

# Phoenix Natural Gas Limited Price Control Draft Proposals 2012-2013

## Consultation Paper

August 2011

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# GLOSSARY

<b>A+M+PR mechanism</b>	Advertising, marketing and PR mechanism.
<b>Capex</b>	Capital expenditure.
<b>COPI</b>	Construction Output Price Index.
<b>DPCR5</b>	Distribution Price Control Review 5 – Ofgem’s most recent price control of the electricity distribution networks in Great Britain.
<b>DRD</b>	Department for Regional Development.
<b>DSEAR</b>	The Dangerous Substances and Explosive Atmospheres Regulations 2002.
<b>FTE</b>	Full time equivalent.
<b>GDN</b>	Gas distribution network.
<b>I&amp;C</b>	Industrial and commercial.
<b>NIHE</b>	Northern Ireland Housing Executive.
<b>NRSAWA</b>	New Roads and Street Works Act.
<b>OO</b>	Owner Occupier – refers to connections of domestic properties that are not New Build or NIHE properties. Sometimes also referred to as Existing Housing.
<b>Opex</b>	Operating expenditure.
<b>PC03</b>	This is the name given to the current price control for PNGL, which runs from 2007 to 2011 (calendar year).
<b>PNGL</b>	Phoenix Natural Gas Limited.
<b>PNGL12</b>	This is the name given this forthcoming price control for PNGL, covering calendar years 2012 and 2013.
<b>ppt</b>	Pence per therm – herein used to refer to the conveyance tariff charged by PNGL per therm of gas (for transportation through its network).
<b>PMICR</b>	Post-maintenance interest cover ratio.
<b>Price Base</b>	All monetary figures presented herein, unless otherwise stated, have been rebased using the Retail Price Index (RPI) as at September 2010.
<b>TMA</b>	Traffic Management Act.
<b>TRV</b>	Total Regulatory Value.
<b>tpa</b>	Therms per annum – a commonly used measure of gas consumption.

# 1 EXECUTIVE SUMMARY

## Introduction

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- 1.1 Phoenix Natural Gas Limited (PNGL) is the owner and operator of the licence for the distribution network in the Greater Belfast Area and Larne, and is the larger of the two gas distribution companies in Northern Ireland (the other business being firmus energy, which owns and operates the network off the North-West and South-North transmission pipelines). PNGL's network extends to around 3,000 kilometres of laid pipeline, and the company has around 140,000 customers.
- 1.2 As PNGL is the sole provider of gas distribution services in its licensed area, our office imposes a periodic price control to ensure the company offers gas consumers a quality service at a fair price. This price control review, referred to from hereon as "PNGL12", is the fourth price control our office has imposed on PNGL since the company's inception in 1996.
- 1.3 PNGL12 will cover the calendar years of 2012 and 2013 only. We have opted for a shorter duration than is normal for a network price control in order to align the timing of PNGL's fifth price control with the next price control of firmus. Alignment of both distribution companies' control periods will therefore occur in 2014.

## Our Statutory Duties

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- 1.4 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.
- 1.5 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.
- 1.6 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.

## Summary of Approach

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- 1.7 We have used a standard RPI-X framework to develop the price control, which will incentivise PNGL to control its costs. We have proposed a maximum allowance for operating expenditure (opex) and capital expenditure (capex) for PNGL in each year of the control period.
- 1.8 Our assessment of appropriate opex allowances has focused on the six largest cost lines which account for around 75 per cent of total opex. For reference these six cost lines are:
- Advertising, marketing and PR;
  - Emergency costs;
  - Incentives (for customers);
  - Insurance;
  - Manpower; and
  - Network maintenance.
- 1.9 Each of the above cost lines have been considered separately. A full explanation of the approach and rationale behind the proposed allowances is set out later in the relevant sections of the paper.
- 1.10 For the remaining (smaller) opex cost lines we propose setting an allowance using an average of actual spend during the three most recent years for which we have audited data (2007 to 2009).
- 1.11 With respect to capex, we commissioned engineering consultants PB Rune to advise on the appropriateness of PNGL's allowance request. PB Rune examined the company's forward capital programme, benchmarking PNGL's costs against suitable comparators. We have used the findings from PB Rune's review to inform our proposed allowances.
- 1.12 The RPI-X framework will result in an annual uplift of RPI to all allowances including capex less an assumed ongoing efficiency factor, of which we are proposing one per cent (the "X" factor). It is worth noting that RPI may not be the appropriate index for all allowances. For example, we could arguably use the Construction Output Price Index (COPI) for capex, which could be less favourable to PNGL.
- 1.13 PNGL has a fixed cost of capital<sup>1</sup> embedded in its licence, set at 7.5 per cent (in real terms and pre tax) until the end of 2016. (To better understand the reason for awarding PNGL a cost of capital in this manner, readers should refer to the narrative in Appendix 1 which describes the history of the company and its governing regulatory regime.)
- 1.14 For this price control, our office considered reviewing the appropriateness of PNGL's existing cost of capital, as there are arguments as to why 7.5 per cent may not reflect the risks facing the company (see Appendix 1 for more details). However on reflection, and when viewed against the overall price control package we have put together for PNGL12, we have decided to retain PNGL's cost of capital at 7.5 per cent over the control period.
- 1.15 In the next price control review (to take effect from 2014) we will be setting a revised cost of capital from 2017 onwards, most likely using a standard methodology such as the capital asset price model (CAPM). We envisage that this will entail a full assessment of all the building blocks comprising a weighted average cost of capital (WACC), including consideration of PNGL's risk profile versus that of comparable gas distribution networks in Great Britain, for example.

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<sup>1</sup> Note that we use the terms "cost of capital" and "rate of return" interchangeably.

- 1.16 In developing PNGL12 we have had to assess the value of PNGL's regulatory asset base (defined in PNGL's licence as the Total Regulatory Value, or TRV). As part of this assessment we have considered how best to address two specific issues, the first in respect of deferred capex and the second in respect of the historic treatment of outperformance.
- 1.17 Regarding deferred capex, PNGL has been granted previous allowances for projects it has yet to complete, or were completed later than originally anticipated. As a result PNGL's asset base has inflated at a greater rate than it would otherwise have if allowances were (or are) granted at the time of actual spend. We believe gas consumers should not have to pay for pipes before they are built and propose making an adjustment to the TRV to account for this.
- 1.18 Regarding outperformance, at the commencement of the current price control our office agreed to include an outperformance amount in the TRV to reward PNGL for historic efficiencies (i.e. the difference between PNGL's actual and allowed spend in previous price controls). Including this sum in respect of outperformance has allowed PNGL to generate additional cashflows from 2007.
- 1.19 It is standard regulatory practice that the benefits from outperformance are shared between companies and consumers. For example, Ofgem's approach to capex outperformance is to allow it to remain in the asset base for a period of five years, during which time the company enjoys greater cashflows than it otherwise would have. However after the five years have passed the outperformance is then removed from the asset base, which ensures that consumers also share in the benefits.
- 1.20 Consistent with the Ofgem approach to capex outperformance, we are proposing to allow PNGL to retain the outperformance sum in its TRV until the end of 2011 (by which time PNGL will have enjoyed five years of greater cashflows generated from its inclusion). We then propose removing the outperformance (suitably depreciated) from the TRV in 2012.
- 1.21 Consistent with our statutory duties, we have also carefully considered how our proposals impact on PNGL's financeability. We recognise that maintaining financeability is in the consumer interest (as consumers are exposed to PNGL's resulting cost of capital), and therefore take the issue seriously. At this stage we are comfortable that our proposals, coupled with a central case scenario, leave the company on a financially sustainable trajectory.



## Summary of Proposals

- 1.22 A summary of our overall proposals for PNGL12 is presented in the table below<sup>2</sup>.
- 1.23 It should be noted that our proposals are based on a higher connection target for domestic owner occupiers (4,200 per year instead of 3,700 proposed by PNGL). The effect of using a higher target is to grant a higher allowance, particularly for capex, since allowance levels for certain cost items are driven by forecast connections. If we had used PNGL's target, the overall allowances would be around £1-2 million lower.

**Table 1 – Proposed Allowances, £m**

Cost Item	PNGL Submission			UR Proposal			Difference	
	2012	2013	Total	2012	2013	Total	Total	Total, %
Opex allowance	15.9	16.2	32.1	13.3	13.6	26.9	-5.2	-16%
Capex allowance	12.5	11.7	24.2	12.4	11.6	24.0	-0.1	-1%
<b>Total</b>	<b>28.4</b>	<b>27.9</b>	<b>56.3</b>	<b>25.8</b>	<b>25.2</b>	<b>50.9</b>	<b>-5.4</b>	<b>-10%</b>
<p>In setting a determination we grant PNGL what we consider to be efficient allowances for future opex and capex. The allowances are then fed into our regulatory model, which calculates a revenue requirement to ensure the company recovers the value of future as well as past investments, plus a return on this investment. The calculated revenue stream that PNGL is allowed to recover from customers is then used to determine conveyance charges for the use of the PNGL network.</p> <p>The allowed revenues for 2012 and 2013 are detailed in the row below.</p>								
Allowed revenues	46.8	48.3	95.1	39.6	40.9	80.5	-14.6	-15%

Source: PNGL and the Utility Regulator

- 1.24 If we compare our proposals to the current PNGL tariffs, it will result in domestic customers paying around £10 less per annum, mainly driven by the end of the reward to PNGL for historic outperformance. Compared to the PNGL submission, our proposals will result in the average domestic customer paying around £25 less per annum.
- 1.25 For I&C customers, particular large ones, the difference will be greater given their higher consumption levels. We estimate savings for I&C customers may amount to tens of thousands of pounds, and for the very largest it may even exceed £100k per annum.

<sup>2</sup> First, note that all monetary figures throughout this paper, unless otherwise stated, are in 2010 prices (specifically, all figures have been rebased using the Retail Price Index as at September 2010). Second, this table sets out allowances for the control period only i.e. 2012 and 2013. However, it should be noted that as part of every price control we do model costs and revenues etc right through to 2046 (the end of the PNGL's licence recovery period). This is necessary since the PNGL business model requires the deferral of some of its entitled revenues, to be recovered at some point in the future. This helps keep conveyance charges lower now which in turn encourages the continued growth of the gas market.

## Consultation Process

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- 1.26 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 1700 on Friday 21 October 2011 and should be addressed to:
- Carl Hashim**  
Gas Directorate  
Queens House  
14 Queen Street  
Belfast  
BT1 6ED  
Tel: 028 9031 6641
- E-mail: [carl.hashim@uregni.gov.uk](mailto:carl.hashim@uregni.gov.uk)
- 1.27 Our preference would be for responses to be submitted by e-mail.
- 1.28 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.
- 1.29 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.
- 1.30 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.
- 1.31 Finally, if there is significant interest in learning more about the consultation, we may choose to host an information event for stakeholders in order to gather early views on the proposals. If you would be interested in attending such an event please contact the office.

## 2 INTRODUCTION

### Company Overview

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- 2.1 PNGL is the owner and operator of the licence for the distribution network in the Greater Belfast Area and Larne, and is the larger of the two gas distribution businesses in Northern Ireland (the other business being firmus energy, which owns and operates the network off the North-West and South-North transmission pipelines). The company is responsible for the development of the pipeline network and also for providing a 24/7 operational and transportation service platform to gas suppliers under the rules of the company's network code.
- 2.2 The PNGL network extends to around 3,000 kilometres of intermediate, medium and low pressure mains, which distribute natural gas throughout the licence area. PNGL manages the development of the both the physical network and market in Greater Belfast; around 140,000 customers have been connected to natural gas.
- 2.3 A brief narrative which summarises the relevant regulatory history of the company is set out in Appendix 1.

### Background to the Price Control

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- 2.4 As mentioned above, Northern Ireland has two gas distribution networks, PNGL and firmus. Both companies are price controlled by our office. PNGL's current price control (referred to as "PC03") commenced in 2007 and will continue until the end of 2011, so a new price control is needed for PNGL to take effect in 2012. The current price control period for firmus runs from 2009 to the end of 2013, so new price control is needed for firmus to take effect in 2014.
- 2.5 In late 2009 we began scoping and planning the work necessary to ensure a price control determination will be in place before 31 December 2011 for PNGL. In considering the issues involved, we also considered the merits of aligning the timing of the price controls of the two companies and how we might go about this.
- 2.6 The merits of aligning the price controls and the potential options to pursue to achieve this were consulted on in January 2010<sup>3</sup>. A decision then followed to align the price controls by way of imposing a two year price control on PNGL for 2012 and 2013, thereby achieving aligning in 2014.
- 2.7 This price control therefore covers the calendar years of 2012 and 2013.

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<sup>3</sup> "Aligning the Price Control Reviews of Northern Ireland's Gas Distribution Networks," January 2010.

## 3 APPROACH

### Our Statutory Duties

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- 3.1 The decisions we faced as we formulated our proposals for this price control have been guided by our statutory duties.
- 3.2 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.
- 3.3 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.
- 3.4 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

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- 3.5 The principles underpinning the regulatory proposals herein are to ensure the revenues and resulting tariffs are:
- Sustainable;
  - Stable;
  - Transparent;
  - Predictable; and
  - Cost-reflective.
- 3.6 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.

### Form of Price Control

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- 3.7 The overall objective of this price control is to ensure that PNGL can continue to develop and operate its distribution network in an efficient and effective manner, and at reasonable cost to gas consumers.

- 3.8 To achieve this objective we have developed our allowance proposals using a standard RPI-X framework, which will incentivise PNGL to control its costs. We have proposed a maximum allowance for operating expenditure (opex) and capital expenditure (capex) for PNGL in each year of the control period. A full explanation of the rationale behind our opex and capex proposals is set out later in the relevant sections of this paper.
- 3.9 Our proposed allowances for opex and capex are that which we consider efficient for PNGL to deliver the required outputs over the control period. Whilst we do intend to scrutinize at an individual cost line how the company actually spends its allowance (via our annual cost reporting regime), the most important consideration is that PNGL delivers the necessary outputs whilst keeping within its *overall* cost allowance.

## Duration

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- 3.10 As mentioned in Section 2, this price control will last for two years, those being calendar years 2012 and 2013.

## Indexation

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- 3.11 The standard regulatory RPI-X framework inflates the allowances set in a price control year-on-year by an appropriate index (usually the Retail Price Index, or RPI) minus an assumed annual efficiency target the regulator believes the company can achieve (the “X” in RPI-X).
- 3.12 The RPI is a broad measure of inflation for the economy and should already reflect within it economy wide efficiency gains. There are some instances however where it could be argued that the RPI is not a good measure of inflation facing a particular regulated company. For example, in recent years the price of commodities and hence materials has increased at a rate above that of the RPI. On the other hand, many companies have also experienced wage inflation of less than the RPI, owing mainly to the challenging economic environment.
- 3.13 To correct for things like this, the regulator can either use a different index or alternatively include in the “X” factor a further adjustment. These are commonly known as real price effects. By way of example, in its most recent price control for the electricity distribution network operators (DPCR5), Ofgem proposed positive real price effects of 1.1 per cent for network investments (capex) and 1.4 per cent for opex. With an ongoing efficiency assumption of one per cent per annum, the net effect was to offer annual expenditure increases above the RPI (RPI+0.1 per cent for capex and RPI+0.4 per cent for opex).
- 3.14 For the purposes of this price control, we expect PNGL to continue achieving efficiency gains in excess of economy wide gains, and propose applying the same assumption as used by Ofgem of one per cent per annum.
- 3.15 With regards to real price effects, over this control period PNGL will continue outsourcing the majority of its capital works to McNicholas Construction Limited. As PNGL’s contract costs with McNicholas are linked to the RPI, capex costs overall are not anticipated to increase by more than the RPI.

- 3.16 Similarly, as manpower constitutes the largest element of opex and wage pressures are likely to remain subdued for the foreseeable future, we do not anticipate opex costs rising by more than the RPI.
- 3.17 We therefore propose an unadjusted “X” factor of one per cent for PNGL12.

# 4 PNGL PRICE CONTROL SUBMISSION

## Introduction

- 4.1 PNGL is required as a condition of its gas conveyance licence to submit to the Utility Regulator all relevant information necessary for us to complete a price control review.
- 4.2 In late 2010 PNGL fulfilled this requirement. This section presents a summary of the information submitted by PNGL, focusing in particular on the resource requirements stated as necessary by PNGL to develop and operate its network over the control period.

