BGE (NI) Ltd
Price Control 2012-2017

Cost of Debt
Consultation

24 August 2012

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1 INTRODUCTION

Introduction

1.1 This document outlines the Utility Regulator's proposed cost of debt for the period of the next BGE (NI) Price Control, beginning 1st October 2012. The Utility Regulator has separately consulted on operating and capital cost allowances in December 2011 and April 2012.

1.2 In September 2011 BGE (NI) provided the Utility Regulator with a submission on the appropriate cost of debt. This submission is reviewed as part of this consultation.

1.3 This is an open consultation paper. We have not posed any specific questions in this paper. Instead we invite stakeholders to express a view on any particular aspect of the paper or any related matter. Responses should be received by **5pm on 21st September 2012** and should be addressed to:

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1.4 Our preference would be for responses to be submitted by e-mail.

1.5 Individual respondents may ask for their responses in whole or in part, not to be published, or that their identity should be withheld from public disclosure. Where either of these is the case, we will ask respondents to also supply us with the redacted version of the response that can be published.

1.6 As a public body and non-ministerial government department, we are bound by the Freedom of Information Act (FOIA) which came into full force and effect on 1 January 2005. According to the remit of FOIA, it is possible that certain recorded information contained in consultation responses can be put into the public domain. Hence it is now possible that all responses made to consultations will be discoverable under FOIA – even if respondents ask us to treat responses as confidential. It is therefore important that respondents note these developments and in particular, when marking responses as confidential or asking to treat responses as confidential, should specify why they consider the information in question to be confidential.

1.7 This paper is available in alternative formats such as audio, Braille etc. If an alternative format is required, please contact the office and we will be happy to assist.

2 APPROACH

Our Statutory Duties

2.1 The proposals for this price control have been guided by our statutory duties.

2.2 Our principal objective in carrying out our gas functions is to promote the development and maintenance of an efficient, economic and coordinated gas industry in Northern Ireland. Our principal objective must also be pursued in a way that is consistent with the objectives defined in Article 40 of the Gas Directive, the most relevant of which – in the context of carrying out price controls – are promoting an efficient market, and protecting consumers.

2.3 In carrying out our gas functions, we are also required to further this principal objective in the best manner that we see fit whilst also having regard to a number of other considerations. The key relevant one being the need to ensure that licence holders are able to finance their licensed activities.

2.4 We therefore interpret our duties, in the context of carrying out price controls, as a mandate to secure the most cost efficient outcome for the consumer that also allows the company to continue financing its activities. This has been the overarching philosophy that has guided our approach to this price control.

Regulatory Principles

2.5 The principles underpinning the regulatory proposals herein are to ensure the revenues and resulting tariffs are:

- Sustainable;
- Stable;
- Transparent;
- Predictable; and
- Cost-reflective.

2.6 These are based on best practice regulation of natural monopolies. Our task essentially consists of creating a framework within which, in return for providing monopoly services to an acceptable quality, the company receives a reasonable assurance of a revenue stream in future years that will cover its costs.

BGE (NI) Gas Conveyance Licence

2.7 Condition 2.2 Annex A Part 5, Rate of Return, of the BGE (UK) Gas Conveyance licence provides that as part of the price control review the Authority should review two elements of the cost of capital calculation within the licence. Namely, (rf) the real Risk Free Rate in gas year t, currently set at 2.5% and (MRDP) the market rate for debt premium excluding the gearing effect, currently set at 0.83%.

Approach

2.8 In establishing the appropriate rate for the real Risk Free Rate and the market rate for debt premium, the Utility Regulator proposes to follow the methodology used to set these parameters for the 2007 – 12 price control. The relevant consultation document is available on the Utility Regulator website.[1] Such an approach has the advantage of consistency and regulatory certainty.

2.9 In brief the methodology can be described as follows.

- For the risk free rate the Utility Regulator will follow the standard regulatory approach which is to use the yield on an index linked gilt as a proxy for the risk free rate. Using the daily yields from a UK Government Bond with three, five and ten years to maturity over the previous ten year period as a benchmark.
- The Utility Regulator will base the debt premium element of the BGE (UK) Cost of Debt on the debt premium of other UK utilities. Rather than calculate the gearing effect and the debt premium excluding gearing separately, the total debt premium will be calculated. The focus will be on bonds with lower credit ratings, for example BBB, to represent a higher gearing.

