An Coimisiún um Rialáil Fóntais

Commission for Regulation of Utilities

Gas Networks Ireland Distribution Tariffs and Allowed Revenue 2022/23

Decision Paper

Decision Paper

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CRU Draft Strategic Plan 2022-24

1.1 Our Mission

- Protecting the public interest in water, energy and energy safety.

1.2 Our Strategic Priorities

- Ensure Security of Supply
- Drive a Low Carbon Future
- Empower and Protect Customers
- Enable our People and Organisational Capacity

1.3 Our Vision

- Safe, secure and sustainable supplies of energy and water, for the benefit of customer now and in the future

Executive Summary

Each year, the network tariffs are reviewed to ensure that Gas Networks Ireland (GNI) only recovers the necessary costs for efficient operation of the network. This paper sets out the distribution network tariffs to apply from 01 October 2022 to 30 September 2023 (gas year 2022/23). The transmission network tariffs are published in a separate paper (CRU/202247); also published today.

In previous years, the calculation of gas network tariffs was based on the annual revenues included in the Price Control Four (PC4) Decision Paper, which covered the period from 1st October 2017 to 30th September 2022. The forthcoming gas year will be the first gas year under PC5 which will run from 1st October 2022 to 30th September 2023. A decision on PC5 revenues has not yet been made.

GNI submitted its initial proposals for PC5 in December of last year. However, given the significant price developments in the current 2021/22 tariff year, most notably impacted by the war in Ukraine, GNI will submit its updated proposals to the CRU in October 2022. Based on a detailed and thorough review of that updated proposal, a decision will be made on PC5 revenues in early 2023. Those revenues will be used in setting the gas tariffs for 2023/24.

With a decision on PC5 not yet made, the CRU has considered how to set tariffs for the gas year 2022/23. The approach decided upon uses the revenue requirements for the current gas year (2021/22), updated with reasonable assumptions to account for key cost drivers, such as inflation, gas prices and current demand forecasts. In selecting that approach, the CRU has carefully considered the need to provide adequate revenues to GNI, while recognising the real cost pressures being faced by rising costs on consumers and businesses. The CRU has thoroughly reviewed all costs to ensure that they are absolutely necessary and has assessed a range of options to further reduce the impact of any cost impacts on customers including taking a 6-month weighted average of forward-looking Winter and Summer prices and the accelerated return of €16.8 million back to customers. This approach will mitigate against the costs increases that customers will face in 2022/23.

In reviewing costs to ensure that they are absolutely necessary, judgement has had to be used to ensure that any assumptions made were reasonable. This included in the setting of key assumptions for gas price and inflation, which are placing the largest upward pressure on revenue requirements (see table 1). Depending on the sources and / or methodology used, those forecasts may be considered conservative. However, the CRU considers that they reasonably account for the market volatility currently being experienced. For example, the gas price used seeks to reduce the impact of recent market volatility on forecasts. This is done by using 6-month weighted averages of forward-looking Winter and Summer prices, which results in a gas price of £1.19 per therm. An alternative approach, where such averaging was not conducted, would have seen a gas price of £2.30 per therm.

Table 1: The adjustments made to calculate the revenue for the gas year 2022/23 (running from 1st October 2022 to 30th September 2023).

Revenue	€m
Allowed revenue 2021/22 PC4 (15/16 monies)	198
Inflation	26
Use of SNP	1
2020/21 K-factor	-2.1
Shrinkage (Dx)	4.6
PC4 clawback	-16.8
Total Revenues requirement for 2022/23	211
Change in revenue relative to 2021/22 revenues of €205m	3%

In its review of distribution tariffs, the CRU has carefully assessed the information presented by GNI and has aimed to ensure that where additional allowances have been provided, they are efficient and in the best interest of the customer. The review has resulted in the following tariffs (Table 2) for a typical residential tariff (annual quantity ≤ 73 MWh). A full set of tariffs for all customers is presented in Appendix A.