## Operating Expenditure

- 4.3 The table sets out a summary of the overall opex allowance requested by PNGL. More detail of the build-up of many of the individual cost lines was also provided by PNGL.

**Table 2 – Operating Expenditure Submission, £k**

<i>Cost Item</i>	<i>2012</i>	<i>2013</i>	<i>Total</i>
Advertising, marketing and PR	785	788	1,572
Billing	217	221	438
Emergency costs	2,069	2,139	4,208
Entertainment	60	60	120
Fleet costs	268	269	536
Human resources	121	107	227
Incentives	847	847	1,693
Information Technology	305	285	590
Insurance	909	933	1,842
Licence fees	293	293	585
Manpower	5,016	5,058	10,074
Network maintenance	2,408	2,456	4,864
Office costs	492	486	978
Own use gas	17	17	34
Professional and legal fees	605	569	1,174
Rates	1,261	1,479	2,740
Stationery	46	47	93
Telephone and postage	103	104	207
Travel and subsistence	78	78	157
<b>Total</b>	<b>15,899</b>	<b>16,234</b>	<b>32,133</b>

Source: PNGL

## Capital Expenditure

4.4 The table sets out a summary of the overall capex allowance requested by PNGL. More detail of the build-up of many of the individual cost lines was also provided by PNGL.

**Table 3 – Capital Expenditure Submission, £k**

<i>Cost Item</i>	<i>2012</i>	<i>2013</i>	<i>Total</i>
7 bar mains	0	0	0
4 bar mains	471	0	471
Pressure reduction stations	0	0	0
Feeder mains	254	168	422
Infill mains	2,501	2,501	5,002
Domestic services	3,210	3,210	6,421
Domestic meters	1,747	1,742	3,489
I&C services	642	642	1,284
I&C meters	566	566	1,132
Network code	100	100	200
Fixtures and fittings	40	40	80
* Titanic Quarter project	169	0	169
IT	150	150	300
Management fee	2,631	2,574	5,205
<b>Total</b>	<b>12,481</b>	<b>11,694</b>	<b>24,175</b>

\* In 2011, PNGL was approached by Titanic Quarter Limited and asked to make gas available to the Titanic Quarter site. As this occurred *after* the PNGL submission, the costs associated with this project were not originally included. We have opted to include the requested costs of this project as part of this price control.

Source: PNGL

## PNGL Connection Assumptions

4.5 PNGL's assumed level of connections over the control period is set out below.

**Table 4 – Proposed Annual Connections**

<i>Cost Item</i>	<i>Annual Connections</i>
Domestic – Owner Occupier (OO)	3,700
Domestic – New Build (NB)	3,000
Domestic – Northern Ireland Housing Executive (NIHE)	500
Industrial and Commercial (I&C)	378
<b>Total</b>	<b>7,578</b>

Source: PNGL



## Environmental Benefits

- 4.6 In its submission, PNGL highlighted the positive impact that converting to natural gas from other fuels such as coal, oil and electricity (for heating) has on the environment. The company correctly pointed out that the government does recognise that an increase in take up of natural gas can deliver significant environmental benefits through a reduction in the level of carbon emissions.
- 4.7 PNGL further cited the recently published feasibility study which examined the possibility of extending the natural gas network in Northern Ireland<sup>4</sup>. Using the methodology set out in the study, PNGL suggest that the financial benefit of the carbon reduction arising from each additional domestic connection is in the region of £1,200 (present value).
- 4.8 We have taken this into consideration when formulating our proposals for this price control. Our considerations include that fact that in the absence of a platform to trade carbon, the financial benefit is notional only and cannot be realised in actual cash terms.

## PNGL12 Outputs versus PC03 Outputs

- 4.9 As part of its submission, PNGL also provided information on the level of outputs they planned to deliver over the control period, the main ones being:
- Kilometres of mains laid;
  - Number of properties passed; and
  - Number of properties connected.
- 4.10 For illustrative purposes, we set out below PNGL's actual performance in calendar years 2007 to 2009 (2009 was the most recent year for which we had audited data at the time of writing) and compare this with its allowance requests and forecast outputs for 2012 and 2013.

**Table 5 – PC03 Actuals versus PNGL12 Submission**

Allowances and Outputs	2007	2008	2009	Average 2007-09	2012	2013
	Actuals				PNGL Submission	
Capex, £m	13.4	11.1	12.7	12.4	12.3	11.7
Opex, £m	13.1	11.2	11.9	12.1	15.9	16.2
Total cost, £m	26.5	22.3	24.6	24.5	28.2	27.9
Pipe laid, km	80.2	60.7	78.2	73.1	58.3	51.3
Properties passed	8,438	8,027	8,168	8,211	5,250	5,250
Connections (domestic)	10,370	7,394	7,661	8,475	7,200	7,200
Connections (I&Cs)	532	506	457	498	378	378

All monetary figures above are in 2010 prices.

Source: PNGL and the Utility Regulator

<sup>4</sup> "Consultation on the potential for extending the natural gas network in Northern Ireland," Department of Enterprise, Trade and Investment, June 2011.  
[http://www.detini.gov.uk/consultation\\_on\\_the\\_potential\\_for\\_extending\\_the\\_natural\\_gas\\_network\\_in\\_northern\\_ireland](http://www.detini.gov.uk/consultation_on_the_potential_for_extending_the_natural_gas_network_in_northern_ireland)

- 4.11 From the figures above there are two main observations:
- First, overall allowances sought by PNGL in 2012 and 2013 are higher than in PC03. PNGL's capex allowance requests for 2012 and 2013 is broadly comparable to its actual capex spend in 2007 to 2009, but the opex allowance request is significantly higher. In total PNGL is seeking over £3 million more allowance in each year of PNGL12 than it has actually spent on average per year in PC03.
  - Second, the outputs that PNGL forecasts to deliver in 2012 and 2013 are significantly lower than that which was actually delivered in each year of PC03.
- 4.12 This high-level review of PNGL's submission demonstrates that PNGL is seeking higher overall allowances to deliver fewer outputs than it has historically been able to.
- 4.13 It is worth noting that PNGL did provide some detail and supporting commentary to explain why costs are forecast to increase. More detail and discussion is provided in the sections to follow.

# 5 OPERATING EXPENDITURE

## Introduction

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- 5.1 Historically PNGL has categorised its operating expenditure into 19 different cost lines. These are:

Advertising, marketing and PR	Human resources	Manpower	Rates
Billing	Incentives (for customers)	Network maintenance	Stationery
Emergency costs	Information Technology	Office costs	Telephone and postage
Entertainment	Insurance	Own use gas	Travel and subsistence
Fleet costs	Licence fees	Professional and legal fees	

- 5.2 Of the above cost lines, six out of the 19 items have accounted for about 75 per cent of opex allowances granted in previous price controls. As PNGL's submission for the forthcoming price control continues to mirror these proportions, we have focused our attention on the six larger cost lines. For reference the six larger cost lines are:
- Advertising, marketing and PR;
  - Emergency costs;
  - Incentives (for customers);
  - Insurance;
  - Manpower; and
  - Network maintenance.
- 5.3 For the remaining (smaller) cost lines we have considered these collectively (with a few exceptions, more details below), adopting what we consider to be a reasonable blanket approach to setting an allowance for these items.
- 5.4 We begin by considering the smaller cost lines. The larger cost lines are then considered one by one.

## Our Connection Assumptions

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- 5.5 Before examining in detail our proposed allowances, we set out the connection assumptions we have used in our modelling. This is necessary since some opex and capex allowances will vary explicitly with the number of connections, both in the setting of an *ex ante* allowances and later in the retrospective adjustments that are made *ex post* once actual connections are known. (The way we propose making retrospective adjustments is discussed later in Section 8).
- 5.6 We have accepted PNGL's proposed connections assumptions, with the exception of domestic owner occupiers (OO). In the period 2007 to 2009 PNGL outperformed on its domestic OO targets, achieving connections averaging around 4,200 per annum. We believe PNGL can continue to achieve connections at this level, are therefore proposing to use 4,200 instead of PNGL's proposed 3,700 per annum.

5.7 Our proposed connection targets are set out in the table below.

**Table 6 – Proposed Annual Connections**

<i>Cost Item</i>	<i>PNGL Submission</i>	<i>UR Proposal</i>
Domestic – OO	3,700	4,200
Domestic –NB	3,000	3,000
Domestic – NIHE	500	500
I&C	378	378
<b>Total</b>	<b>7,578</b>	<b>8,078</b>

Source: PNGL and the Utility Regulator

## Smaller Items

5.8 The 13 smaller cost lines *originally* considered suitable for dealing with collectively were as follows:

Advertising, marketing and PR	Human resources	Manpower	Rates
Billing	Incentives (for customers)	Network maintenance	Stationery
Emergency costs	Information Technology	Office costs	Telephone and postage
Entertainment	Insurance	Own use gas	Travel and subsistence
Fleet costs	Licence fees	Professional and legal fees	

5.9 A further revision was then necessary, requiring the removal of the following cost lines and for the following reasons:

- **Billing** – PNGL’s submission indicated an increase in costs because of supply competition. This warranted further investigation.
- **Entertainment** – we planned to reconsider the appropriateness of this cost line.
- **Information Technology** – IT costs for 2012 and 2013 were forecast to increase, and reasons were provided. Further investigation was therefore necessary.
- **Professional and legal fees** – PNGL’s submission indicated a substantial increase in costs, again warranting further investigation.
- **Rates** – historically a Rates allowance has been determined using a set formula; as we plan to continue with this methodology, Rates cannot be dealt with in a collective approach.

5.10 Therefore the remaining eight cost lines considered appropriate to deal with collectively are as follows:

Advertising, marketing and PR	Human resources	Manpower	Rates
Billing	Incentives (for customers)	Network maintenance	Stationery
Emergency costs	Information Technology	Office costs	Telephone and postage
Entertainment	Insurance	Own use gas	Travel and subsistence
Fleet costs	Licence fees	Professional and legal fees	

5.11 Note further that “Licence fees” are to be treated as pass-through and will therefore be adjusted retrospectively to reflect the actual fee levied on PNGL by our office. However for the

purposes of setting an *ex-ante* allowance, we have included this cost line in the collective approach used for the smaller cost lines.

#### **Collective approach to smaller items**

- 5.12 We considered a number of approaches for setting allowances for all of these smaller cost lines bearing in mind that historically and going forward, these items together account for no more than ten per cent of **total** PNGL expenditure.
- 5.13 We considered two main possibilities: (1) applying an average of the most recent actual spend over a desired number of years; or (2) using recent actual spend to determine a trend, and use this trend to extrapolate forward through 2012 and 2013. Both techniques were examined using data on actual spend over a two, three and five year period spanning 2005 to 2009.
- 5.14 Having considered the results of both approaches, we conclude that using a trend is less credible than using an average, since trending tends to exaggerate expenditure anomalies in any one particular year. Furthermore there is no evidence to support an argument that these costs are rising in line with the expanding customer base. We therefore propose setting allowances for these cost lines using an average, and have selected the most recent three year timeframe for our calculations (2007 to 2009).
- 5.15 The allowances we propose can be seen in Table 7 later in this section.

#### **Billing**

- 5.16 PNGL's allowance request is for £217k and £221k in 2012 and 2013 respectively. This compares to actual spend averaging £89k from 2007 to 2009.
- 5.17 PNGL explained the substantial increase is due to supply competition in the domestic market, which will increase the number of meter exchanges and meter reads that the distribution business will have to undertake.
- 5.18 PNGL provided our office with the build-up of its cost estimates, including the assumptions it is making. We have considered these assumptions, and adjusted them based on our own views of the level of switching activity the market is likely to experience. These views have been formed based on actual switching experience to date in electricity supply and gas supply.
- 5.19 This reduces the allowance for supply competition related costs from £175k in 2012 and £179k in 2013 to around £100k in each year respectively.
- 5.20 We have added on to this a further allowance (based on the three year average of actual costs) for business-as-usual billing activities. This amounts to c£45k, giving a total allowance overall for Billing of c£145k per annum.

#### **Entertainment**

- 5.21 PNGL's allowance request is for £60k per annum for 2012 and 2013. This compares to historic actual costs from 2007 to 2009 averaging around £53k per annum.
- 5.22 Historically our office has always granted PNGL an allowance for entertainment, but in this review we reconsidered its appropriateness altogether. We conclude that PNGL should still be granted an allowance for entertainment but at a reduced level.
- 5.23 We therefore propose to set an allowance of £20k per annum, based on offering around £150 per employee in line with HMRC guidance on non taxable employee benefits.

### **Information Technology**

- 5.24 PNGL has requested an allowance of £305k and £285k in 2012 and 2013 respectively.
- 5.25 For comparison historic actual costs from 2007 to 2009 have averaged around £185k per annum, versus an average annual allowance granted in PC03 of c£251k. This demonstrates that PNGL has successfully achieved efficiencies on its IT costs.
- 5.26 In addition, over the course of PC03 we have granted PNGL further IT allowances for the development of a switching system for domestic customers. It could be argued that rather than grant these additional allowances in full, our office could have reduced them by the amount of outperformance achieved on the general IT budget; the rationale for this approach being that IT expenditure on the switching system could be paid for from this surplus.
- 5.27 However we have not to date adopted such an approach.
- 5.28 In its submission PNGL explained that costs for IT are expected to rise over the control period, owing mainly to an increasing requirement to provide adequate security to business support systems as they grow and develop. PNGL's submission indicated that rising costs are driven specifically by items not previously a cost to the business, most notably:
- Additional system support costs;
  - Tape storage (security);
  - GIS/ Network analysis;
  - Internet hosting; and
  - Additional software system upgrades.
- 5.29 Our office recognises the importance of IT infrastructure to a company such as PNGL. The company's historic performance on IT expenditure, and our generous treatment of additional allowances for the domestic switching system, could support an argument to grant a reduced allowance.
- 5.30 However we are not proposing to reduce PNGL's requested allowance. Instead we propose granting PNGL what it has asked for, but on condition that we are unlikely to grant any additional allowances for unexpected IT expenditure during the control period, including any costs that may arise in respect of the Common Arrangements in Gas (CAG) project.

### **Professional and legal fees**

- 5.31 Originally we planned to treat this cost item as part of the collective smaller items. On reflection we then considered using a two year average instead of three year (i.e. exclude 2007) since in 2007 actual costs in this area were significantly higher due to the sale of PNGL's transmission business, and the development of PC03.
- 5.32 By way of example, the three year average (2007 to 2009) is c£300k per annum and the two year (2008 and 2009) is c£168k. This compares to an average annual allowance granted in PC03 of c£334k. As per expenditure on IT, PNGL's performance demonstrates successful achievement of efficiencies on professional and legal fees, particularly when allowances are compared to actual spend in 2008 and 2009.
- 5.33 PNGL is now seeking £605k in 2012 and £569k in 2013, which is a significant increase compared to both actual historic spend and annual allowances granted in PC03. Some detail was provided by PNGL on the build-up of these forecast costings, which we have reviewed and considered. In our review we categorised costs into two groups: (1) business-as-usual costs; and (2) new costs.

- 5.34 We note that business-as-usual costs are forecast to increase, but with no explanation as to why. We therefore propose to set such costs based on a historic two year average.
- 5.35 For new costs, there are three cost lines that were either not included at all prior to 2009 or were included but at a lower introductory value, and so are due to increase. These are:
- Rating agency costs i.e. fees payable for providing a credit rating;
  - Costs for PAS55 development; and
  - Non-executive director fees.
- 5.36 The requested sum for the above cost lines amounts to c£315k per annum. We have considered these items and propose setting an allowance of c£212k per annum<sup>5</sup>.
- 5.37 In total our overall allowance works out around £380k in each year.

### **Rates**

- 5.38 As mentioned in paragraph 5.9, we have historically set Rates using a formula which links the allowance to PNGL revenues. We propose to retain the formula approach.
- 5.39 Note that PNGL's allowance request for Rates was also calculated using the formula. However, our proposed allowance is lower than PNGL's request since we have based our calculation on a lower revenue requirement (assessed as part of this price control exercise) than that proposed by PNGL.
- 5.40 For the avoidance of doubt our proposed allowance for Rates has been calculated using the formula, but this allowance will be fixed once we issue our final decision.