[1] http://www.uregni.gov.uk/publications/bge_northern_ireland_price_control_2007_2012_consultation_may_2007

3 BGE (NI) Cost of Debt Submission

Summary of BGE(NI) submission on cost of debt

3.1 As part of the price control review process BGE(NI) submitted a paper to the Utility Regulator on Cost of Debt. The main points raised by BGE(NI) in this paper are set out briefly below.

- Only the cost of debt is open for review. The cost of equity, gearing and "gearing adjustment" are fixed for the lifetime of the licence;
- The cost of debt calculation is focused on the overall cost of debt, rather than build up an estimate based on separate calculations for the risk-free rate and the debt premium. The reason for this is that there is such volatility in the data on the individual parameters as a result of the turmoil in financial markets;
- The allowed revenues are indexed using CPI rather than RPI, and therefore the allowed cost of debt needs to be adjusted to reflect the average difference between CPI and RPI. BGE(NI) estimates this difference at 1.1%;
- There is a risk premium for investing in Northern Ireland, rather than Great Britain. BGE(NI) estimates this effect at 1.5%, on the basis of a comparison between National Grid, Scottish & Southern and NIE. This was then cross checked with the comparison between National Grid and Phoenix Natural Gas; and
- A summary of recent British regulatory decisions gives some form of average for the real cost of debt in Britain of 3.9%.

3.2 BGE(NI)'s methodology for calculating the cost of debt involves taking their average for the real cost of debt in Britain of 3.9%, adding a Northern Ireland risk premium and a CPI adjustment to give a real cost of debt for BGE of 6.5% (excluding the gearing adjustment). BGE(NI) then propose adding the gearing adjustment of 0.38% making their proposal for the real cost of BGE(NI) debt 6.88% (including the gearing adjustment). This compares to the real cost of debt allowed in 2007-12 of 3.71%.

Table 1 – Summary of BGE(NI) make-up of the cost of debt

	Percentage
GB regulatory precedent	3.9%
Adjustment for CPI indexation	1.1%
Adjustment for NI risk profile	1.5%
Real cost of debt for BGE(NI) (excluding the gearing adjustment)	6.5%
Real cost of debt for BGE(NI) (including the gearing adjustment of 0.38%)	6.88%

Source: BGE(NI)

4 OUR VIEW OF BGE(NI)'S COST OF DEBT SUBMISSION

UR view on BGE(NI) submission

4.1 The Utility Regulator's view on the key points in BGE(NI)'s submission is summarised below.

- We agree with BGE(NI) that the cost of equity and gearing ratio are not part of the present review.

- BGE(NI)'s proposal to estimate the overall cost of debt rather than the risk free rate and the debt risk premium separately is not in line with the licence which clearly states that the risk free rate and the market rate for debt premium must be calculated (see Condition 2.2 Annex A Part 5, Rate of Return).

- In relation to BGE(NI)'s request for a CPI adjustment – BGE(NI) capital revenues are indexed to the Consumer Prices Index rather than the more traditional Retail Prices Index. BGE(NI) accepted this when they agreed to the present licence. The methodology with which we deal with this in the licence is consistent since 2004 and any consequent risks must be set against the 15% nominal cost of equity figure also included in the licence, which compares very favourably with that received by other regulated network utilities who typically receive less than 8% real. Should BGE(NI) propose a licence modification to index their capital revenues to RPI rather than CPI, we would consider this if proposed.