Table 2: Distribution tariffs for 2022/23

	2021/22 tariff		2022/23 Tariff	% Change	
	21/22 tariff (nominal)[1]	21/22 tariff (real)[2]	22/23 charge (nominal)	2022/23 Tariff vs 21/22 tariff (nominal)	2022/23 Tariff vs 21/22 tariff (real)
Capacity – c/peak kWh	154.21	158.72	158.13	2.54%	-0.37%
Commodity – c/kWh	0.329	0.339	0.362	9.78%	6.66%

As in previous years, the CRU is also publishing, today, the transmission network tariffs. The transmission tariffs are set to increase by 8.67% when compared to 2021/22 tariffs. It is estimated that the combined change in transmission and distribution tariffs equates to a €16 increase on an average residential gas customer's annual bill. Network tariffs are charged to gas shippers/suppliers. It is up to suppliers whether to pass on these costs to their customers.

[1] Not adjusted for inflation.
[2] Adjusted for inflation. Forecast HICP inflation of 2.925% for 22/23.

Customer Impact Statement

The CRU's mission is to protect the public interest in water, energy and energy safety. Within that brief it is legally responsible for regulating network charges in the natural gas market. The CRU may set the basis for charges for using the distribution system.

The tariffs set out in this paper are charged to gas suppliers for the use of Gas Network Ireland's distribution network – this network consists of smaller pipes that includes those running to customers' homes. The CRU conducts an annual review of distribution tariffs to ensure that only necessary costs are included in the calculation of these tariffs.

The review this year has had to consider the significant increase in gas price volatility, the war in Ukraine and the general upward inflationary pressures that the Irish customer is facing. The CRU has ensured that the review has been thorough, allowing only costs necessary to deliver a sustainable and secure energy network. The CRU has carefully considered any underlying assumptions put forward by GNI to ensure that they are reasonable. The review identified the revenue requirements were increasing which was driven mostly from general inflation and rises in gas costs. Options to reduce the impact of this increase were carefully considered and it has been decided to take a 6-month average of forward-looking Winter and Summer prices and also to bring forward a return of €16.8 million to customers. With this approach, the potential increase in distribution network tariffs for 2022/23 was reduced and will reflect a c. 1.04% increase on current gas tariffs from October 2022.

As detailed in a separate publication alongside this paper, transmission tariffs are set to increase by c. 8.67%. It is estimated that the combined change in transmission and distribution tariffs equates to an €16 increase on an average residential gas customer's annual bill. However, network tariffs are charged directly to gas suppliers. It is a decision for suppliers whether to pass on these costs to their customers.

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Glossary of Terms and Abbreviations

Abbreviation or Term	Definition or Meaning
Allowed Revenues	The sum of revenues that the DSO is entitled to obtain in a given period, as approved by the CRU.
CRU	Commission for Regulation of Utilities
Correction Factor (K-Factor)	An adjustment of revenue applied to rectify over or under recoveries.
Distribution Supply Point Capacity	Capacity in kilowatt-hours (kWh) at a Supply Point that is deemed to be reserved for the peak day. A “1-in-50” peak day is used, which is based on weather conditions so severe that statistically they are only likely to occur once every 50 years.
Extra-over items	Work items not included in the Price Control
GNI	Gas Networks Ireland
Pass-through items	Work items that were included in the Price Control but the costs of which were not certain at the time of the Price Control.
Price Control	A 5 - yearly review of GNI’s allowed revenues.

1 Introduction

1.1 Commission for Regulation of Utilities

The Commission for Regulation of Utilities (CRU) is Ireland's independent energy and water regulator. The CRU was established in 1999 and now has a wide range of economic, customer protection and safety responsibilities in energy and water. The CRU's mission is to protect the public interest in Water, Energy and Energy Safety.

Further information on the CRU's role and relevant legislation can be found on the CRU's website at www.cru.ie.