### **Summary of smaller items**

- 5.41 Our allowance proposals are therefore presented in the table overleaf.
- 5.42 Note that the allowances presented overleaf are those that we have assessed using the methodologies described above. There is one final adjustment however to be made to *some* of these smaller cost lines, resulting in some of the numbers presented overleaf in Table 7 differing a small amount from those presented in the final overall opex allowance proposals summarised in Table 13 at the end of this section.
- 5.43 A full explanation for this adjustment will follow in paragraph 5.44 onwards, where we describe the Advertising, Marketing and PR mechanism.

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<sup>5</sup> Note that this figure does not include an allowance for the development of PAS55; see section on Network Maintenance for more details.

**Table 7 – Small Items Allowances, £k**

Cost Item	PNGL Submission			UR Proposed Allowance			Difference		
	2012	2013	Total	2012	2013	Total	2012	2013	Total
Billing	217	221	438	145	148	293	-72	-73	-145
Entertainment	60	60	120	20	20	40	-40	-40	-80
Fleet costs	268	269	536	249	249	499	-18	-19	-37
Human resources	121	107	227	73	73	146	-48	-33	-81
Information Technology	305	285	590	305	285	590	0	0	0
Licence fees	293	293	585	241	241	483	-51	-51	-103
Office costs	492	486	978	444	444	887	-48	-42	-91
Own use gas	17	17	34	14	14	28	-3	-4	-7
Professional and legal fees	605	569	1,174	380	380	760	-225	-189	-414
Rates	1,261	1,479	2,740	1,257	1,357	2,614	-5	-122	-126
Stationery	46	47	93	35	35	70	-11	-12	-23
Telephone and postage	103	104	207	82	82	163	-21	-23	-44
Travel and subsistence	78	78	157	49	49	98	-29	-29	-58
<b>Total</b>	<b>3,866</b>	<b>4,014</b>	<b>7,880</b>	<b>3,294</b>	<b>3,377</b>	<b>6,671</b>	<b>-572</b>	<b>-637</b>	<b>-1,209</b>

As mentioned in paragraph 5.42, the following cost lines in the table above are higher than those presented in the final overall opex allowances summary at the end of this section: Fleet costs, Human resources, Information Technology, Office costs, Rates, Stationery, Telephone and postage, Travel and subsistence. A full explanation for this adjustment will follow in the description of the Advertising, Marketing and PR mechanism.

*Source: PNGL and the Utility Regulator*



## Advertising, Marketing and PR

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- 5.44 In previous price controls our office has granted fixed allowances to PNGL for costs associated with sales activities. Whilst we believed, and still continue to believe, that such costs are necessary to continue growing the market, we are also mindful that allowances of this nature may no longer be appropriate given the company's level of maturity. Consider for example, that in its original business case PNGL had forecast that the market was going to grow much more quickly, thereby negating the need for sales-related allowances of the current magnitude.
- 5.45 For this reason we are now placing even greater emphasis on the need for all future connections made by PNGL to its network to be economic. By this we mean that on average, making a new connection to the network will deliver NPV positive revenues over a suitable time period. That is, the present value of direct revenues from the connection should be equal to or exceed the present value of direct costs of making that connection.
- 5.46 We therefore propose moving away from past practice of granting fixed allowances for sales-related costs and instead plan to remunerate PNGL with a per connection allowance. We have therefore designed a mechanism to assess what an economic allowance should be.

### **The mechanism**

- 5.47 As part of its submission, PNGL are looking for allowances for:
- Advertising and Marketing and PR;
  - Incentives i.e. monies offered to customers to connect to gas;
  - The Retail Operations Department in its Manpower submission (i.e. the sales team), including the Director of Retail Operations; and
  - A range of other shared corporate overhead costs, which are apportionable to sales activities.
- 5.48 We consider the above opex costs directly relevant for sales i.e. attracting new customers to connect to gas. In addition to opex costs, a new connection will also incur direct capex costs, those being the Service and the Meter. (Direct capex costs are considered in the next section.)
- 5.49 For the opex costs above, we have developed a mechanism that will assess a per connection allowance to cover all or some of these costs.

### **Mechanism principles**

- 5.50 The main principles used in the development of the mechanism are as follows:
- The opex allowance per connection has been calculated using the formula:

$$\text{Allowance per connection} = (\text{Revenue per connection}) - (\text{Direct capex cost per connection})$$

Where:

$$\text{Revenue per connection} = \text{Average consumption} \times \text{Conveyance tariff} \times \text{Recovery period}$$

AND

$$\text{Direct capex cost per connection} = \text{Determined service cost} + \text{Determined meter cost}$$

- We have developed a model around the above formulae using estimates, where necessary, for some key assumptions within the formulae.
- The mechanism will apply only to domestic Owner Occupier (OO) housing. We have therefore granted a certain level of fixed allowance for sales-related costs that are NOT associated with OO connections.

#### Revenue per connection

5.51 A reminder of the formula:

<b><i>Revenue per connection = Average consumption X Conveyance tariff X Recovery period</i></b>
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5.52 The assumptions we have used are as follows:

Variable	Assumption
Average consumption (A)	<b>390 therms per annum (tpa)</b> This is the approximate average consumption figure expected in 2012 and 2013, as advised by PNGL.
Conveyance tariff (B)	<b>37 pence per therm (ppt)</b> This is an estimate of the approximate tariff applicable to domestics in 2012 and 2013.
Recovery period (C)	<b>15 years</b> This was considered a suitable payback period for recovery of direct connection costs. Thereafter all future revenues would contribute to the costs of the wider network.
Average revenue per annum	<b>£144</b> Calculated as: (A) x (B)
Net present value (NPV) of average revenue over recovery period	<b>£1,428</b> NPV of: (A) x (B) x (C)

#### Direct capex cost per connection

5.53 A reminder of the formula:

<b><i>Direct capex cost per connection = Determined service cost + Determined meter cost</i></b>
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5.54 We look at capex allowances in detail in the next section, but to summarise:

Variable	OO – Credit customers	OO – Pay As You Go customers
Service cost	£512	£512
Meter cost	£85	£262
Proportion to be installed	15%	85%
Service cost (weighted)	<b>£512</b>	
Meter cost (weighted)	<b>£235</b>	

### Allowance per connection

- 5.55 Using the above figures we have determined an allowance per connection:

<b>Allowance (£)</b>	<b>=</b>	<b>(Revenue per connection) – (Direct capex cost per connection)</b>
	<b>=</b>	<b>1,428 – (512 + 235)</b>
	<b>=</b>	<b>681 (which we will round up to £690)</b>

### Allowance application

- 5.56 Using our model we have calculated an appropriate allowance of £690 per connection, to cover those opex costs we consider directly apportionable to sales-related activities for domestic OO properties. However, the full allowance will not be applicable to *all* new OO connections.
- 5.57 We consider that there will be a certain number of OO connections that would have happened anyway without any direct marketing or selling to these customers. We would describe these connections as “non-additional”. Since PNGL could in theory avoid any sales-related costs to connect such customers, no allowance will be applicable for these customers. We have assumed that 25 per cent of all new connections will fall into this category<sup>6</sup>.
- 5.58 There is also the issue of how long this allowance should be available to PNGL. In our considerations, we note on one hand that the GDNs in GB do not receive an explicit allowance of this nature. We also note that PNGL’s original business plan was for the company to achieve their target connections by 2016. On the other hand, we also acknowledge that at least some potential customers require a certain amount of direct marketing to switch over to gas. We are therefore proposing to reduce the allowance to 50 per cent (i.e. £345 per connection) from 2017 onwards.

### What costs are being replaced by the mechanism?

- 5.59 As stated in paragraph 5.47, the relevant opex costs are: (1) Advertising, Marketing and PR; (2) Incentives; (3) the Retail Operations Department in the Manpower submission, including the Director of Retail Operations; and (4) shared corporate overheads.
- 5.60 The full allowance request against the distribution business for these cost items are as follows:

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<sup>6</sup> For clarity, it is our intention that the amount of “non-additionals” will be fixed at 25 per cent of the target OO connections i.e. 25 per cent of 4,200, or 1,050.

**Table 8 – Potential Costs to be Replaced, £k**

<b>Cost Item</b>	<b>2012</b>	<b>2013</b>
<b>Advertising, Marketing and PR</b>		
<i>Market Development</i>	610	610
<i>Corporate Affairs</i>	148	151
<i>Additional Corporate Affairs</i>	27	27
<b>TOTAL</b>	<b>785</b>	<b>788</b>
<b>Incentives</b>		
<i>Domestic</i>	813	813
<i>I&amp;C</i>	34	34
<b>TOTAL</b>	<b>847</b>	<b>847</b>
<b>Retail Operations Department (inc Director)</b>	<b>1,070</b>	<b>1,083</b>
<b>Corporate Overheads (apportioned)</b>	<b>649</b>	<b>646</b>
<b>Total</b>	<b>3,350</b>	<b>3,363</b>

Source: PNGL and the Utility Regulator

- 5.61 The *Corporate Overheads (apportioned)* cost line above refers to a share of overhead costs we consider appropriate to apportion to the Retail Operations Department. The costs are:
- Fleet Costs;
  - Human Resources;
  - Rates (excluding network rates);
  - Office Costs;
  - Telephone and postage;
  - Stationery;
  - IT;
  - Travel and subsistence;
  - Insurance (Buildings and Car Insurance); and
  - Corporate support personnel AND their apportioned share of the above costs (by this we are referring to staff in the Finance and Business Development departments including the Finance Director, and to the Chief Executive Officer).
- Our intention is that these costs are to be recovered via the mechanism. Therefore we have reduced the fixed allowances proposed for these costs items by an appropriate amount. (This explains why for example our “smaller items” proposals set out in Table 7 are slightly higher than those presented in the final overall opex allowance proposals summarised in Table 13 at the end of this section.)
- 5.62 We consider that the costs PNGL seeks, as set out in the above table, should be recovered through the mechanism but do acknowledge that some element of these costs may not be directly linked to domestic OO sales. We therefore propose a fixed sum against some or all of the above cost lines, in addition to the allowance recoverable via the mechanism.
- 5.63 The fixed sums we propose, along with a rationale, are set out in the table below. Note that total costs in our proposed fixed allowances have been rounded down to the nearest £10k.

**Table 9 – Fixed Allowances, £k**

<b>Cost Item</b>	<b>2012</b>	<b>2013</b>	<b>Rationale</b>
<b>Advertising, Marketing and PR</b>			
<i>Market Development</i>	29	29	We accept that some of these costs will relate to connections other than domestic OOs, so have pro rated the total cost based on forecast I&C connections.
<i>Corporate Affairs</i>	148	151	Corporate Affairs costs are incurred to support the existing customer base and are not linked to achieving new connections. We therefore propose granting PNGL in the region of their full allowance request as fixed.
<i>Additional Corporate Affairs</i>	27	27	
<b>TOTAL</b>	<b>200</b>	<b>200</b>	
<b>Incentives</b>			
<i>Domestic</i>	0	0	Incentives offered to domestics are to be fully recovered via the mechanism.
<i>I&amp;C</i>	30	30	We propose allowing a sum in the region of what PNGL has requested for I&C incentives. And note that this will be the last time that we grant an explicit allowance for I&C incentives.
<b>TOTAL</b>	<b>30</b>	<b>30</b>	
<b>Retail Operations Department (inc Director)</b>	<b>500</b>	<b>500</b>	A detailed review of the Retail Operations Department indicates that there are some members of this team whose activities are not focused on OO domestics. We further accept that the Director of Retail Operations will spend some of their time on activities not related to OO domestics.
<b>Corporate Overheads (apportioned)</b>	<b>0</b>	<b>0</b>	Corporate overheads have already been apportioned using a ratio of those staff in the Retail Operations Department (whose focus is on OO domestics) to the total staffing complement at PNGL. Therefore no fixed sum is proposed.
<b>Total</b>	<b>730</b>	<b>730</b>	

Note that total costs have been rounded down to the nearest £10k.

Source: The Utility Regulator

## Summary

5.64 The A+M+PR mechanism is summarised as follows:

- The full allowance is £690 per OO connection, applicable to all new OO connections *after* consideration of non-additional connections.
- The total aggregate allowance has been calculated by multiplying the appropriate allowance (i.e. full or none in the case of non-additionals) by the forecast number of OO connections. This will be retrospectively adjusted at the time of the next price control using the actual number of connections.
- The allowances to be recovered via the mechanism will replace those costs set out in Table 8. Where an element of fixed allowance is considered appropriate, this has been included in our overall proposals.
- The full per connection allowance will reduce by 50 per cent from 2017 onwards.
- The mechanism and all its components will be reviewed at the next price control.

## Emergency Costs

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- 5.65 PNGL has requested an allowance of c£2.1 million per annum in its submission. For comparison, historic actual costs from 2007 to 2009 have averaged around £1.6 million per annum. We commissioned our engineering consultants, PB Rune, to advise on the appropriateness of PNGL's allowance request.
- 5.66 In undertaking this review, PB Rune examined the company's emergency programme, and interrogated PNGL staff on the detailed build-up of the cost estimates. Where comparable, costs have also been suitably benchmarked against other gas distribution networks (GDNs) in Great Britain (GB).
- 5.67 In Appendix 2 we include an extract from PB Rune's report with the full narrative on Emergency Costs. We propose accepting the recommendations from PB Rune and granting an allowance of c£1.8 and c£1.9 million in 2012 and 2013 respectively.

## Incentives

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- 5.68 For the avoidance of doubt, the cost item "Incentives" refers to a sum of money that PNGL makes available to new connecting customers to encourage the connection.
- 5.69 Incentives are covered as part of the A+M+PR mechanism.

## Insurance

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- 5.70 PNGL has requested an allowance of £909k and £933k in 2012 and 2013 respectively in its submission.
- 5.71 Historic actual costs in 2007, 2008 and 2009 are: £749k, £734k, and £662k respectively. This would indicate a clear downward trend even as the network has been expanding, which suggests PNGL has some ability to manage this cost downwards.
- 5.72 The approaches considered for smaller opex items have been considered for Insurance. Using the three year average approach would give an allowance of £715k per annum.
- 5.73 However our preferred approach is to use the Ofgem benchmark in the existing Gas Distribution Price Control Review (GDPCR). Ofgem's benchmark is 1.04 per cent of turnover, which was used to set allowances for network insurance (the equivalent of the Business Insurance element of PNGL's total Insurance cost build-up).
- 5.74 For the remaining elements of PNGL's total Insurance costs, namely Fleet Insurance and Building Insurance, we propose using the three year average approach. This gives a total Insurance allowance of c£533k and c£548k in 2012 and 2013 respectively<sup>7</sup>.

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<sup>7</sup> Note that our allowance proposal for Business Insurance has been calculated using annual turnover figures *as proposed by PNGL in its submission (£46-48 million)*. Also, note that the final allowance proposed for Insurance at the end of this section is less than the figures cited here, since we have apportioned an element of the Insurance allowance to be recovered via the A+M+PR mechanism.

## Manpower

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- 5.75 PNGL has requested an allowance of £5 million and £5.1 million in 2012 and 2013 respectively in its submission. For comparison, historic actual costs in 2007, 2008 and 2009 are: £4.6 million, £4 million, and £4 million respectively.
- 5.76 In its submission, PNGL included a detailed build-up of its Manpower costings, which has allowed our office to undertake a thorough review. An initial inspection revealed the main reason for the increase in costs in 2012 and 2013 is an increase in the number of staff working in the Commercial Operations department. We have considered the appropriateness of this as part of our review.
- 5.77 In our review we have attempted to answer two main questions:
- Is the level of staffing resource requested by PNGL appropriate for operating and maintaining their network?
  - Is the level of remuneration appropriate across the various job grades?
- We consider each of these questions in turn.