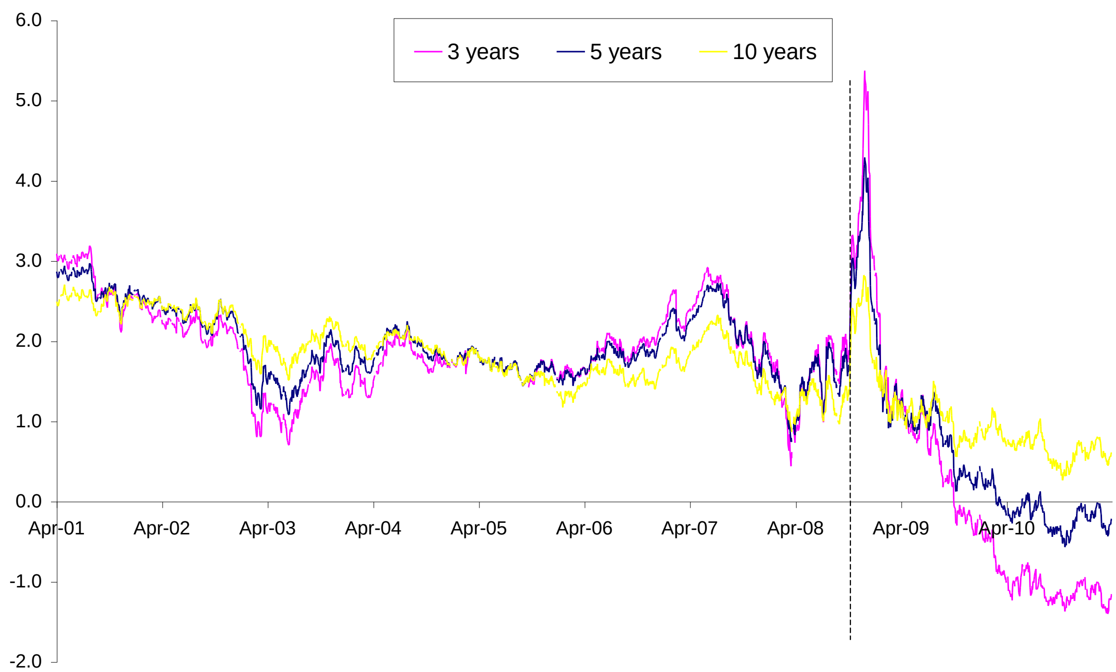
- We are not convinced that there is a risk premium for investing in Northern Ireland rather than Great Britain. The issue of a Northern Ireland premium was considered extensively during RP5 and the RP5 proposals do not assign a Northern Ireland specific risk premium to the cost of debt. While it was recognised that the cost of debt on recently issued NIE bonds was slightly above that for other United Kingdom utilities, it was considered that this could be the result of many factors including, timing, size, Northern Ireland specific risk, parent company specific risk.

5 UR Proposed Allowance

Risk Free Rate

5.1 The approach used by regulators to assess the risk-free rate has in the past has been to analyse yields on government-issued index-linked gilts. The figure below plots the index linked gilt yields over the last ten years, for three different maturities of bond.

Figure 1 – Yields on Index Linked Gilts 2001-2011



Source: Bank of England

5.2 From this chart it can be seen that the yields on short-dated gilts are now negative and the yields on even very long-dated debt sit no higher than 0.8%. However, gilt yields have undoubtedly been affected by the financial crisis and subsequent recession. While yields rose considerably at the beginning of the crisis subsequent policy actions by the Bank of England including adjustments to base rates and programmes of quantitative easing have dramatically reduced yields.

5.3 The Utility Regulator considers that the data from recent years may not be an entirely reliable proxy for the risk-free rate. We have therefore also considered pre-August 2008 data as it may be better to reply on data over a longer period of time. In the ten years prior to the financial crisis, yields on our benchmark gilts averaged approximately 2% per annum. This is also the sort of risk-free rate that regulators have been including in recent regulatory determinations. However, this may lead to a risk free rate somewhat on the generous side. Relevant data points are summarised in the table 2 below.

Table 2 – Previous Risk Free Rate Assumptions

Decision	Risk-free rate assumption	Year
Ofgem - Transmission (TPCR4)	2.5%	2006
CC/CAA – Heathrow/Gatwick airports	2.5%	2007
CC/CAA – Stansted airport	2.0%	2008
Ofgem – Electricity Distribution (DPCR5)	2.0%	2009
Ofwat – Water (PR09)	2.0%	2009
CC – Bristol Water	2.0%	2010
CAA – NATS	1.75%	2010
NIAUR - SONI	2.0%	2011

Source: Various Regulators

5.4 The Utility Regulator therefore proposes that the risk free rate (rf) should be set at 2.0% for the period 20012 – 17. This represents a decrease of 0.5% from the rate during the 2007 – 12 price control period. As at the last review, we are proposing a rate in excess of the prevailing bond yields but which is in line with the practice of other regulators. We therefore regard this rate as being on the generous side.

Debt Premium

5.5 As was the case at the time of the 2007 – 12 price control review we propose to calculate a debt premium inclusive of the 0.38% gearing effect by examining the yield on bonds issues by other UK utilities with a credit rating below that of a transmission standard of ‘A’ that is with grades BBB, BBB+ and A -.

5.6 The evidence set out in the First Economics paper on Cost of Capital as an input to the RP5 process provides evidence from a small number of recently issued bonds from UK utilities. From these data the real cost of debt and risk premium, assuming a risk free rate of 2.0% can be implied.

