



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

**Proposed Direction to Bord Gáis Energy Supply  
regarding the application of the  
Regulated Tariff Formula**

**CER/04/089**

## 1. Introduction

The Regulated Tariff Formula (“RTF”) took effect on 1 April 2003 for gas customers consuming from 181,000 to 9 million therms. The methodology for both price and structure of the RTF was set out in CER 03/078 and CER 03/079.

The Commission has just begun a review of gas tariff structures in both the franchise and RTF markets. It is intended to complete this work by late September 2004, with the introduction of new tariffs if appropriate on 1 October. There will be a number of public consultations during the review and sufficient time for customers and market participants to consider any proposed changes to existing tariffs.

Although this review will involve a thorough appraisal of the RTF the Commission is proposing, in the interests of both customers and the development of competition in the market<sup>1</sup>, to issue this direction to Bord Gáis Energy Supply on the structure of the RTF for customers availing of Non-Monthly Price Adjustment contracts (“fixed price contracts”).

## 2. Regulated Tariff Formula – Non-Monthly Price Adjustment

CER 03/079 – Bord Gáis Energy Supply (“BGS”) Proposals for Gas Pricing in the Competitive Market Sector – set out the details of the RTF for variable price and fixed price contracts. The current formula for fixed price contracts is set out below:

$$P_p = [(IPE_p + T_{uk} + P_{sw}) * EUR/GBP] + T_{ti} + T_{di} + S_i + \text{Fixed Charges}$$

Where:

**P<sub>p</sub>** = the price of gas in Period P expressed in cent per therm

**IPE<sub>p</sub>** = The weighted average (based on customer profile) of the IPE futures settlements prices as published by the IPE for the relevant period P on the business day on which the customer wishes to agree a contract.

**T<sub>uk</sub>** = UK transportation charges, adjusted quarterly and currently at X p/kWh.

**P<sub>sw</sub>** = Swing Premium

**EUR/GBP** = The Euro/Sterling exchange rate quoted by AIB at the close of business on the specified business day preceding any price adjustment date.

**T<sub>ti</sub>** = Transportation charges for the Irish Transmission System

**T<sub>di</sub>** = Transportation charges for the Irish Distribution System

**S<sub>i</sub>** = Shrinkage charges on the Irish System

**Fixed Charges** = a fixed charge in c/kWh, to cover BGE operating costs, and margin.

Worked examples of RTF pricing were provided in CER/03/079. Example 1 from that paper is reproduced at Appendix I for ease of reference. This shows a price quotation for a 12-month fixed price RTF contract.

The current formula allows BGS to charge a volume-weighted average commodity price in each month of a fixed price contract rather than a monthly commodity price,

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<sup>1</sup> Section 2(6A) of the Gas (Amendment) Act, 1987 (as inserted by Section 23 of the Gas (Interim) (Regulation) Act, 2002 refers.

fixed in advance for each month, that reflects the market price for gas as quoted on the IPE<sup>2</sup>.

The original RTF (as set out in CER/03/079) intended to introduce market reflective prices into this sector of the market by establishing a transparent mechanism to allow eligible gas customers to determine gas costs on a forward-looking basis for periods of up to twelve months ahead. It was also intended to provide a clear target for new market entrant suppliers to compete against in providing supplies to customers.

This volume-weighted averaging means that the fixed price RTF contains an inefficient price signal that may influence customers' consumption behaviour in a manner that may act as a barrier to competition and which may therefore be against their long-term interests. Although BGS has quoted customers on the basis of IPE forward prices, the effect of averaging is contrary to the aim of introducing market reflective pricing into the sector.

BGS has the potential to recover higher or lower revenue from a customer if they exceed or fall short of their estimated volume. For example, a 12-month fixed price RTF customer with a high Summer load who exceeds their estimated volume will pay more than the average price during the Summer months because of the impact of Winter prices in raising the average. In this case BGS may recover additional revenue from that customer than originally estimated.

Similarly, a 12-month fixed price RTF customer with a high Winter load who exceeds their estimated volume will pay less than the average price during the Winter months because of the impact of Summer prices in lowering the average price. In this case BGS may recover less revenue from that customer than originally estimated.