1.2 Purpose of this Paper

Under the Gas (Interim) (Regulation) Act, 2002, the CRU is responsible for regulating charges in the natural gas market. Under Section 14 of that Act, the CRU may set the basis for charges for transporting gas through the distribution system.

This paper outlines the CRU's decision in relation to Gas Networks Ireland's (GNI) allowed revenues and distribution tariffs that will apply from 01 October 2022 to 30 September 2023.

1.3 Related Documents

Documents related to this publication are as follows:

- CRU Distribution Revenue Model 2022/23 (CRU/202248a)
- Gas Networks Ireland Transmission Tariffs 2022/23 (CRU/202247)
- Decision on October 2017 to September 2022 distribution revenue for GNI (CER/17/259).

Information on the CRU's role and relevant legislation can be found on the CRU's website at **www.CRU.ie**

1.4 Structure of Paper

The structure of this paper is as follows:

- Section 1 provides an introduction and background.
- Section 2 provides a brief explanation of the CRU's tariff setting process.

- Section 3 sets out the tariffs for gas year 2022/23.

2 Setting the tariffs for 2022/23

2.1 Introduction

In this section the CRU sets out the allowed revenues for gas year 2022/23 and provides a brief overview of GNI's demand forecasts for the coming gas year. The allowed revenue is combined with the demand forecasts to calculate the network tariffs. The allowed revenues are set to ensure that GNI can operate, maintain and invest in the network effectively. Only necessary costs are allowed in the calculation of revenues. To ensure this a detailed review of GNI's proposed costs is carried out.

2.2 Allowed revenue

2.2.1 GNI's 2022/23 Revenues

In previous years, the calculation of gas network tariffs was based on the annual revenues included in the Price Control Four (PC4) Decision Paper, which covered the period from 1st October 2017 to 30th September 2022. The forthcoming gas year will be the first gas year under PC5. However, a decision on the revenues for PC5 will not be available within the required tariff timelines.

A decision on PC5 revenue requirements was planned for October of this year. This was to be based on a detailed review of proposals submitted by GNI in December of last year. That decision will now be made in early 2023. This is to allow GNI time to update its PC5 proposals in light of the significant national and international developments impacting on energy markets, society and the wider economy (most notably the war in Ukraine) that have since occurred. Without this additional time to update the proposals, there was a real and substantive risk that revenue allowances under PC5 would not reflect the likely realities that GNI and the Irish gas customer would face during PC5. The publication of a decision based on an updated submission, will further ensure:

- sustainable and secure energy networks and supplies; and
- the provision effective regulation that supports competitive and efficient energy markets deliver a low carbon future whilst supporting competitiveness and security of supply.

As a decision on a revenue allowance for 2022/23 under PC5 will not be available until early next year, the CRU has decided to base revenues on GNI's 2021/22 gas year revenues (€197.97m, in 2015/16 monies) adjusted for key cost drivers. All costs and underlying assumptions have been carefully reviewed and are set below.

2.2.2 Inflation adjustments

Adjusting GNI's base 2022/23 revenues of €197.97m (in 2015/16 monies) for cumulative inflation of 13.14% increases by €26m to €224m. The inflation rates applied to do this are shown in Table 3 below.

Table 3: Inflation rates used to inflate revenues from 2015/16 monies to 2022/23 monies

Actual and forecast when setting tariffs from 15/16 monies to 22/23		
HICP Forecast/Outturn	Year	Rate
HICP Outturn	16/17	0.600%
HICP Outturn	17/18	0.500%
HICP Outturn	18/19	1.100%
HICP Outturn	19/20	0.500%
HICP Outturn	20/21	0.100%
HICP Outturn	21/22	6.900%
HICP Forecast	22/23	2.925%
Total Cumulative	-	13.139%

The outturn inflation figures from the table above are CSO annual percentage change from March to March for each period, while the 2022/23 forecast inflation rate of 2.93% is based on the weighted average inflation rates for 2022 & 2023 taken from the Central Bank of Ireland Bulletin Q1 2022[3]

2.2.3 Use of the South North Pipeline (SNP)

In November 2020 the CRU approved an amendment to the Gormanston Interconnection Agreement.[4] This was needed to reflect the development of a Use of System Agreement between GNI and GNI (UK) to facilitate GNI to flow gas along the South-North Pipeline (SNP) to meet growing demand in the Dundalk area (driven in the short-term by connection of pharmaceutical plant).

