E2007W02		71.6%	72.7%
E2007W03		60.6%	62.1%
E2007W04		37.1%	40.8%
E2008B		66.2%	63.2%
E2008W01		70.9%	70.3%
E2008W02		71.6%	72.7%
E2008W03		60.6%	62.1%
E2008W04		37.1%	40.8%
E2009B		67.0%	67.5%

Exit Capacity Unit Rates (ECN) – Charging methodology

Exit Capacity unit rates are set to recover the costs. Networks receive an allowance to match the cost as it is deemed non controllable and a "pass through" area.

During RIIO-GD1 the allowance was set as part of the final determinations process and any difference between forecast and actual cost trued up 2 years after.

In GD2 networks are moving to a rolling revenue process and will include the most recent forecast of exit costs as part of the Annual Iteration Process each November, to be applied in the following years charges.

The key components are:

- Calculated ECN base allowance, which is a forecast of exit costs based on the most recent rate published by National Grid and our capacity bookings.

- A true up of the difference between actual costs and the previous year's base allowance figure.

- K factor which represents the prior year's difference between allowed and collected revenue.

When setting ECN rates, NGN seeks to recover their allowed revenue as calculated above which may include true ups to adjust for prior year cost differences, rather than solely costs for the year. For this reason, the ECN rate charged will not match the NTS postage stamp unit rate in the same year.

ECN unit rates are calculated by exit zone:

- A cost per exit zone is calculated, based on bookings by offtake applied with NTS unit rates.

- Allowed revenue is then calculated by exit zone by apportioning the revenue allowance on the same basis as the costs.

- The latest demand snapshot of each site's SOQ is used to derive our unit rates.

The example below illustrates our methodology using a dummy data set.

Example: ECN unit rate calculation

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.

Description	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 x 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**
Total	**230,000**		**46,000,000**	**45,000,000**	**215,000**	

ECN unit rates will differ across exit zones due to any differences in capacity bookings and a shipper's demand profile. Potential reasons a shipper's demand level can differ to our bookings are as follows:

- Timing of bookings compared to the snapshot of shipper demand taken
- User commitment NGN are currently contracted too