### **PNGL staffing resource**

- 5.78 PNGL is organised into four main departments as follows:
- **Commercial Operations** – this department can be thought of as PNGL’s engineering department, and is responsible for the safe, reliable and efficient operation of its network.
  - **Retail Operations** – this department is responsible for sales and customer service.
  - **Finance** – this department provides corporate support functions such as finance, human resources and IT support.
  - **Business Development** – this department deals with business planning, regulation and corporate affairs.
- 5.79 There is also a senior management team comprising four executive directors, namely: Chief Executive Officer (CEO), Director of Commercial Operations, Director of Retail Operations, and Director of Finance and Business Development.
- 5.80 The full staff complement presented as full time equivalents (FTEs) in post, as advised by PNGL, is set out in the table overleaf.

**Table 10 – PNGL Staffing Complement**

<i>Department</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>
	<i>Actual</i>			<i>Forecast</i>			
<b>Senior Management</b>	5.0	4.2	4.0	4.0	4.0	4.0	4.0
<b>Commercial Operations</b>	48.5	46.4	44.8	52.0	54.5	60.0	59.0
<b>Retail Operations</b>	43.9	37.6	34.8	37.0	38.0	39.0	39.0
<b>Finance</b>	25.1	28.4	27.4	29.8	30.8	30.8	30.8
<b>Business Development</b>	7.5	8.0	7.0	7.0	7.0	7.0	7.0
<b>Total</b>	<b>130.0</b>	<b>124.6</b>	<b>118.0</b>	<b>129.8</b>	<b>134.3</b>	<b>140.8</b>	<b>139.8</b>

Source: PNGL

5.81 Below we set out the main conclusions from this aspect of our review.

- **Commercial Operations**

It is clear from inspecting the above table that PNGL is seeking an increase in the resources available to this department. PNGL did provide further detail to justify this, namely that additional staff are required: (1) to support its growing operation and maintenance programs; (2) to ensure the requirements of the Dangerous Substances and Explosive Atmosphere Regulations (DSEAR) are met; and (3) to meet the extra demands anticipated by its transportation services team, following the opening of the domestic market in 2010.

We asked our engineering consultants, PB Rune, to consider the appropriateness of PNGL's proposed resourcing in this department. PB Rune advised that PNGL's resourcing levels did not seem unreasonable; therefore we are content to accept PNGL's proposals.

- **Retail Operations**

We set out earlier in this section (see paragraph 5.44 onwards, the A+M+PR mechanism) our intention to implement a per connection opex allowance for new OO connections. We described how this mechanism would replace all sales-related costs directly attributable to new OO connections.

A significant element of the Retail Operations department costs have therefore been replaced by the A+M+PR mechanism.

- **Finance**

We benchmarked the resources PNGL require for corporate support functions (such as finance, human resources and IT support) using a range of metrics and publicly available comparative data. Our analysis indicates that PNGL's resourcing levels are not unreasonable; therefore we are content to accept PNGL's proposals.

- **Business Development**

We are content to accept PNGL's proposals.



### **Remuneration levels**

- 5.82 As part of its submission, PNGL provided a detailed build-up of the remuneration packages offered to its staff. We have benchmarked these remuneration packages at all levels using publicly available comparative data and advice from remuneration consultants, and have used these to inform our proposed allowances.

### **Summary**

- 5.83 We are proposing to accept the additional FTEs requested by PNGL<sup>8</sup>. However we have included a significant element of the Retail Operations Department in the A+M+PR mechanism, thereby reducing the fixed allowance element in our proposals.
- 5.84 We have benchmarked these remuneration packages at all levels using publicly available comparative data and advice from remuneration consultants, and have used these to inform our proposed allowances.
- 5.85 In summary, we are proposing a fixed allowance for Manpower of c£3.6 million in 2012 and 2013<sup>9</sup>.

## **Network Maintenance**

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- 5.86 PNGL has requested an allowance of c£2.4 million and c£2.5 million in 2012 and 2013 respectively in its submission. For comparison, historic actual costs from 2007 to 2009 have averaged around £1 million per annum. We commissioned our engineering consultants, PB Rune, to advise on the appropriateness of PNGL's allowance request.
- 5.87 In undertaking this review, PB Rune examined the company's forward maintenance programme, and interrogated PNGL staff on the detailed build-up of the cost estimates. In its report on the matter, PB Rune provided analysis under three headings: (1) network maintenance; (2) meter maintenance; and (3) supplier work requests.

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<sup>8</sup> These additional resources are considered sufficient for PNGL to successfully carry out its activities, including all resources needed to facilitate customer switching.

<sup>9</sup> It is worth noting that our remuneration consultants advised that pay increases in the Northern Ireland private sector for 2010 and 2011 has been around two per cent (significantly below the increase in the RPI). There may be merit therefore in offering a lower increase to the Manpower allowance than RPI. However on balance, for these draft proposals we do not propose isolating the Manpower allowance and applying a separate (lower) uplift than that applied to all other costs.

5.88 The allowance request under each heading in 2012 and 2013 are as follows:

**Table 11 – Network Maintenance Submission, £k**

<i>Maintenance Area</i>	<i>2012</i>	<i>2013</i>	<i>Total</i>
Network maintenance, including costs associated with DSEAR <sup>10</sup>	462	471	933
Meter maintenance	1,282	1,308	2,591
Supplier work requests	664	677	1,341
<b>Total</b>	<b>2,408</b>	<b>2,456</b>	<b>4,864</b>

Source: PNGL and PB Rune

5.89 The advice we received, and our decision regarding allowances, is summarised as follows:

- **Network maintenance**

Network maintenance comprises all activities associated with operation and maintenance of network pressure control equipment, including pressure regulators incorporated in supply connections to industrial and commercial, and domestic premises. Associated costs are driven by policies, procedures and operational activities appropriate to the various types of asset incorporated in the distribution network.

In its submission, PNGL provided what PB Rune described as “a detailed and credible analysis” of the build-up of the network maintenance cost. PB Rune further advised that:

- PNGL’s policy regarding the frequency and scope of routine maintenance activity is aligned with manufacturers’ recommendations, which may be overly conservative (and thus result in higher costs).
- PNGL’s tendency to follow manufacturers’ recommendations stems from the fact the company does not operate an asset risk management system, which would contain information that might otherwise inform a maintenance schedule based on need and reliability.
- PB Rune therefore suggested that we advise PNGL to develop and implement a suitable asset risk management system, such as that required under PAS55<sup>11</sup>.
- PB Rune further suggested that if/when PNGL implements PAS55 and incorporates its principles into its maintenance operations, PNGL will have access to better information that will facilitate optimisation of activity, based on need and reliability. This should in turn improve overall cost effectiveness.
- Finally, setting aside the above considerations, PB Rune found no significant issues in the cost build-up as presented by PNGL.

<sup>10</sup> The Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) requires employers to assess the risks of fires and explosions that may be caused by dangerous substances in the workplace. These risks must then be eliminated or reduced as far as is reasonably practicable. The aim is to protect employees and other people who may be put at risk, such as visitors to the workplace and members of the public.

<sup>11</sup> PAS55:2008 is the BSI Specification for the optimized management of physical assets and is regarded as the industry standard of best practice. PAS55 is an internationally recognized specification that details the requirements for establishing a whole-life management system for all types of physical assets. Compliance with the specification demonstrates effective management of assets, and the associated risks, to external authorities, e.g. regulators, HSE. Also, it provides evidence that asset maintenance processes are appropriate, cost is optimized and safety performance is managed.

We propose granting PNGL its full allowance request for network related maintenance but with an efficiency reduction applied to reflect our previous expectations that PNGL would have developed an asset risk management system by now (see paragraph 5.90 below).

We also will advise PNGL to develop and implement a suitable asset risk management system, but are not proposing to grant an explicit allowance to do so since: (1) it has already been suggested in the last two price controls but the company has not yet acted on this; and (2) Ofgem has never granted an allowance to the GDNs for similar undertakings.

Finally, when developing the next price control, if information on asset condition is not available, we may commission our consultants to carry out actual site visits and physically inspect a sample of PNGL assets. The intention being that our consultants can advise on a maintenance schedule – and associated costs – based on need and reliability, rather than manufacturers' recommendations.

- **Meter maintenance**

As with the network maintenance cost item, PNGL has developed a maintenance schedule for meters in line with manufacturers' recommendations. This is likely to be overly conservative, leading to a heavier workload than might otherwise be needed if the maintenance schedule was based on need. However as stated above, such a schedule cannot be developed without a suitable asset risk management system.

This issue of overall workloads notwithstanding, PB Rune also compared PNGL's meter maintenance unit costs with that of National Grid Metering, who undertake similar work in Great Britain. PB advised that PNGL's unit costs were reasonable in comparison.

We propose granting PNGL its full allowance request for meter maintenance less an efficiency reduction (see paragraph 5.90 below), and reiterate the importance to PNGL of developing an asset risk management system as soon as possible.

- **Supplier related maintenance**

The components of this cost area are customer telemetry, meter switching and supplier work requests (to both domestic and I&C properties).

- We propose to grant PNGL its full allowance for customer telemetry.
- Meter switching costs relate to customers requesting a replacement meter, and PNGL has assumed the volume of such requests will increase as a result of the opening of the domestic market to competition. PNGL's estimated cost is in the region of £300k per annum in 2012 and 2013.

We have considered the assumptions used by PNGL and adjusted them downwards based on our own views of the level of switching activity the market is likely to experience. We therefore propose to grant PNGL c£38k per annum for meter switching costs.

- PNGL is seeking around £330k per annum for supplier work requests (about £310k for domestic works and £20k for I&C). We propose to grant PNGL its full allowance for domestic works. However, we consider it appropriate at this stage of the market's development for any supplier requested works in respect of I&C customers to be paid for directly by the end customer. We therefore propose offering no allowance for I&C work requests.

### Asset risk management systems and associated efficiencies

- 5.90 It has been the opinion of our office for sometime now that PNGL should develop and implement an asset risk management system. For example in our price control decision for the period 2002 to 2007, we suggested that PNGL should develop such a system. PNGL did not act on our suggestion during this control period, so we restated the opinion in PC03.
- 5.91 Note that we did not explicitly direct PNGL to develop such a system – we merely suggested it would be good practice as we do not believe it is our place to micromanage PNGL on such issues. We did however reduce PNGL’s allowance request in PC03, to reflect the fact that the company was unlikely to be operating to the most efficient maintenance schedule.
- 5.92 PNGL has still not made sufficient progress in developing a suitable system. Given this lack of progress – and the fact we believe it would be in the best interest of everyone involved, including PNGL, that the company operates under such a system – we will again suggest that the company develop and implement a suitable system.
- 5.93 Furthermore, in recognition that the company is in all likelihood still not operating to the most efficient maintenance schedule (as advised by PB Rune), we are again proposing to reduce the allowances in respect of network and meter maintenance<sup>12</sup>.
- 5.94 The table below presents a summary of our proposed allowances for Network Maintenance.

**Table 12 – Network Maintenance Allowances, £k**

<i>Maintenance Area</i>	<i>2012</i>	<i>2013</i>	<i>Total</i>
Network maintenance, including costs associated with DSEAR	416	424	839
Meter maintenance	1,154	1,177	2,332
Supplier work requests	381	389	770
Total	1,951	1,990	3,941

*Source: The Utility Regulator*

<sup>12</sup> We are suggesting a reduction of ten per cent in this price control review, but are prepared to increase this in the 2014 review if PNGL continues to resist the development of an asset risk management system such as PAS55. PNGL has already indicated that it will not develop such a system if our office does not grant it an explicit allowance. However, and to repeat, we do not consider it appropriate to grant PNGL an allowance given that: (1) we suggested in the last two price controls to develop such a system but the company has not yet acted; (2) Ofgem has never granted an allowance to the GDNs for similar undertakings; and (3) it is considered best industry practice to operate such a system, and would in fact be beneficial to PNGL. Nevertheless we still expect the company to develop and implement a suitable system during this control period.

## Opex Summary

5.95 In the table below we set out a summary of the total opex allowances we propose for 2012 and 2013.

**Table 13 – Opex Summary, £k**

Cost Item	PNGL Submission			UR Proposed Allowance			Difference			
	2012	2013	Total			Total	2012	2013	Total	Total, %
Advertising, marketing and PR	785	788	1,572	200	200	400	-585	-588	-1,172	-75%
Billing	217	221	438	145	148	293	-72	-73	-145	-33%
Emergency costs	2,069	2,139	4,208	1,835	1,890	3,725	-234	-249	-483	-11%
Entertainment	60	60	120	20	20	40	-40	-40	-80	-67%
Fleet costs	268	269	536	203	203	407	-64	-65	-130	-24%
Human resources	121	107	227	60	60	119	-61	-47	-108	-48%
Incentives	847	847	1,693	30	30	60	-817	-817	-1,633	-96%
Information Technology	305	285	590	249	232	481	-57	-53	-109	-19%
Insurance	909	933	1,842	524	539	1,063	-385	-394	-779	-42%
Licence fees	293	293	585	241	241	483	-51	-51	-103	-18%
Manpower	5,016	5,058	10,074	3,593	3,608	7,200	-1,424	-1,450	-2,873	-29%
Network maintenance	2,408	2,456	4,864	1,951	1,990	3,941	-457	-466	-923	-19%
Office costs	492	486	978	361	361	723	-130	-125	-255	-26%
Own use gas	17	17	34	14	14	28	-3	-4	-7	-19%
Professional and legal fees	605	569	1,174	380	380	760	-225	-189	-414	-35%
Rates	1,261	1,479	2,740	1,236	1,337	2,573	-25	-142	-168	-6%
Stationery	46	47	93	28	28	57	-18	-18	-36	-39%
Telephone and postage	103	104	207	66	66	133	-37	-38	-74	-36%
Travel and subsistence	78	78	157	40	40	80	-38	-38	-76	-49%
<b>Total</b>	<b>15,899</b>	<b>16,234</b>	<b>32,133</b>	<b>11,176</b>	<b>11,387</b>	<b>22,564</b>	<b>-4,722</b>	<b>-4,847</b>	<b>-9,569</b>	<b>-30%</b>
Potential £ from A+M+PR mechanism				2,174	2,174	4,347	2,174	2,174	4,347	n/a
<b>Total</b>	<b>15,899</b>	<b>16,234</b>	<b>32,133</b>	<b>13,350</b>	<b>13,561</b>	<b>26,911</b>	<b>-2,549</b>	<b>-2,674</b>	<b>-5,222</b>	<b>-16%</b>

As per the comment under the summary table for smaller cost items, a number of cost lines in the table above may be lower than the allowance stated in the main body of this chapter. This is due to the apportionment of some of the allowed costs to the A+M+PR mechanism.

Source: PNGL and the Utility Regulator

# 6 CAPITAL EXPENDITURE

## Introduction

- 6.1 PNGL has requested an allowance of c£12.3 million and c£11.7 million in 2012 and 2013 respectively in its submission, to deliver a forecast workload as set out in the table below. For comparison historic actual costs from 2007 to 2009 have averaged around £12.4 million per annum, delivering an average workload which is also shown in the table.

**Table 14 – Workloads: PNGL12 Forecast and 2007 to 2009 Actuals**

<i>Workload</i>	<i>2012</i>	<i>2013</i>	<i>Average 2007-09</i>
Pipe laid, km	58.3	51.3	73.1
Properties passed	5,250	5,250	8,211
Connections (domestic)	7,200	7,200	8,549
Connections (I&Cs)	378	378	498

*Source: PNGL and the Utility Regulator*

- 6.2 We commissioned our engineering consultants, PB Rune, to advise on the appropriateness of PNGL's allowance request.
- 6.3 In undertaking this review, PB Rune examined the company's forward capital programme, some areas of which were considered in great detail, and interrogated PNGL staff on the build-up of the cost estimates. We have taken on board PB Rune's findings in setting our proposed allowances for capex.

## Overview

### General overview

- 6.4 In its submission PNGL provided a build-up of its estimated capex costs, which typically consisted of a forecast workload multiplied by an estimated unit rate. As an example, in 2012 PNGL forecast it will lay just over 5.4 kilometres of 4 bar pipe at an average unit cost of c£87 per meter. Multiplying the two together gives an overall cost of c£470k, which is what PNGL has requested for 4 bar pipe laying in 2012.
- 6.5 This method has been applied by PNGL for most of the individual capex cost items.
- 6.6 In its review, PB Rune examined at a summary level the overall cost effectiveness of PNGL at delivering capital projects. The analysis looked at both historic performance (2007 to 2009) and future forecasts (2012 and 2013). PB Rune compared PNGL with the GDNs in GB, and concluded that PNGL is generally efficient at undertaking and delivering capital projects. Implicit in this is that the unit rates for the various capex activities, as proposed by PNGL, do not seem unreasonable.