This situation may cause customers to increase and/or decrease their gas consumption during Winter and/or Summer depending on their current load distribution and the position of the monthly price (as per BGS's quote) relative to the average price. This issue does not arise in the case of variable price RTF contracts.

Also in relation to Fixed Charges, it has come to the Commission's attention that BGS has averaged these prices in customers' bills. Henceforth, BGS will apply these charges in accordance with Appendix 3 of CER/03/079. Fixed charges will not be averaged over the duration of an RTF contract, either fixed or variable.

### **3. Proposed change to the Non-Monthly Price Adjustment Formula**

The following formula is designed to prevent the averaging of both the IPE gas prices and Fixed Charges.

$$P_m = [(IPE_m + T_{ukm} + P_{swm}) * \text{EUR/GBP}] + T_{tim} + T_{dim} + S_{im} + \text{Fixed Charges}_m$$

Where,

$P_m$  = charge per unit (c/kWh) for month m. This charge is fixed for each month (m) of the contract whether it is 3, 6, 9, or 12 months in duration;

$IPE_m$  = is the IPE futures settlement price for month m as published by the IPE on the quote date, q. This price will be known in advance and will not be subject to averaging over the period of the contract;

$\text{Fixed Charges}_m$  = a fixed charge in c/kWh, to cover BGE operating costs, and margin. This is a monthly fixed charge as set out in Appendix 3 of CER/03/079. As

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<sup>2</sup> International Petroleum Exchange

with IPE<sub>m</sub> this price will be known in advance and will not be subject to averaging over the period of the contract;

**q** = the quote date;

all other terms as per section 2 above.

The original RTF formula, set out in section 2, is now redundant.

#### **4. Impact of change to Non-Monthly Price Adjustment Formula**

This change does not affect the price certainty associated with the original RTF fixed price formula. Customers may continue to lock into fixed prices for contract durations of 3, 6, 9 or 12 months. However, the revised formula means that monthly prices will not be averaged over the term of the contract. Instead the price in each month will reflect the market price of gas and fixed charges as detailed in the BGS quote.

BGS's price quotation will show a commodity price that will vary each month depending on the value of the IPE Index, but will be known in advance. Fixed Charges will be applied in accordance with Appendix 3 of CER/03/079.

For the purposes of comparing BGS and independent supplier quotes, BGS may still quote an Average charge per unit in c/kWh but this will be an indicative price only and will not be applied to customers' monthly bills. The outturn Average charge per unit will depend on actual volumes consumed and will therefore not be known ex-ante.

The impact of this change will vary from customer to customer and will depend on load distribution.

#### **BGS Price Quotations**

A number of fixed price RTF contracts will terminate at the end of March 2004. BGS has already issued some customers with indicative price quotations. As a result of the change arising from this Direction all BGS RTF customers should be issued with revised quotations with immediate effect.