Table 3 – Summary of First Economics data

Company	Issued	Rating	Cost of Debt	Premium
WPD (West Midlands)	May 2011	Baa1/BBB	2.17%	0.17%
NIE	May 2011	A-/BBB+	2.78%	0.78%
SP Distribution	July 2011	A3/A-	2.29%	0.29%

Source: First Economics

5.7 However, the Utility Regulator proposes to allow NIE a cost of debt of 3.2%. This is based on the company's current borrowings, and calculated in accordance with forecasted inflation. The proposed cost of debt (which is 6.65% in nominal terms) is 15 basis points higher than the blended average of the interest rates payable on NIE's two main branches of debt. The UR cost of debt for NIE would therefore suggest a debt premium of 1.2% for NIE.

5.8 Ofgem have taken a slightly different approach as part of their RIIO-T1 price control for National Grid Gas and Electricity Transmission. This approach is to use a 10 year trailing index, IBoxx, to set the cost of debt allowance, with this allowance being updated during each year of the price control based on the movement of the index. Further information on this approach is available on the Ofgem website.

5.9 As this index is based on a much wider range of UK utilities it might be considered that it gives a more robust estimate of debt costs than does considering a very small number of data points as above. It should be noted that the IBoxx index combines data from both 'A' and 'BBB' rated utilities. Consistency with the 2007 methodology would suggest that the Utility Regulator should only consider data for the 'BBB' rated utilities. The results of this analysis are set out below.

Table 4 – Summary of debt premium for 'BBB' rated utilties

	IBoxx 10 year trailing Index as at December 2011 ('A' and 'BBB')	IBoxx 10 year trailing Index as at December 2011 ('BBB' only)
Cost of debt	3.03%	3.29%
Debt premium	1.03%	1.29%

Source:

5.10 Based on the above analysis the Utility Regulator would appear to have a range of possible debt premium figures within which to place the BGE (UK) allowance. Ranked from highest to lowest these are set out below.

Table 5 – Debt Premium – potential range

Approach	Debt Premium
NIE Bond issued May 2011	0.78%
IBoxx index ('A' and 'BBB')	1.03 %
NIE RP5	1.20%
BGE (UK) Price Control 2007 - 12	1.21%
IBoxx index ('BBB' only)	1.29%

5.11 The Utility Regulator therefore proposes to set the debt premium at 1.20%. Removing the gearing effect of 0.38% this gives a (MRDP) of 0.82%.

6 SUMMARY OF UR PROPOSALS

Our Proposals

6.1 The table below sets out our proposals for cost of debt and capital for the BGE (UK) 2012 – 17 price control. We have also included BGE(NI)'s proposal for comparison.

Table 6 – Summary of UR proposals

	PCR 2012-17	
Element	**UR**	BGE (UK)
Risk Free Rate	**2.00%**	-
Premium	**1.20%**	-
Cost of Debt	**3.20%**	6.88%
Cost of Equity	**#15.0%**	#15.0%
Gearing Ratio	**72.5%**	72.5%
Vanilla WACC	**5.83%**	8.49%

These figures are nominal and have been converted to real using an inflation rate of 2% giving a real cost of equity of 12.75% for the purpose of calculating the WACC.

6.2 Table 7 below sets out for reference BGE(NI)s previous submissions alongside previous Ofgem and Utility Regulator decisions.

Table 7 – Summary of previous proposals/decisions

	BGE(NI) Proposals		Ofgem Previous Control Decisions				UR Previous Control Decisions	
Element	2007-12	2012-17	Transco PC 2002	TPCR4 (2006-11)	TPCR4 Rollover	RIIO	2004-07	2007-12
Risk Free Rate	2.5%	-	-	2.5%	2%	-	2.70%	2.50%
Premium	1.63%	-	-	1.25%	1.25%	-	1.83%	1.21%
Cost of Debt	4.13%	6.88%	-	3.75%	3.75%	3.03%	4.53%	3.71%
Cost of Equity	15.0%	15.0%	-	7%	7%	6.80%	#15.0%	#15.0%
Gearing Ratio	72.5%	72.5%	-	60%	60%	62.5%	72.5%	72.5%
Vanilla WACC	6.50%	8.49%	6.25%	5.05%	4.75%	4.44%	6.79%	6.19%

These figures are nominal and have been converted to real using an inflation rate of 2% giving a real cost of equity of 12.75% for the purpose of calculating the WACC

Source: BGE(NI); Ofgem; UR

Customer impact

6.3 A reduction in the allowed cost of capital from 6.19% to 5.83%, (i.e. by 0.36%), will reduce the BGE (UK) allowed revenue by circa £500k per annum which represents a reduction of just over 1% in the postalised transmission tariff resulting in a circa £0.50 reduction per annum for a domestic supply point.