The enduring commercial arrangements for the use of the SNP are to be finalised by the end of this year. However, interim arrangements are currently in place. This saw the inclusion of a charge of c. €1m in the current gas tariffs for the gas year 2021/22. With the interim commercials still in place this charge has also been included in the 2022/23 tariffs. This is considered appropriate, in the absence of a decision on the enduring arrangements.

2.2.4 Correction factor (k-factor)

[3] Central Bank of Ireland Bulletin Q1 2022
[4] Commission Meeting No. 862

A correction factor (or k-factor) is a revenue adjustment applied to rectify over or under recoveries of revenue by GNI in previous gas years. It is based on the difference between the actual inflation, interest rates, revenues collected, and pass-through costs incurred by GNI; versus the ex-ante projections for such items. The k-factor closes out the year Kt-1, i.e. when setting the tariffs for the year 2022/23, the CRU closed out the year 2020/21.

The total distribution correction factor for 2022/23 tariffs is a €2.05m give-back to customers. This mainly occurred due to the actual inflation and actual pass-through costs for 2020/21, being lower than the forecasts. When interest is applied the resulting figure is a total giveback of €2.1m.

2.2.5 Shrinkage Gas

Shrinkage gas includes own use gas (OUG) and unaccounted for gas (UAG). OUG is gas that is consumed by GNI in operating its network (e.g. gas required to run compressors). UAG is gas whose use is not accounted for. Examples are theft and leakages. GNI must purchase gas to cover the level of shrinkage on its networks. Currently it does this through the Irish balancing point.

As will be discussed later, GNI’s most up to date demand forecasts have been used to calculate tariffs. In order to use the most up to date forecasts, and given the time available proposed to use the shrinkage volumes used in calculating the 2021/22 tariffs as a placeholder. This reflects a reduction in Shrinkage from the earlier forecasts but likely not to extent that would be realised if their most up to date forecasts materialised.

Due to a number of factors including post-Covid recovery in demand, lower supply and influences from fluctuations in weather the price of gas has been increasing since the middle of 2021. Further compounding this, the war in Ukraine pushed gas prices to historic highs with markets experiencing significant volatility and it is difficult to predict how they will develop. For example, in April 2021 the wholesale price of gas was £0.50 per therm which compares to £2.50 per therm in April 2022[5]. In recent months, the price for within day gas in the UK recently reduced to 20 pence per therm from highs of over £5 per therm earlier in the year. This was associated with low system demand and a marked increase in LNG being delivered in the UK and Europe.

With this level of volatility there is a question as to what a reasonable gas price would be to apply to shrinkage purchases. GNI has calculated gas prices on the basis of averages of winter and

[5] gov.ie - National Energy Security Framework (www.gov.ie)

summer prices over 6 months. This approach is designed to dampen the effect of volatile prices on the forecast and results in a gas price of £1.19 per therm. This cost was calculated based on the weighted average (volume based) of forward-looking Winter 22 and Summer 23 prices over the 6 months. The CRU considers the above assumptions to be reasonable forecast inputs.

On balance, the CRU considers GNI's approach to forecasting shrinkage costs is reasonable. It results an additional shrinkage allowance of €4.6m for 2022/23.

2.2.6 PC4 Capital underspend clawback

Over the course of PC4, GNI has underspent for capex which results in an estimated PC4 clawback of €16.8m. In PC3 a similar build-up of capex underspend occurred.