Appendix I – Original Example 1 from CER/03/079

<b>Worked Example 1</b>						
<b>Scenario :</b>		<b>Customer is taking fixed 12 month RTF from 1st April - price cap applicable</b>				
Annual Volume (Mwh):	5941					
Annual Peak Day (Mwh):	35.1					
Winter Peak Day (Mwh):	35.1					
<b>1) 12 month commodity price excluding UK &amp; Irish Transportation Charges and shrinkage</b>						
	IBE Stg p/therm	Swing Stg p/therm	Total UK Commodity Cost cent/kWh	Fixed Charges cent/kWh	Monthly Volume kwh	Monthly Commodity Costs €'s
Apr'03	16.6	0.60	0.863	0.075	483,685	€4,538
May	16.0	0.60	0.831	0.075	393,602	€3,566
Jun	15.6	0.60	0.815	0.087	283,005	€2,552
Jul	15.5	0.60	0.808	0.087	256,172	€2,294
Aug	16.1	0.60	0.837	0.087	189,522	€1,752
Sep	15.5	0.60	0.806	0.087	427,097	€3,816
Oct	19.5	0.60	1.009	0.075	441,334	€4,785
Nov	23.5	0.60	1.211	0.075	412,860	€5,308
Dec	26.4	0.60	1.357	0.073	890,480	€12,728
Jan '04	26.0	0.60	1.338	0.073	784,658	€11,069
Feb	26.0	0.60	1.338	0.073	714,817	€10,084
Mar	26.0	0.60	1.338	0.073	663,808	€9,364
<b>Totals</b>					<b>5,941,039</b>	<b>€71,856</b>
12 month commodity price (excluding UK & Irish Transportation Charges and shrinkage). Price in Sterling pence per therm =						<b>24.08</b>
12 month commodity price in Euro cent per kWh =						<b>1.209</b>
1 Therm = 29.3071 kwh						<i>Exchange based on 0.6794</i>
<b>2) Monthly price per kWh including Transportation Commodity charges, excluding Transportation Capacity charges</b>						
	12 month price cent/kWh	UK Transport cent/kWh	Transmission Commodity cent/kWh	Distribution Commodity cent/kWh	Shrinkage cent/kWh	Monthly cost per kWh excluding Capacity
Apr'03	1.209	0.027	0.037	0.127	0.025	1.426
May	1.209	0.027	0.037	0.127	0.024	1.425
Jun	1.209	0.027	0.037	0.127	0.024	1.425
Jul	1.209	0.027	0.037	0.127	0.024	1.424
Aug	1.209	0.027	0.037	0.127	0.024	1.424
Sep	1.209	0.027	0.037	0.127	0.024	1.424
Oct	1.209	0.027	0.037	0.127	0.028	1.429
Nov	1.209	0.027	0.037	0.127	0.030	1.431
Dec	1.209	0.027	0.037	0.127	0.032	1.433
Jan '04	1.209	0.027	0.037	0.127	0.034	1.435
Feb	1.209	0.027	0.037	0.127	0.033	1.434
Mar	1.209	0.027	0.037	0.127	0.032	1.433
<b>3) Total Monthly delivered charges including fixed capacity charges</b>						
	Monthly Volume kWh	Unit rate c/kwh	Cost excluding Capacity	Transmission Capacity	Distribution Capacity	Total Monthly Costs
Apr'03	483,685	1.426	€6,897	€2,007	€2,656	€11,560
May	393,602	1.425	€5,608	€2,007	€2,656	€10,271
Jun	283,005	1.425	€4,032	€2,007	€2,656	€8,695
Jul	256,172	1.424	€3,649	€2,007	€2,656	€8,312
Aug	189,522	1.424	€2,699	€2,007	€2,656	€7,363
Sep	427,097	1.424	€6,083	€2,007	€2,656	€10,747
Oct	441,334	1.429	€6,305	€2,007	€2,656	€10,969
Nov	412,860	1.431	€5,907	€2,007	€2,656	€10,570
Dec	890,480	1.433	€12,759	€2,007	€2,656	€17,422
Jan '04	784,658	1.435	€11,256	€2,007	€2,656	€15,920
Feb	714,817	1.434	€10,247	€2,007	€2,656	€14,911
Mar	663,808	1.433	€9,510	€2,007	€2,656	€14,173
<b>Totals</b>	<b>5,941,039</b>		<b>€84,953</b>	<b>€24,081</b>	<b>€31,878</b>	<b>€140,912</b>
Average unit delivered price in cent per kWh =						<b>2.372</b>

Shading indicates that data is subject to potential change.