### **Street works legislation**

- 6.7 In GB there are two main pieces of legislation which set out the rules and regulations that apply whenever utilities or any other such organisations undertake capital works on public roads. They are the Traffic Management Act (TMA) and the New Roads and Street Works Act (NRSWA). There is currently no equivalent legislation in Northern Ireland, but it is anticipated that the Department for Regional Development (DRD) will introduce legislation in due course.
- 6.8 As instructed by our office, PNGL has included an uplift of ten per cent to those capex cost items that will be impacted if and when legislation equivalent to the TMA and NRSWA in GB is introduced in Northern Ireland<sup>13</sup>. At this stage no one is sure when this legislation will be brought in, and indeed what the likely impact on costs will be. For this reason we have agreed with PNGL that all costs associated with the legislation will be adjusted retrospectively at the time of the next price control, to reflect the actual level of expenditure incurred as a result. This approach protects both PNGL (in the event actual costs turn out higher) and consumers (in the more likely event that the legislation is delayed, or that the impact is less than our assumption).
- 6.9 PNGL has embedded the ten per cent uplift into the unit rates for the following cost items (since these activities involve capital works on public roads):
- 4 bar mains;
  - Feeder mains;
  - Infill mains;
  - Domestic services; and
  - I&C services.
- 6.10 In our review of capex costs and in setting allowances, we have removed the uplift from the unit rates and instead include TMA as a separate cost item. This will better facilitate the retrospective adjustment at the time of the next price control.
- 6.11 We have also retained the ten per cent uplift and applied this to the cost items listed above.

### **Management fee**

- 6.12 PNGL outsource much of its capital works to a third party contractor, currently McNicholas Construction Limited. Costs forecast under the generic heading of “management fee” covers all costs incurred by McNicholas associated with managing PNGL construction activity i.e. manpower and associated costs, supply chain costs, depot costs, security, training, safety equipment, general office and support costs etc.
- 6.13 In addition, the management fee also covers operating costs relating to staff directly employed by PNGL, plus their associated overheads, that are recharged from opex to capex.
- 6.14 In keeping with what it has always done historically, PNGL has submitted the management fee as a separate and explicit cost item. This treatment of management costs differs from most other capital works contracts operated by GDNs in GB (and indeed in Northern Ireland), since costs associated with managing contracts are usually embedded in the quoted unit rates.
- 6.15 Whilst there is nothing inherently wrong with the way that PNGL builds up its costs, it does make comparison more difficult. To get around this problem, in our proposals we have

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<sup>13</sup> We commissioned engineering consultants to advise on the typical cost increase arising as a result of TMA and NRSWA in GB. Following this advice, we consider ten per cent to be a reasonable assumption at this stage.

apportioned the management fee across the various capex activities undertaken by PNGL. This allows more direct comparison of unit costs with other GDNs.

#### Overview summary

- 6.16 As PB Rune in general found PNGL to be efficient at undertaking and delivering capital projects, we have broadly accepted the implied unit rates of the various capex activities forecast over the control period.
- 6.17 Our allowance proposals however differ from PNGL's in two ways:
- The unit rates submitted by PNGL include a ten per cent uplift for TMA. In our proposals we have stripped out this uplift, and instead include TMA as a separately and explicit cost item; and
  - PNGL has submitted a forecast of its management fee as a separate and explicit cost item. In our proposals we have determined what we consider to be an efficient allowance for the management fee, and apportioned this across capex activities on a pro rata basis. Our proposed unit rates therefore include an appropriate uplift to account for management costs.

## 7 Bar Mains

- 6.18 PNGL does not plan to lay any 7 bar pipe during the control period. Accordingly we have not needed to assess or grant an allowance for this cost item.

## 4 Bar Mains

- 6.19 PNGL plans to lay 5,413 meters of 4 bar mains, all in 2012. In its submission the cost per meter was around £87, which includes an uplift for TMA.
- 6.20 We have removed the TMA uplift and embedded a proportion of the management fee cost item into the 4 bar unit rate. Our proposed allowance is £100 per meter.

**Table 15 – 4 Bar Mains Allowance**

Variable	PNGL Submission		UR Proposal	
	2012	2013	2012	2013
Pipe laid, km	5.4	0	5.4	0
Cost per meter, £	87	87	100	100
Total, £k	471	0	541	0

Source: PNGL and the Utility Regulator



## Pressure Reduction Stations

- 6.21 PNGL does not plan to construct any pressure reduction stations during the control period. Accordingly we have not needed to assess or grant an allowance for this cost item.

## Feeder Mains

- 6.22 PNGL plans to lay 4,983 meters of feeder mains in 2012, and 3,395 meters in 2013. In its submission the cost per meter was around £50, which includes an uplift for TMA.
- 6.23 We have removed the TMA uplift and embedded a proportion of the management fee cost item into the feeder unit rate. Our proposed allowance is £58 per meter.

**Table 16 – Feeder Mains Allowance**

Variable	PNGL Submission		UR Proposal	
	2012	2013	2012	2013
Pipe laid, km	5.0	3.4	5.0	3.4
Cost per meter, £	50	50	58	58
Total, £k	254	168	289	197

Source: PNGL and the Utility Regulator

## Infill Mains

- 6.24 In previous price controls we have granted an allowance per property passed for infill mains, with the allowance varying depending on the type of property. For example an allowance of say, £500 (a purely illustrative number) may have been granted in the past for each domestic owner occupier household that PNGL passed as it built out its network.
- 6.25 We have chosen to retain this approach for PNGL12.
- 6.26 In preparing its submission, PNGL carried out a detailed analysis of all the areas that remain in its licence area that are not currently readily connectable to the gas network. PNGL developed costing estimates of the cost of building out the network into these areas, which it shared with our office and PB Rune.
- 6.27 The PNGL submission indicated an assumed allowance per property passed for each type of property. This is summarised as follows:
- For owner occupier, PNGL's analysis indicates an appropriate allowance of £705. This figure has been calculated as a weighted average cost of passing all remaining owner occupier properties in PNGL's licence area. PNGL did acknowledge however that the actual average cost could vary widely from this, depending on the actual properties that were passed during the control period;
  - For new build properties, PNGL's analysis indicates an appropriate allowance of £287;
  - For NIHE properties, PNGL's analysis indicates an appropriate allowance of £414; and

- For I&C properties, PNGL's analysis indicates an appropriate allowance of £875.

- 6.28 Note the above allowances include the uplift for TMA.
- 6.29 We undertook a review of PNGL's allowance requests, supported by PB Rune, and found the requests to be reasonable.
- 6.30 However for owner occupier properties, our review indicated that PNGL will pass around 700 properties of this nature *as a consequence of passing NIHE properties*. For example, consider that a typical NIHE estate might contain houses that are both NIHE properties and owner occupier properties. Further consider that the uniform nature of the estate would suggest an equal cost to PNGL to lay infill mains passed either type of house. For this reason, we believe it is appropriate for these 700 properties to grant PNGL the same allowance as we grant for NIHE properties.
- 6.31 For the remaining 550 owner occupier properties to be passed each year, a higher allowance request would apply. We have therefore calculated an allowance for passing *all* owner occupier properties as a weighted average of 700 consequentially passed properties, and 550 "normal" passed properties.
- 6.32 We have also removed the TMA uplift and embedded a proportion of the management fee cost item into the infill unit rate. Our proposed allowances are as follows:

**Table 17 – Infill Mains Allowance**

Variable	PNGL Submission		UR Proposal	
	2012	2013	2012	2013
<b>Number of properties passed</b>				
Owner occupier	1,250	1,250	1,250	1,250
New build	3,000	3,000	3,000	3,000
NIHE	600	600	600	600
I&C	400	400	400	400
<b>Allowance per property passed, £</b>				
Owner occupier	705	705	600	600
New build	287	287	382	382
NIHE	414	414	488	488
I&C	875	875	917	917
<b>Aggregate allowance, £k</b>				
Owner occupier	881	881	750	750
New build	860	860	1,146	1,146
NIHE	249	249	293	293
I&C	350	350	367	367
<b>plus allowance for Millisle extension</b>	161	161	147	147
<b>Total, £k</b>	<b>2,501</b>	<b>2,501</b>	<b>2,702</b>	<b>2,702</b>

Source: PNGL and the Utility Regulator

## Domestic Services

- 6.33 PNGL plans to connect 7,200 domestic customers in 2012 and 2013. We have applied an upwards adjustment to the forecast for domestic owner occupiers by 500 per annum (see the discussion in Section 5 under Our Connection Assumptions).
- 6.34 In its submission the cost per service was around £446, which includes an uplift for TMA.
- 6.35 We have removed the TMA uplift and embedded a proportion of the management fee cost item into the service allowance. Our proposed allowance is £512 per service.

**Table 18 – Domestic Services Allowance**

Variable	PNGL Submission		UR Proposal	
	2012	2013	2012	2013
Number of connections	7,200	7,200	7,700	7,700
Cost per service, £	446	446	512	512
Total, £k	3,211	3,211	3,942	3,942

Source: PNGL and the Utility Regulator

## Domestic Meters

- 6.36 A meter will be required for all new connections, and PNGL estimate that around 2,000 existing meters will need replacing each year. PNGL's allowance request for new meters is higher than for replacement meters (£196 versus £166) since the mix of new meters is expected to include more pay-as-you-go meters, which are more expensive than the alternative of credit meters.
- 6.37 We are proposing a single allowance for all domestic meters, calculated as a weighted average of the two types of meters. We have also embedded a proportion of the management fee cost item into the meter allowance. Our proposed allowance is £235 per meter.
- 6.38 This allowance has been applied to the higher assumed level of connections, as for domestic services.

**Table 19 – Domestic Meters Allowance**

Variable	PNGL Submission		UR Proposal	
	2012	2013	2012	2013
Number of new meters	7,200	7,200	7,700	7,700
Cost per new meter, £	196	196	235	235
Number of replacement meters	1,962	2,051	1,962	2,051
Cost per replacement meter, £	166	166	235	235
Total, £k	1,747	1,742	2,271	2,292

Source: PNGL and the Utility Regulator

## I&C Services

- 6.39 PNGL plans to connect 378 I&C customers in 2012 and 2013. In its submission the cost per service was around £1,699, which includes an uplift for TMA.
- 6.40 We have removed the TMA uplift and embedded a proportion of the management fee cost item into the service allowance. Our proposed allowance is £1,979 per service.

**Table 20 – I&C Services Allowance**

Variable	PNGL Submission		UR Proposal	
	2012	2013	2012	2013
Number of connections	378	378	378	378
Cost per service, £	1,699	1,699	1,979	1,979
Total, £k	642	642	748	748

Source: PNGL and the Utility Regulator

## I&C Meters

- 6.41 A meter will be required for all new connections, and PNGL estimate that around 140 existing meters will need replacing each year. PNGL's allowance request for replacement meters is substantially higher than for new meters. This is due to the consumption patterns, and hence the required meter size and cost, of those customers whose meters will need replacing i.e. the larger customers with high consumption volumes.
- 6.42 We are proposing a single allowance for all I&C meters, calculated as a weighted average of the allowance for new and replacement meters. We have also embedded a proportion of the management fee cost item into the meter allowance. Our proposed allowance is £1,281 per meter.

**Table 21 – I&C Meters Allowance**

Variable	PNGL Submission		UR Proposal	
	2012	2013	2012	2013
Number of new meters	378	378	378	378
Cost per new meter, £	469	469	1,281	1,281
Number of replacement meters	137	141	137	141
Cost per replacement meter, £	2,793	2,793	1,281	1,281
Total, £k	566	566	660	665

Source: PNGL and the Utility Regulator

## Other Capex Items

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- 6.43 The individual cost items under “other capex” are: network code, fixtures and fittings, capex-related IT, costs related to the Titanic Quarter project, and management fee. With the exception of the management fee, the other three costs items are relatively small and the requested allowances reasonable. We therefore propose granting PNGL what it has asked for.
- 6.44 With respect to the management fee, we have already discussed what this cost line constitutes (see paragraph 6.12 above). Given that PB Rune’s review found PNGL to be generally efficient at undertaking and delivering capital projects, we have concluded that PNGL’s actual spend on the management fee in the period 2007 to 2009 could be considered efficient.
- 6.45 Similar to the approach taken with the smaller opex cost items, we have taken an average of the management fee from 2007 to 2009. We have then pro rated this average based on the forecast workload in 2012 and 2013 compared to the 2007 to 2009 period, using a composite scale variable based on kilometres of pipe laid and connections made (both domestic and I&C).
- 6.46 This gives an allowance of c£2.4 million per annum, which we have then apportioned across all capex activities.

## Traffic Management Act

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- 6.47 As mentioned from paragraph 6.7 onwards, PNGL embedded an uplift of ten per cent into the unit rates of those cost items that involve capital works on public roads. We however have removed this uplift from the unit rates and instead include TMA as an explicit separate cost line. This is to better facilitate the retrospective adjustment that will be made at the time of the next price control.
- 6.48 We have retained the ten per cent uplift and applied this to the relevant cost items that will be impacted by TMA.
- 6.49 We propose therefore to allow PNGL an allowance of c£822k in 2012 and c£759k in 2013 for TMA. This allowance will be retrospectively adjusted at the time of the next price control, to reflect actual expenditure incurred as a result of TMA.

## Capex Summary

6.50 In the table below we set out a summary of the total capex allowances we propose for 2012 and 2013. Note that our proposals are based on PNGL achieving an additional 500 domestic owner occupier connections per annum.

**Table 22 – Capex Summary, £k**

Cost Item	PNGL Submission			UR Proposed Allowance			Difference			
	2012	2013	Total	2012	2013	Total	2012	2013	Total	Total, %
7 bar mains	0	0	0	0	0	0	0	0	0	n/a
4 bar mains	471	0	471	541	0	541	71	0	71	15%
Pressure reduction stations	0	0	0	0	0	0	0	0	0	n/a
Feeder mains	254	168	422	289	197	486	35	29	64	15%
Infill mains	2,501	2,501	5,002	2,702	2,702	5,405	201	201	403	8%
Domestic services	3,210	3,210	6,421	3,942	3,942	7,885	732	732	1,464	23%
Domestic meters	1,747	1,742	3,489	2,271	2,292	4,562	524	550	1,073	31%
I&C services	642	642	1,284	748	748	1,496	106	106	212	17%
I&C meters	566	566	1,132	660	665	1,325	94	99	193	17%
Network code	100	100	200	100	100	200	0	0	0	0%
Fixtures and fittings	40	40	80	40	40	80	0	0	0	0%
Titanic Quarter project	164	0	164	164	0	164	0	0	0	0%
IT	150	150	300	150	150	300	0	0	0	0%
Management fee	2,631	2,574	5,205	0	0	0	-2,631	-2,574	-5,205	-100%
Total excluding TMA	12,475	11,694	24,170	11,608	10,836	22,444	-868	-858	-1,726	-7%
* Traffic Management Act				822	759	1,581	822	759	1,581	n/a
Total including TMA	12,475	11,694	24,170	12,430	11,595	24,025	-46	-99	-145	-1%

\* No explicit costs for TMA were set out in the PNGL submission; instead they were embedded into the mains laying estimates. However in our allowances we have extracted the cost of TMA from our allowed unit rates for mains laying, and therefore include an explicit allowance for TMA.

Source: PNGL and the Utility Regulator

# 7 REGULATORY MODEL

## Introduction

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- 7.1 The proposed opex and capex allowances, as set out in the previous sections, feed into a regulatory model which calculates the allowed revenues over the control period. This is a vital final step in our price control setting process.
- 7.2 This section of the paper focuses on a number of the other key components of the regulatory model, namely:
- Cost of capital;
  - Depreciation; and
  - The value of the regulated asset base at the beginning of 2012.
- 7.3 We now consider each one in turn.