This was then handed back to the customer across PC4 (the over recovery being spread across the five years). GNI proposed that it would be appropriate, given the inflationary pressures that are currently being experienced, to hand this over the PC4 over recovery back to customers now (rather than spreading it across PC5). This would limit the increase in tariffs customers would face for the forthcoming gas year. This could be done in a cost neutral way. On balance, the CRU considers that it is appropriate to provide the entire clawback now. However, it is important to note that the PC5 project is currently underway, and the CRU is yet to review the level of underspends and overspends during PC4. Therefore, the final value of the over recovery during PC4 may differ to the figures proposed by GNI.

2.2.7 Allowed revenue

The CRU has updated the 2021/22 allowed revenue set out in its PC4 decision to reflect the additional expenditure set out in sections 2.2.2 to section 2.2.6. This results in an allowed revenue of €211m for gas year 2022/23, which is a nominal increase of 3% (€6m) on the 2021/22 allowance of €205m.

The difference between the revenue assumption used to calculate tariffs in this paper and the outcome of the CRU's PC5 Final Determination, regarding the 2022/23 allowed revenues, will be corrected in future years through the k-factor mechanism.

2.3 Demand forecasts

Demand forecasts are used to calculate tariffs from the revenue requirements just discussed. Initially GNI had calculated tariffs based on demand forecasts from last year. However, with ongoing monitoring of the market, it became clear that those forecasts are no longer likely to be accurate. In particular, they appeared to overstate likely future demand. Given this, the CRU requested more up to date demands from GNI. The updated demand forecasts that GNI provided are based on six months of actual 2021/22 data and six months of 2021/22 forecast data. This updated forecasted has been used to determine the tariffs for the gas year 2022/23. The calculation of that forecast is now discussed.

Table 4 below presents GNI's distribution network demand forecasts (commodity and capacity) for gas year 2022/23. For context these forecasts are presented alongside GNI's actual demands for 2020/21 and the 2021/22 forecast used for setting current tariffs. Highlighting the forecast demands for the upcoming gas year, against the demands forecast used in setting the current gas tariffs is particularly useful, to indicate are applying upward or downward pressure on tariffs (higher demands equal lower tariffs).

Table 4: Distribution demand forecast summary

	Demand Forecasts			% Variation	
Demand	20/21 actual demand	21/22 tariff forecast	22/23 demand forecast	22/23 vs 20/21 actual	22/23 vs 21/22 tariff
Commodity (GWh)	17,259	17,575	16,347	-5.3%	-7%
Capacity (MWh)	118,151	120,303	120,734	2.2%	0.4%

For the forthcoming gas year 2022/23, total distribution commodity forecasts are 5.3% lower than the actual (outturn) commodity demand for 2020/21 and 7% lower than the 2021/22 commodity forecast for tariff setting. This is mostly driven by milder Winter in 2021/22 which has caused the demand forecasts to be reduced.

3 CRU Decision on Distribution Tariffs for 2022/23

3.1 Distribution tariffs for 2022/23

GNI has calculated distribution network tariffs for the period 01 October 2022 to 30 September 2023 based on the allowed revenues and demands set out in the previous section. The distribution tariff uses a tiered structure whereby charges depend on the customer's annual quantities. There are four tiers. The tariffs presented in Table 5 are for the smallest tier (≤ 73 MWh), within which a typical residential customer would be placed. See Appendix A for the tariffs for each of the four tiers.

The CRU's decision is that GNI implements the tariffs set out in Table 5 & Appendix A for gas year 2021/22. Capacity charges have decreased by **0.37%** and commodity charges have increased by **6.66%** (in real terms (i.e. adjusted for inflation)). Therefore, on an overall basis,[6] distribution network tariffs have increased by c.1.04% when compared to 2021/22 tariffs. A reason for the increase is that demand is projected to remain relatively stable for the upcoming gas year, while the allowed revenues have increased.