Appendix II – Rework of Example 1

<b>Re-worked Example 1</b>							
<b>Scenario :</b> Customer is taking fixed 12 month RTF from 1st April - price cap applicable							
Annual Volume (Mwh):		5941					
Annual Peak Day (Mwh):		35.1					
Winter Peak Day (Mwh):		35.1					
<b>1) 12 month commodity price excluding UK &amp; Irish Transportation Charges and shrinkage</b>							
	IPE Stg p/therm	Swing Stg p/therm	Total UK Commodity Cost cent/kWh	Fixed Charges cent/kWh	12 month price cent/kWh	Monthly Volume kwh	Monthly Commodity Costs €'s
Apr'03	16.6	0.60	0.863	0.075	0.938	483,685	€4,538
May	16.0	0.60	0.831	0.075	0.906	393,602	€3,566
Jun	15.6	0.60	0.815	0.087	0.902	283,005	€2,552
Jul	15.5	0.60	0.808	0.087	0.895	256,172	€2,294
Aug	16.1	0.60	0.837	0.087	0.925	189,522	€1,752
Sep	15.5	0.60	0.806	0.087	0.893	427,097	€3,816
Oct	19.5	0.60	1.009	0.075	1.084	441,334	€4,785
Nov	23.5	0.60	1.211	0.075	1.286	412,860	€5,308
Dec	26.4	0.60	1.357	0.073	1.429	890,480	€12,728
Jan '04	26.0	0.60	1.338	0.073	1.411	784,658	€11,069
Feb	26.0	0.60	1.338	0.073	1.411	714,817	€10,084
Mar	26.0	0.60	1.338	0.073	1.411	663,808	€9,364
<b>Totals</b>						<b>5,941,039</b>	<b>€71,856</b>
*Average 12 month commodity price (excluding UK & Irish Transportation Charges and shrinkage). Price in Sterling pence per therm =							<b>24.08</b>
*Average 12 month commodity price in Euro cent per kWh =							<b>1.209</b>
<b>1 Therm = 29.3071 kwh</b>				<b>Exchange based on 0.6794**</b>			
<b>2) Monthly price per kWh including Transportation Commodity charges, excluding Transportation Capacity charges</b>							
	12 month price cent/kWh	UK Transport cent/kWh	Transmission Commodity cent/kWh	Distribution Commodity cent/kWh		Shrinkage cent/kWh	Monthly cost per kWh excluding Capacity
Apr'03	0.938	0.027	0.037	0.127		0.025	1.155
May	0.906	0.027	0.037	0.127		0.024	1.121
Jun	0.902	0.027	0.037	0.127		0.024	1.117
Jul	0.895	0.027	0.037	0.127		0.024	1.110
Aug	0.925	0.027	0.037	0.127		0.024	1.139
Sep	0.893	0.027	0.037	0.127		0.024	1.108
Oct	1.084	0.027	0.037	0.127		0.028	1.304
Nov	1.286	0.027	0.037	0.127		0.030	1.507
Dec	1.429	0.027	0.037	0.127		0.032	1.653
Jan '04	1.411	0.027	0.037	0.127		0.034	1.636
Feb	1.411	0.027	0.037	0.127		0.033	1.635
Mar	1.411	0.027	0.037	0.127		0.032	1.634
<b>3) Total Monthly delivered charges including fixed capacity charges</b>							
	Monthly Volume kWh	Unit rate c/kwh	Cost excluding Capacity	Transmission Capacity		Distribution Capacity	Total Monthly Costs
Apr'03	483,685	1.155	€5,584	€2,007		€2,656	€10,248
May	393,602	1.121	€4,413	€2,007		€2,656	€9,077
Jun	283,005	1.117	€3,162	€2,007		€2,656	€7,825
Jul	256,172	1.110	€2,844	€2,007		€2,656	€7,507
Aug	189,522	1.139	€2,159	€2,007		€2,656	€6,823
Sep	427,097	1.108	€4,733	€2,007		€2,656	€9,397
Oct	441,334	1.304	€5,753	€2,007		€2,656	€10,416
Nov	412,860	1.507	€6,221	€2,007		€2,656	€10,884
Dec	890,480	1.653	€14,716	€2,007		€2,656	€19,379
Jan '04	784,658	1.636	€12,835	€2,007		€2,656	€17,499
Feb	714,817	1.635	€11,686	€2,007		€2,656	€16,349
Mar	663,808	1.634	€10,845	€2,007		€2,656	€15,509
<b>Totals</b>		<b>5,941,039</b>	<b>€84,953</b>	<b>€24,081</b>		<b>€31,878</b>	<b>€140,912</b>
*Average unit delivered price in cent per kWh =							<b>2.372</b>

\* Note this is an indicative price only and will not be applied to customers' bills. The outturn Average charge per unit will depend on actual volumes consumed in each month.

\*\* Exchange rate as per original Example 1 for comparison purposes only.

Shading indicates changes from original version of Example 1