## Cost of Capital

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- 7.4 PNGL has a fixed cost of capital<sup>14</sup> embedded in its licence, set at 7.5 per cent (in real terms and pre tax) until the end of 2016. (To better understand the reason for awarding PNGL a cost of capital in this manner, readers should refer to the narrative in Appendix 1 which describes the history of the company and its governing regulatory regime.)
- 7.5 For this price control, our office considered reviewing the appropriateness of PNGL's existing cost of capital, as there are arguments as to why 7.5 per cent may not reflect the risks facing the company (see Appendix 1 for more details). However on reflection, and when viewed against the overall price control package we have put together for PNGL12, we have decided to retain PNGL's cost of capital at 7.5 per cent over the control period.
- 7.6 In the next price control review (to take effect from 2014) we will be setting a revised cost of capital from 2017 onwards, most likely using a standard methodology such as the capital asset price model (CAPM). We envisage that this will entail a full assessment of all the building blocks comprising a weighted average cost of capital (WACC), including consideration of PNGL's risk profile versus that of the GDNs in GB, for example.

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<sup>14</sup> Note that we use the terms "cost of capital" and "rate of return" interchangeably.

## Depreciation

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- 7.7 Future assets still to be constructed are depreciated in our regulatory model using a straight-line methodology over a range of periods, as follows:
- Mains – depreciated over 40 years;
  - Services – depreciated over 35 years; and
  - Meters – depreciated over 15 years.
- 7.8 For the existing asset base, in its submission PNGL propose a straight-line methodology over 34 years i.e. the number of years left of its licence recovery period from 2012. We have retained this methodology in our own modelling.

## Total Regulatory Value

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- 7.9 It is standard regulatory practice to review the value of a regulated company's asset base at each price control. In our review we have considered the value of the PNGL asset base (defined in the licence as the company's Total Regulatory Value, or TRV) at the opening of the previous price control, PC03. We have then considered the adjustments that need to be made to reach an opening TRV position in this price control.

### **Opening TRV in PC03 and PNGL12**

- 7.10 As part of the 2006 refinancing discussions and the resulting 2007 licence modifications, our office assessed the value of the PNGL asset base. A figure of £312.8 million (2006 prices) was determined and granted to PNGL, taking effect at the end of 2006. This figure included an element for historic outperformance, to allow PNGL to benefit from additional cashflows as a reward for past efficiencies.
- 7.11 The figure of £312.8 million fed directly into the opening TRV in 2007, the year that PC03 commenced.
- 7.12 Over the course of PC03, PNGL has continued to develop and build out its network, and in so doing has been increasing the net value of its asset base. We are in agreement with PNGL that the net addition in respect of approved capitalised expenditure over the course of PC03 is c£98.5 million.
- 7.13 As well as approving the addition of allowed capitalised expenditure to the asset base, our assessment of the opening value of the asset base for PNGL12 has sought to address two further issues, namely:
- Deferred capex; and
  - Treatment of historic outperformance.
- 7.14 Below we consider each of these in more detail.



**Deferred capex**

- 7.15 PNGL has been granted previous allowances for projects it has yet to complete, or were completed much later than originally anticipated. As a result PNGL's asset base has inflated at a greater rate than it would otherwise have if allowances were (or are) granted at the time of actual spend. We believe gas consumers should not have to pay for pipes before they are built and propose making an adjustment to the asset base to account for this.
- 7.16 This issue was identified and highlighted at the time developing PC03. In our final determination we stated:
- "The Utility Regulator wishes to consider the appropriateness of deferred capex (4/7 bar and Governors) that is planned for future construction, and will review the planned activity to ascertain when/if it will be carried out and if it would be in the customer interest to use the "deferred" cash within the asset base for other construction activities. This analysis will form one of the reviews to be conducted during PC03."* (Emphasis added).
- 7.17 As part of this price control exercise, PNGL submitted updated information on the status of the relevant deferred projects identified in PC03 (details can be seen in Appendix 3). Our analysis of this information indicates the following:
- PNGL was originally remunerated for these projects in 1999 or 2000, by way of an addition to their asset base.
  - All the projects were deferred from their original date and are now either:
    - No longer required;
    - Completed;
    - Still to be completed; or
    - No longer required but have been substituted for other projects.
- 7.18 Our analysis further indicates that PNGL has benefited from the early receipt of allowances into its asset base versus when the work actually took place. The make-up of the gain varies depending on the status of the project, namely:
- For projects no longer required, PNGL has received an allowance it should not have and has been earning a rate of return on that allowance;
  - For projects deferred but subsequently completed, PNGL received a return on the allowance for a number of years before the projects were actually completed; or
  - For projects still to be completed, PNGL already has the allowance in their asset base and has been earning a return on this allowance before the projects are completed.
- [Note for projects no longer required but that have been substituted for other projects, there has been no obvious benefit to PNGL. We are therefore excluding such projects from our proposals to remedy the matter.]
- 7.19 Taking the above together, we have concluded that the PNGL asset base has inflated to a level beyond that which it should have and propose making an adjustment to account for this.

### ***Deferred capex – our proposal***

- 7.20 As we have not been presented with any evidence to conclude that deferrals occurred as result of efficiencies, we propose removing all of the gain to PNGL, as identified in the narrative above. We have calculated an appropriate downward adjustment to the opening TRV in 2012 of c£21.2 million.
- 7.21 This figure represents the removal of:
- Any return earned prior to a project being completed; plus
  - The original allowance that entered the asset base *if the project is not yet completed*.
- 7.22 A detailed build-up of our proposed adjustment is set out in Appendix 4.

### ***Treatment of historic outperformance***

- 7.23 Between 1996 and 2006 PNGL overall spent less than the allowances set by our office in our price controls. The aggregate absolute figure determined to be an efficiency amounted to around £37.2 million (2006 prices).
- 7.24 PNGL did not actually receive any cashflow benefits from this outperformance as it was being achieved because of the significant revenue underrecoveries accumulated between 1996 and 2006<sup>15</sup>. For this reason, as part of the 2006 discussions our office agreed to roll up the outperformance at the prevailing rate of return and include this rolled-up amount in the asset base. This led to an addition of c£74.1 million (2006 prices) to the asset base at the end of 2006, allowing PNGL to generate additional cashflows as a reward for past outperformance.
- 7.25 This and all related matters pertaining to the 2006 discussions and resulting 2007 licence modifications were consulted on by our office in April 2007<sup>16</sup>.

### ***Outperformance – our proposal***

- 7.26 The paper cited in footnote 16 explains in more detail the main aspects of the 2007 licence modifications. Where outperformance is mentioned it is talked about in the context of being shared between customers and PNGL, based on regulatory practice elsewhere.
- 7.27 In order that the benefits from PNGL's outperformance are shared between the company and customers, we consider it appropriate to remove the outperformance addition from the asset base. We propose doing this at the end of the current control period i.e. the end of 2011.
- 7.28 We consider that such action is consistent with regulatory practice elsewhere, and with the intentions of the 2006 discussions and the resulting 2007 licence modifications. To illustrate the point, in the shaded box below we briefly consider how other GB regulators treat outperformance.

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<sup>15</sup> This is in contrast to the standard model of incentive regulation, whereby outperformance leads to an immediate cashflow benefit to the regulated entity.

<sup>16</sup> "Phoenix Natural Gas Licence Restructuring: Proposed Price Control Licence Modifications", the Utility Regulator, 6 April 2007. [http://www.uregni.gov.uk/uploads/publications/Phoenix\\_Gas\\_price\\_control\\_conditions\\_consultation\\_April\\_07.pdf](http://www.uregni.gov.uk/uploads/publications/Phoenix_Gas_price_control_conditions_consultation_April_07.pdf)

### **Capex outperformance: some regulatory precedents**

#### ***Ofgem***

Ofgem's five year rolling mechanism allows capex outperformance to enter and remain in the asset base for a period of five years, during which time the company receives depreciation and return as normal. After five years however, the outperformance is removed from the asset base. The net gain to the company will depend on the rate of return and depreciation period applied, but is typically in the region of 40 per cent of the outperformance.

#### ***Ofwat***

Ofwat's approach to capex outperformance is less generous than Ofgem, and sees outperformance shared out equally in thirds:

- The company is allowed to retain one third of any outperformance as a reward;
- Customers also benefit, their share being one third of the total; and
- The remaining third is put towards capital projects for which an allowance was *not* granted by Ofwat in the current control period. In other words, one third of any outperformance achieved by the company must be used to pay for capital works *not* already approved by Ofwat.

- 7.29 Our proposal to remove the outperformance from the asset base in 2012 is consistent with the approach taken by Ofgem. Furthermore we consider that PNGL has recovered an adequate benefit in the five year period 2007 to 2011. As an alternative we could retain the figure in the asset base until a future year e.g. 2016. This would allow an increased reward to PNGL for the outperformance. However on balance we consider the five year period to be consistent with best regulatory practice.
- 7.30 The sum we propose removing is the c£74.1 million (2006 prices) cited above, less an amount to correct for the fact that this sum *includes* an element for deferred capex (which we are already making an adjustment for), and then suitably depreciated for five years. This calculation leaves a residual value of c£52.8 million (2006 prices), or c£59.6 million in 2010 prices. This is the sum we propose removing from the asset base in 2012.
- 7.31 Allowing PNGL to retain the outperformance for the five year period 2007 to 2011 has delivered a cumulative cashflow benefit to the company of around £15 million. We consider that this is an appropriate amount to reward PNGL for outperformance achieved in the period 1996 to 2006, bearing in mind that none of this money relates to investments that were ever made.

#### **Opening TRV in 2012**

- 7.32 Taking all of the above together, the removal of deferred capex and outperformance from the asset base results in an adjustment to the opening TRV in 2012 of c£80.8 million. The opening TRV in 2012 would therefore be c£369.9 million.
- 7.33 We have carefully considered how this proposed adjustment impacts on PNGL's financeability (see the next section for a full discussion). We further recognise that the primacy of the consumer interest drives us to take the investor's position seriously, as consumers are to a greater or lesser extent exposed to the resulting cost of capital. We have proposed the adjustment to the TRV only because the reasons for doing so are strong.

## Allowed Revenues and Impact

7.34 We have used the regulatory model to assess the revenues that we propose granting over this control period. In the table below we set out a summary of the key input components to the model, and the resulting allowed revenues it has calculated<sup>17</sup>.

**Table 23 – Regulatory Model Inputs and Resulting Allowed Revenues, £m**

Component	PNGL Submission			UR Proposal			Difference	Difference, %
	2012	2013	Total	2012	2013	Total	Total	Total
Opex allowance	15.9	16.2	32.1	13.3	13.6	26.9	-5.2	-16%
Capex allowance	12.5	11.7	24.2	12.4	11.6	24.0	-0.1	-1%
Total	28.4	27.9	56.3	25.8	25.2	50.9	-5.4	-10%
Cost of capital	7.5%			7.5%			No difference.	
Depreciation	See discussion above.			As per PNGL submission.			No difference.	
The above allowances are fed into our regulatory model, which calculates a revenue requirement to ensure the company recovers the value of future as well as past investments, plus a return on this investment.								
Allowed revenues	46.8	48.3	95.1	39.6	40.9	80.5	-14.6	-15%

Source: PNGL and the Utility Regulator

- 7.35 If we compare our proposals to the current PNGL tariffs, it will result in domestic customers paying around £10 less per annum, mainly driven by the end of the reward to PNGL for historic outperformance. Compared to the PNGL submission, our proposals will result in the average domestic customer paying around £25 less per annum.
- 7.36 For I&C customers, particular large ones, the difference will be greater given their higher consumption levels. We estimate savings for I&C customers may amount to tens of thousands of pounds, and for the very largest it may even exceed £100k per annum.

<sup>17</sup> This table sets out allowances for the control period only i.e. 2012 and 2013. However, it should be noted that as part of every price control we do model costs and revenues etc right through to 2046 (the end of the PNGL's licence recovery period). This is necessary since the PNGL business model requires the deferral of some of its entitled revenues, to be recovered at some point in the future. This helps keep conveyance charges lower now which in turn encourages the continued growth of the gas market.

## 8 RETROSPECTIVE ADJUSTMENTS

### Retrospective Adjustment Mechanism

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- 8.1 As part of PC03, we agreed with PNGL that a number of cost items would be retrospectively adjusted at the time of the next price control, to correct for deviations between forecast and outturn events. The purpose of these adjustments is to ensure that PNGL is remunerated only for the activities and outputs that it actually undertakes and delivers.
- 8.2 An agreement was reached on the specifics of how the mechanism would function, formalised in a supplemental note and spreadsheet model to the PC03 determination in July 2010. The supplemental note to the agreement is included in Appendix 5, and contains full details of what is included in the retrospective mechanism and how it operates.
- 8.3 We propose retaining the mechanism for this price control (although some amendments will be required however, namely the addition of the A+M+PR mechanism). We may also carry out audits of actual outputs over the control period, to ensure PNGL has actually delivered what it claims to.

### Treatment of Unforeseeable/ Unpredictable Costs

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- 8.4 The retrospective mechanism has to date also been used as the vehicle through which we have granted additional allowances to PNGL for genuinely unforeseeable and/ or unpredictable costs that have arisen after the PC03 determination was finalised. The process for granting such additional costs can be summarised thus:
- Where an unforeseeable or unpredictable cost has arisen, PNGL has approached our office requesting additional monies. Each submission has been accompanied with information to substantiate the request.
  - Our office has then considered and reviewed the request and, where appropriate, granted an additional allowance.
  - The additional allowance has then been captured (or “logged up” as commonly termed by regulators) in the retrospective adjustment mechanism, ensuring that PNGL is appropriately remunerated for these allowed costs at the time of the next price control.
- 8.5 We intend to continue using the mechanism as the vehicle for dealing with genuinely unforeseeable and/ or unpredictable costs over the control period<sup>18</sup>. It should also be noted that we will only consider granting additional allowances of this nature for spend in excess of a de minimus of £100k.

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<sup>18</sup> Note that any additional (efficient) allowance we consider appropriate to grant may include a net reduction of any outperformance achieved on say, the general IT budget (for IT projects) or the general professional and legal fees budget (for additional consultancy).

# 9 FINANCEABILITY

## Introduction

- 9.1 In carrying out our gas functions, we are required to further the principal objective in relation to gas (see paragraph 3.2) whilst also having regard to the financial health of the companies we regulate. Therefore any decisions we make in our price control reviews should not compromise the ability of a regulated company to finance its licensed activities.
- 9.2 We further recognise that maintaining financeability is also in the consumer interest (as consumers are exposed to the resulting cost of capital), and therefore take the issue seriously.
- 9.3 As part of this price control review therefore, we are carefully considering how our draft proposals impact on the financeability of PNGL.

## Assessing Financeability

- 9.4 In order to deliver the outputs required over the control period and beyond, PNGL must be able to finance its activities (through both debt and equity). To ensure our draft proposals allow this to happen, we have tested the financeability ratios that the company should be reasonably expected to achieve if it is operating efficiently.
- 9.5 We have developed our financeability test primarily around the key metrics that credit rating agencies focus on when determining a company's credit rating. These key metrics are:
- **Gearing** – which we have defined as **Net debt/TRV**; and
  - **Debt interest cover** – specifically the **Post-maintenance interest cover ratio (PMICR)**<sup>19</sup>.
- 9.6 In the table below we set out a summary of the gearing values and interest cover that are consistent with a stable investment grade credit rating.

**Table 24 – Key Financial Metrics and Credit Ratings**

Metric	Fitch		Moody's	
	A	BBB	A	Baa
Gearing	60%	> 70%	45 - 60%	60 - 75%
PMICR	1.75x	1.5x	2.0 - 4.0x	1.4 - 2.0x

Source: Ofgem consultation on strategy for the RIIO T1 and GD1, specifically the annex discussing financial issues.

<sup>19</sup> We have used the PMICR instead of say, EBITDA/Interest, since the PMICR recognises that regulatory depreciation and, in the specific case of PNGL's business model, the deferral of income, are key elements of the regulatory building blocks for revenue. In our case we have defined PMICR as: EBITDA adjusted for over- or underrecoveries, less regulatory depreciation, plus any deferred revenue entitlement, less cash taxes, all divided by cash interest. (Note that EBITDA is 'earnings before interest, tax, depreciation and amortisation'.)

- 9.7 We have also considered other metrics including funds from operations (FFO) interest cover, for which Ofgem used a benchmark value of three times FFO interest cover in DPCR5.