Table 5: Distribution tariffs 2021/22

	Tariffs			% Change	
	21/22 tariff (nominal)[7]	21/22 tariff (real)[8]	22/23 tariff (nominal)	2022/23 Tariff vs 21/22 tariff (nominal)	2022/23 Tariff vs 21/22 tariff (real)
Capacity – c/peak kWh	154.21	158.72	***158.13***	2.54%	-0.37%
Commodity – c/kWh	0.329	0.339	***0.362***	9.78%	6.66%

For comparison, Table 6 provides the 2022/23 in the context of recent tariff levels. Distribution tariffs have remained relatively stable.

[6] Accounting for 80:20 capacity commodity charge weighting.
[7] Not adjusted for inflation.
[8] Adjusted for inflation. Forecast HICP inflation of 2.93% for 22/23.

Table 6: Recent distribution network tariffs (nominal)

	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Capacity – c/peak kWh	158.33	152.18	149.63	157.72	154.21	158.13
Commodity – c/kWh	0.3424	0.3318	0.3163	0.3316	0.3293	0.3615

3.2 Impact on a residential customer's bill

As in previous years, the CRU is also publishing, today, the transmission network tariffs. The transmission tariffs are set to increase by c. 8.67%. It is estimated that the combined change in transmission and distribution tariffs equates to an €16 (or 1.41%) increase on an average residential gas customer's annual bill which is estimated to be €1,142 (excluding VAT) per annum (calculation conducted in May). Network tariffs are charged to gas shippers/suppliers. It is up to suppliers whether to pass on these costs to their customers.

To calculate the gas network charge element of the indicative bill, both Transmission (Capacity & Commodity) and Distribution (Capacity & Commodity) tariffs are used. The relevant capacity tariffs for both transmission and distribution are applied against a 'peak day capacity (MWh's)'. The peak day capacity element has been calculated based on an annual consumption estimate of 11 MWh's divided by a 'load factor' of 3 (ref table 11.2 of document 'CER15/057'). The relevant commodity tariffs for both transmission and distribution are applied to the annual consumption estimate of 11MWh's. The capacity and commodity charges calculated are then combined to give the 'Gas Network Charge' element of the overall customer bill. It is assumed that the Gas Network Charges are fully passed onto the end customer – but this is ultimately a decision for the supplier themselves to pass these charges on fully.

3.3 Next steps

These tariffs will take effect from 01 October 2022.

As detailed in this paper, a decision on PC5 revenues was not available in time for setting the 2022/23 tariffs. In terms of tariffs for 2023/24, the CRU would like to highlight that it intends to base those tariffs on revenues from its forthcoming PC5 decision. That decision was planned for October of this year. That decision will now be made in early 2023. This is to allow GNI to update its PC5 proposals, which they had submitted to the CRU in December 2021. The update provides the opportunity to capture the significant national and international developments impacting on energy markets, society and the wider economy (most notably the war in Ukraine) that have since occurred. Without this additional time to update the proposals, there was a real and substantive risk that revenue allowances under PC5 would not reflect the likely realities that GNI and the Irish gas customer would face during PC5. The publication of a decision based on an updated submission, will further ensure:

- sustainable and secure energy networks and supplies; and
- the provision effective regulation that supports competitive and efficient energy markets deliver a low carbon future whilst supporting competitiveness and security of supply.

Appendix A: GNI distribution tariffs 2022/23

Volume Range (MWh)		Capacity Charge (c/peak day kWh)		
>	***< or =***	***A***	***B***	***Total***
0	73	158.1301		158.1301
73	14,653	139.9834	4.0695	A - B *Ln(PDV[MWh])
14,653	57,500	349.7290	50.1863	A - B *Ln(PDV[MWh])
57,500		43.1277		43.1277

Volume Range (MWh)		Commodity Charge (c/kWh)		
>	***< or =***	***A***	***B***	***Total***
0	73	0.3615		0.3615
73	14,653	0.2888	0.0281	A - B *Ln(PDV[MWh])
14,653	57,500	0.3365	0.0444	A - B *Ln(PDV[MWh])
57,500		0.0658		0.0658