## Initial Findings

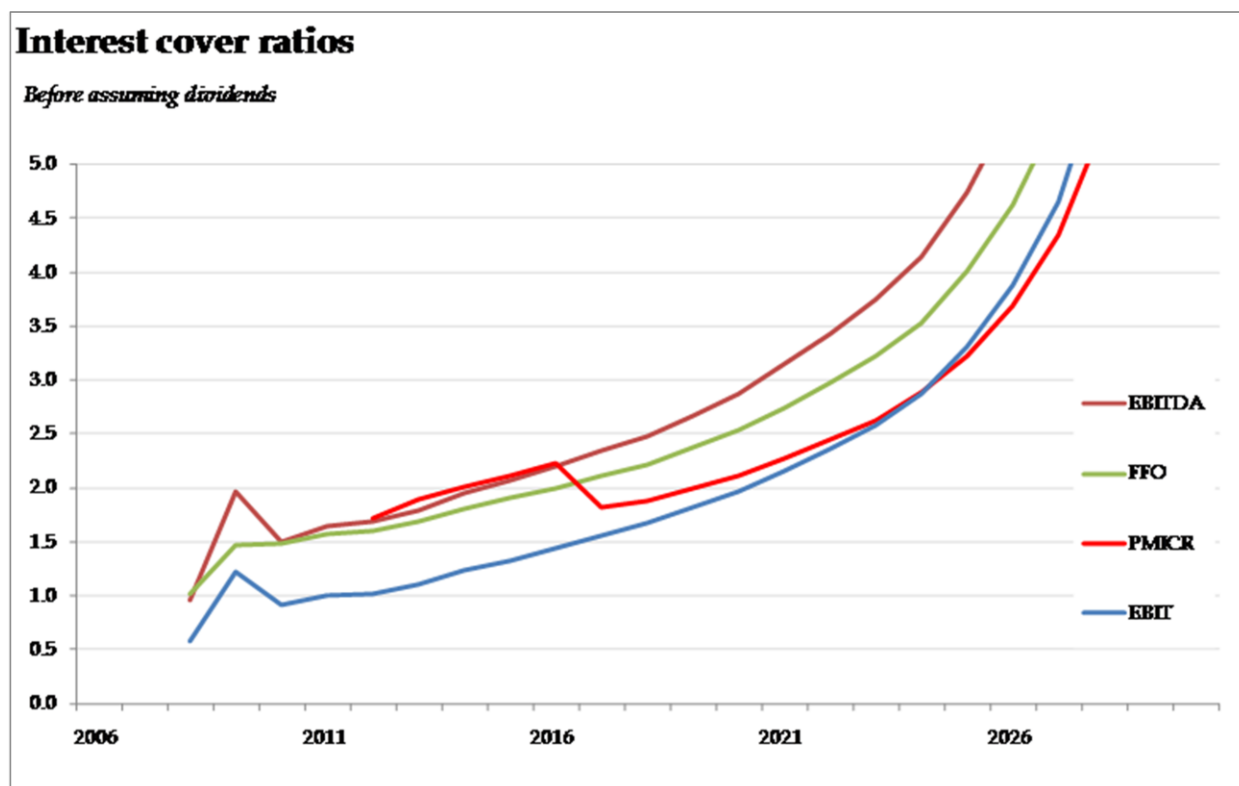
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- 9.8 To carry out the financeability assessment, we developed an extended version of our regulatory model to include accounting and cashflow analysis. The initial findings from the financeability modelling are as follows:
- Before assuming dividends, the business is substantially cashflow positive in the medium to long term;
  - Gearing will start slightly higher than 70 per cent at the beginning of 2012, but will fall below this level by the end of the year;
  - In the absence of dividends, the projections indicate that net debt would be eliminated by about 2030. Given the licence recovery period is to 2046, this would indicate scope for substantial dividends;
  - The PMICR is around 1.7 times at the beginning of 2012, and improves gradually thereafter;
  - FFO interest cover is around 1.6 times at the beginning of 2012, and improves gradually thereafter.
- 9.9 With the exception of FFO interest cover, all of the above findings indicate the company would remain financially sound under our draft proposals.
- 9.10 With regards FFO interest cover, and bearing in mind that Ofgem uses a benchmark value of three times, we recognise that a cover ratio of 1.6 times may appear low. We further recognise that a conventional regulatory response might be to re-profile revenues via for example, accelerated depreciation.
- 9.11 However, we do not consider such a re-profiling appropriate given the relative maturity of the Northern Ireland gas market. Instead, some revenue entitlements are deferred into the future to be recovered against a (projected) larger customer base. This reduces upward pressures on current prices, which in turn supports further growth of the market. The deferral of revenue entitlement also leads to the gradual improvement of PNGL's financial ratios over the medium and long term (see diagram overleaf)<sup>20</sup>.
- 9.12 As a final point, it is important to note that our financeability analysis is focused on the medium to long term. It is not our intention to advance cashflows in the event of any apparent short term dips in the financeability metrics. While we would seek to understand the reason behind such shortfalls, the onus will be on the company to resolve the situation. If however PNGL can demonstrate serious financing difficulties – and assuming of course the company is operating efficiently – we may consider potential solutions to assist the company.

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<sup>20</sup> The deferral of revenues has always been a feature of the PNGL business model and is well understood. It follows therefore that ratios such as FFO interest cover are expected to be low in the earlier years of the licence recovery period, but then increase gradually over time.

Diagram 1 – Interest Cover Ratios



Note that the dip in the PMICR projections occurs because of the reduction in the cost of capital in our model from 2017 onwards. (PNGL's cost of capital is fixed in the licence at 7.5 per cent until the end of 2016; from 2017 onwards we have assumed a cost of capital of around 5.9 per cent, based on the Ofgem cost of capital in the existing price control review for the GDNs in GB.)

Source: *The Utility Regulator*

## Initial Conclusions

- 9.13 At this stage we are comfortable that our draft proposals, coupled with a central case scenario, leave the company on a financially sustainable trajectory. Before issuing a final decision on our proposals, we intend to continue developing our assessment of financeability. Any consultation responses we receive on this issue will also be incorporated into our thinking.



## 10 NEXT STEPS

### Call for Responses

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- 10.1 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 1700 on Friday 21 October 2011 and should be addressed to:

**Carl Hashim**

Gas Directorate

Queens House

14 Queen Street

Belfast

BT1 6ED

Tel: 028 9031 6641

E-mail: [carl.hashim@uregni.gov.uk](mailto:carl.hashim@uregni.gov.uk)

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

### Implementation of the Price Control

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- 10.3 Following the conclusion of this consultation, we will duly consider all responses and then formulate our final decision.
- 10.4 We will also need to make some amendments to the PNGL licence to implement the price control. A statutory four week consultation will be carried out to implement these licence changes, either at the same time that we publish our final decision or shortly after.

# APPENDIX 1

## A Brief History of PNGL

### A Brief History of PNGL

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In this appendix we briefly document PNGL's history, with a focus on the changing nature of the risk-reward balance facing the company. We took account of this history when considering an appropriate rate of return over the control period.

#### **1996 to 2006**

In 1996 PNGL was awarded a licence that gave it a recovery period of 20 years, during which time the company would construct the network, develop and grow the market, and ultimately recover its investment.

The original licence differed from a typical regulated entity's licence in that all of PNGL's expenditure was capitalised, regardless of its nature. In addition PNGL was granted a rate of return enshrined in the licence at 8.5 per cent, in real terms and pre tax, and stated as fixed until the end of the licence recovery period.

- Capitalising all of PNGL's expenditure was considered necessary because it was private sector funding developing the network from the outset, with no meaningful income generation expected to follow for several years (since it would take time to grow the market). Therefore it was considered reasonable that all expenditure be capitalised.
- The high rate of return was granted to reflect the high level of risks associated with developing an entirely new market from a zero base.

PNGL began constructing the network in the Greater Belfast and Larne areas, but by the early Noughties it was becoming clear that the original business case was flawed and that demand for PNGL's product was not growing as rapidly as envisaged. It was therefore looking more and more likely that PNGL would struggle to recoup its investment within the 20 year time frame. PNGL considered the possibility of raising its prices substantially, which our office felt would be harmful to the still infant gas industry. This paved the way for a renegotiation of the PNGL licence.

#### **2006 to 2011**

PNGL and our office developed a solution in 2006, which led to significant licence modifications in 2007. The changes benefited PNGL in many ways, but to summarise:

- Between 1996 and 2006, PNGL opted to price below the maximum level set by our office in our price controls, and thus accumulated significant underrecoveries over the period (some of which the company may have never recovered under the previous licence arrangements). As part of the negotiations, we agreed to capitalise the underrecoveries into the opening asset value (OAV) in 2006. This increased the OAV by c£76 million (2006 prices).
- Between 1996 and 2006, PNGL overall spent less than the allowances set by our office in our price controls. The aggregate absolute figure determined to be an efficiency amounted to around £37.2 million (2006 prices). However PNGL did not actually receive any cashflow benefits from this

outperformance as it was being achieved because of the significant revenue underrecoveries<sup>21</sup>. For this reason, our office agreed to roll up the outperformance at the prevailing rate of return and include this rolled-up amount in the asset base. This led to an addition of c£74.1 million (2006 prices) to the OAV, thereby allowing PNGL to generate additional cashflows from 2007 as a reward for past outperformance.

- A recovery period of 40 years beginning in 2006 was granted. Given the 1996 licence had been in effect for ten years at this stage, the total recovery period granted to PNGL from start to finish now sits at 50 years.

In return PNGL did see its rate of return reduced from 8.5 per cent to 7.5 per cent, fixed at this level until 2016. PNGL also agreed to sell its transmission business.

The third price control of PNGL (PC03) followed shortly after the 2006 deal was concluded. Some further changes were made in that price control that also benefited PNGL, the key ones being:

- PNGL was moved from a price control to a revenue control, removing volume risk from PNGL.
- PC03 saw the introduction of an extensive retrospective adjustment mechanism, which sees much of PNGL's allowances (for both opex and capex) adjusted up or down depending on outturn events, significantly reducing activity-based risks for PNGL.

A further point worth mentioning is that PNGL is likely to still be off-setting past losses against current profits, meaning its post tax rate of return is likely to be much higher than comparable utilities in Great Britain.

### **2012 onwards**

The company today faces very different risks than those it once faced.

- It has laid pipe in almost all of its existing licence area, so no longer faces the same level of construction risk as it once did.
- There are no planned major expansions to its network, which in effect means PNGL is now a stable "steady as she goes" business rather than a rapidly growing business. Inherent in this is that the risks it faces are much lower.
- The 2007 licence modifications have given PNGL a recovery period that will total 50 years by 2046. And at this stage the market has grown sufficiently to the point where even if there was little or no further growth, PNGL could still realistically recover its investment by 2046.
- Customer connections have not suffered during the recession and there seems to be a good constant flow of new customers (perhaps reflecting a steady stream of connections as oil boilers age and need replacing, or people renovate their homes).

### **To summarise**

PNGL faces very different risks today and going forward than it did in the past. And whilst the company has been significantly de-risked, its corresponding rate of return has not yet been reduced to rebalance the risk-reward profile it enjoys.

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<sup>21</sup> This is in contrast to the standard model of incentive regulation, whereby outperformance leads to an immediate cashflow benefit to the regulated entity.

## APPENDIX 2

### Emergency Costs

#### Emergency Costs

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As stated in the main body of this report, we commissioned PB Rune to examine PNGL's emergency programme and provide advice on an efficient allowance that we should grant over this price control period. The text below is an extract from the PB Rune report.

#### Extract from PB Rune Report

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### EMERGENCIES

The Emergency cost element within the PNGL submission cannot be directly compared with the Emergency elements as reported by GB network to Ofgem. *Table 25* below shows the mapping between GB Networks (& Metering Companies) and PNGL

PNGL Cost Elements		GB Network (& Metering)
First Call (PES)	ETM (PES) <sup>22</sup>	Metering
	Emergency (PES)	Emergency
Emergency (Sub Contractor)		Repair
Call Centre		Part of Work Management

**Table 25**

### Emergency Volumes

PNGL has explained both at the meeting and in their note on emergency numbers that NI does not have a 24 hour emergency gas number other than the emergency number (0800 002 001) which is answered by National Grid on their behalf. This statement is used to explain why they are receiving calls which should not normally be expected to be handled by the gas emergency service operated by PNGL. In discussion at the meeting assurances were given by PNGL that there is no benefit in consumers calling PNGL to attend to non-emergency situations (such as a boiler breakdown), as the person attending the report will advise that it is not within the scope of the service. The difference between PNGL and GB first call operatives is that in those attending for PNGL are PES staff who are trained to undertake appliance work, and on rota will move between the emergency role and appliance servicing. In GB the first call operatives are not trained in appliance repair and not accredited to carry out the work.

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<sup>22</sup> Phoenix Energy Services

It is noted from the Phoenix web site that PES offer a boiler servicing contract which offers 7 days/week 365 days/year boiler breakdown cover. The web site does not offer a telephone number which operates out of hours and weekends.

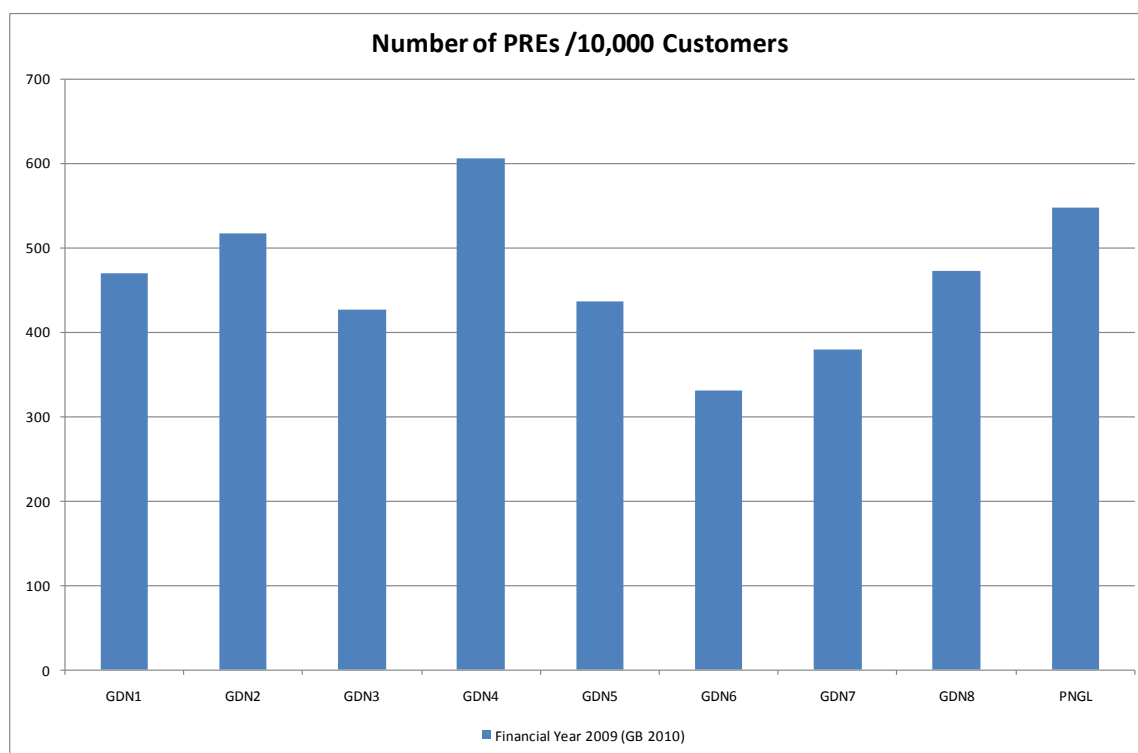
**Recommendation 7 NIAUR confirms with PES if a contact telephone number is provided to their customers taking out a boiler servicing contract and if not how a breakdown callout is invoked.**

### Public reported escapes:

Taking into account the alignment of activity described in Section 6.1.2 regarding benchmarking, the number of public reported escapes (PRE) received by PNGL in 2009 has been compared with the networks in GB. The results are shown in Table 26 and are represented in Figure 1. PNGL received 547 PREs/10,000 customers which is at the higher end of the number for the GB networks, which range from 330 to 606 PREs/10,000 customers.

	GDN1	GDN2	GDN3	GDN4	GDN5	GDN6	GDN7	GDN8	PNGL
Financial Year	2010								2009
Numbers of Customers (m)	2.67	2.27	2.44	1.76	1.94	2.62	3.96	4.03	0.13
Number of PREs ('000s)	126	118	104	106	85	87	150	190	7
Number of PREs /10,000 Customers	469	517	427	606	436	330	379	473	547

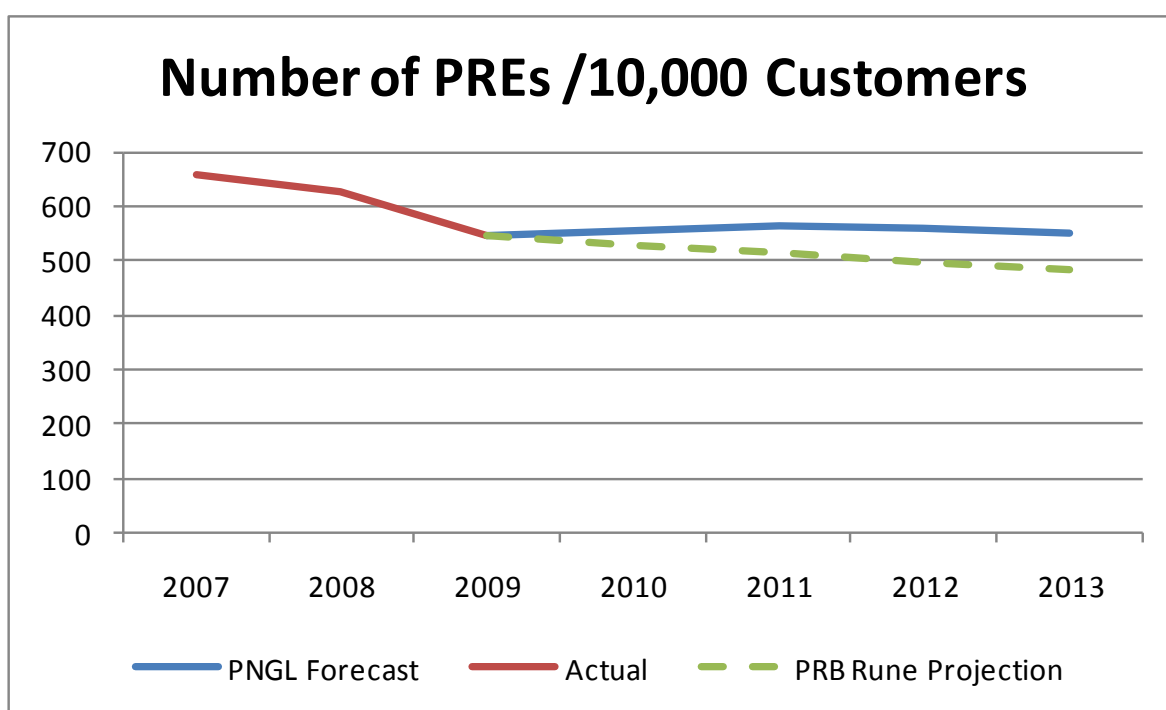
**Table 26**



**Figure 1**

The trend for PNGL's actual PRE activity over the period 2007 to 2009 is downward, as shown in *Figure 2*, whereas the forecast for 2010/12/13 shows an increase. PNGL attributes 16%, a significant proportion, of PREs to 'brand protection' issues and also claims no control over the number or type of calls received in this respect. However, as the market matures it is to be expected that customer awareness of the limitations of services provided by PNGL will increase and the number of such calls will decline therefore. Positive action by PNGL, and PES, to address this issue is necessary and would also contribute to the reduction.

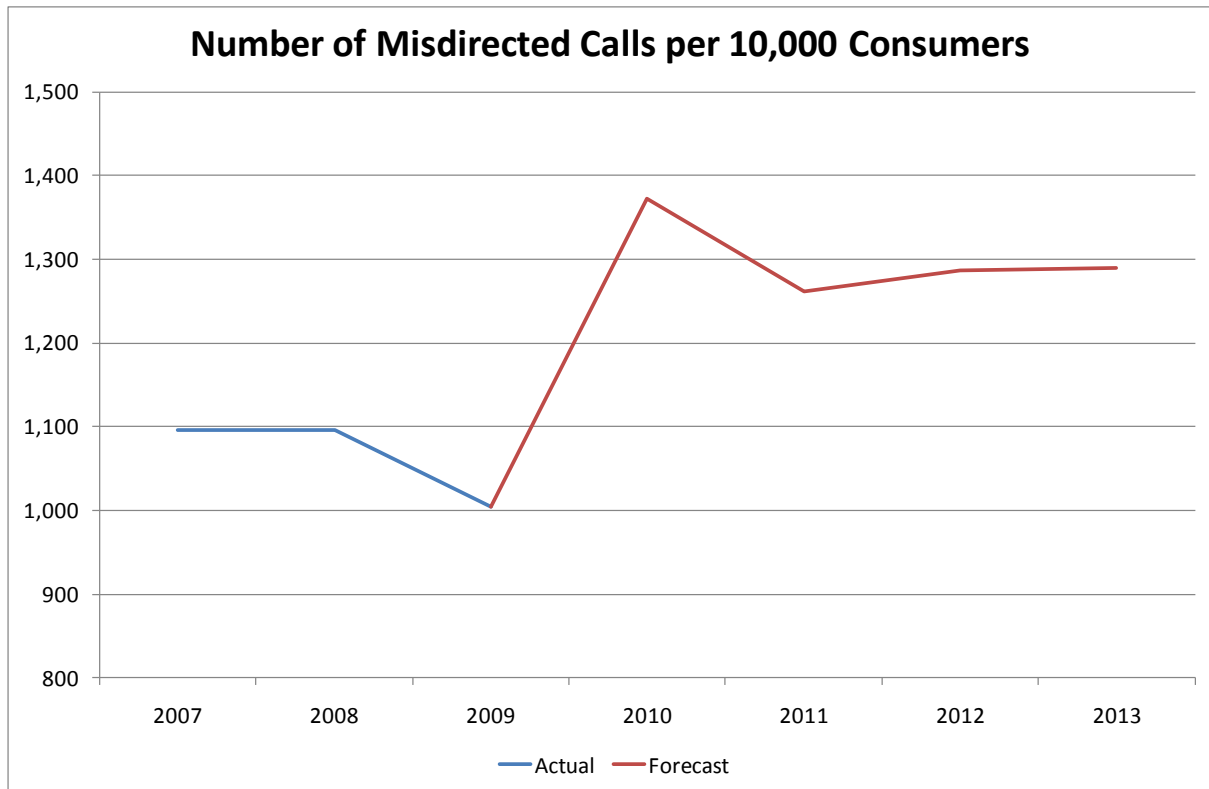
An alternative forecast PRE level has been suggested by PB Rune. It is suggested that a reduction of 3% per year from 2009 to 2013 would be more appropriate given the reductions seen between 2007 and 2009. This forecast trend reduction would leave the 2013 PREs at 481/10,000 customers. This level is still higher than all but two GB Networks reported in for the year 2010. This reduced level of forecast PRE numbers leads to a corresponding reduction in operating cost.



**Figure 2**

### **Misdirected Calls**

PNGL reports that it receives a large number of misdirected calls and claim that this is largely due to NI not having any other 24 hour emergency number (see comments earlier in this section about Boiler Servicing). PNGL also claims that the number of misdirected calls is likely to increase with the introduction of supply competition in November of 2010. Unfortunately the breakdown for 2010 call numbers is not available and it is likely that if this is the case the increase may not be seen until later in 2011. *Figure 3* below shows the number of misdirected calls per 10,000 consumers both actual 2007-2009 and PNGL's forecast 2010-2013. Whilst PB Rune is sceptical about the increase in the volume of these calls predicted by PNGL, it has no way of knowing what the impact of supply competition will be and therefore has not adjusted these forecast numbers in its' considerations.



**Figure 3**

## Benchmarking Emergency (PES)

The Emergency elements of the total Emergency costs have been benchmarked. The costs relate to ensuring an operative attends a premise or location within a 1 or 2 hour period of an emergency report being received at the call centre. This operational activity is almost entirely undertaken by PES.

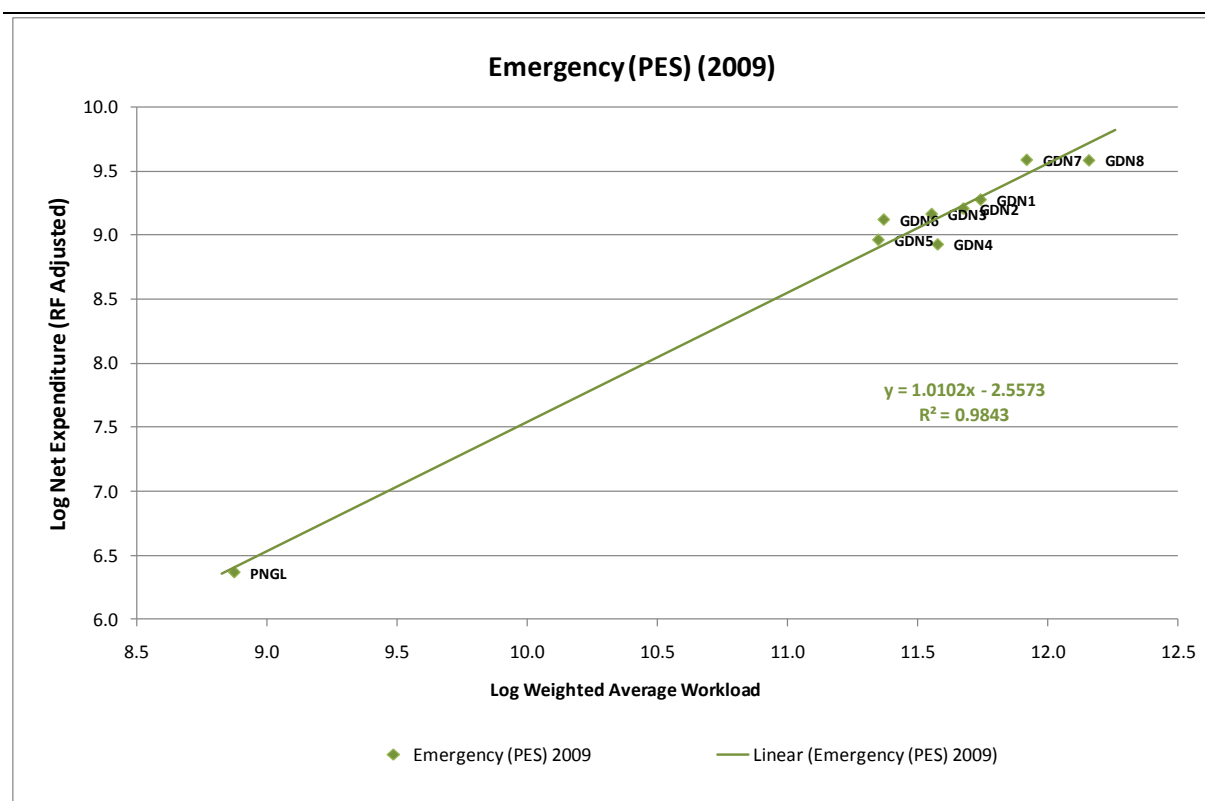
Benchmarking PNGL costs to deal with public reported escapes with the costs incurred by the networks in GB has been considered in the past and it was concluded that it is feasible subject to the provision of relevant information similar to that reported by the GB networks (Report - Advice on Information Submission for PNGL 2012 Price Control – August 2010). The information required to facilitate alignment of activity and costs, as specified at that time, has been provided by PNGL; comprising:

- Number of external escapes
- Number of internal escapes
- Number of mains PREs
- Number of service PREs
- Number of interference damage events
- Number of 'no gas escape found' reports

To ensure alignment, the following PNGL activity categories/costs are excluded from this element of the benchmarking:

- Metering reports
- Call centre costs
- Pager costs
- Sub Contractor costs
- Cost recoveries

The output from the benchmarking regression analysis of actual performance for the period 2009 is shown in *Figure 4* below, and indicates that PNGL ranks third in terms of overall cost effectiveness when compared with the eight GB networks. However, the result is influenced by the substantial difference in the level of activity due to the relative sizes of the networks/businesses.



**Figure 4**

Further analysis has been undertaken to compare PNGL's unit cost performance with the eight GB networks, taking into account regional differences by the application of a 'Regional Factor' (RF) (See Section [XX]) The comparative workloads and costs used for the regression analysis are shown in Table 27.



Company	Cost (£m)	RF Cost (£m)	Workload	Unit Cost (£)	RF Unit Cost (£)
GDN1	10.32	10,732.06	125,541	82.17	85,486.46
GDN2	11.55	10,006.65	117,525	98.28	85,144.89
GDN3	9.23	9,595.39	104,044	88.68	92,224.36
GDN4	7.32	7,562.46	106,474	68.79	71,026.33
GDN5	7.54	7,839.33	84,784	88.88	92,462.40
GDN6	8.88	9,186.69	86,559	102.57	106,132.14
GDN7	14.07	14,642.57	149,878	93.91	97,696.62
GDN8	15.62	14,583.86	190,372	82.02	76,607.15
PNGL	0.56	583.49	7,146	78.39	81,656.18

**Table 27**

As indicated by the regression analysis and shown in *Table 28*, PNGL's ranking is third in terms of cost effectiveness.

Company	Regression Ranking
GDN1	5
GDN2	4
GDN3	6
GDN4	1
GDN5	7
GDN6	9
GDN7	8
GDN8	2
PNGL	3

**Table 28**

The unit cost of emergencies has been tracked in *Table 29* below. PNGL has forecast a step increase on the 2009 unit cost of 4.9% for 2010 and later years. They have not forecast any productivity improvements over the period 2010-2013.

Emergency (PES) Unit Cost Tracking	2007	2008	2009	2010	2011	2012	2013
Cost / Emergency (Excluding ETM)	85.77	76.21	78.39	82.19	82.39	82.34	82.31

**Table 29**

The estimated workloads for future years have been used to project the appropriate allowed costs for 2010-2013 based on the performance level in 2009.

	2009	2010	2011	2012	2013
Workload for Regression	7,146	7,357	7,560	7,711	7,847
Allowance @ Maintain Efficiency (£m)	0.560	0.577	0.593	0.605	0.616
Allowance @ 1.0% Efficiency (£m)	0.560	0.571	0.581	0.587	0.591
Allowance @ 2.0% Efficiency (£m)	0.560	0.565	0.569	0.569	0.568

**Table 30**

The workloads for each of the years 2009-2013 are shown in *Table 30*. These workloads have been used to calculate the appropriate allowance for each subsequent year at the level of performance seen in 2009. Additionally, the recommended allowances have been calculated assuming an annual productivity efficiency saving of 1% & 2% per year.

## Benchmarking Emergency (Sub Contractor)

The costs associated with permanent repairs following the initial 'make safe' of public reported escapes are very dependent on the range of asset types incorporated in the distribution network. The distribution networks in GB are generally mature and significantly different in composition to those in Northern Ireland which are relatively new, small in scale and unique in terms of the asset characteristics. The range and scope of permanent repairs to the networks are significantly different therefore, and this activity is excluded from the benchmarking regression analysis.

The size and characteristics of PNGL's network are comparable to those of an iGT business operating in GB. If the necessary cost and activity information could be obtained, benchmarking comparison with an iGT would provide a more reliable indication of performance, for both emergency response and permanent repair activities, to support review of the PNGL 12 submission.

## Summary

In summary, the emergency costs for the period 2010-2013 as presented by PNGL have been set out below in *Table 31*.

PNGL Submission (£m)	2010	2011	2012	2013
Emergency (PES)	0.632	0.681	0.714	0.736
Emergency (Sub Contractor)	0.253	0.273	0.278	0.285
Call Centre	0.423	0.451	0.472	0.487
ETM Meters (PES)	0.521	0.567	0.605	0.631
	1.830	1.971	2.069	2.139

**Table 31**

The way in which the Emergency (PES) costs have been assessed using regression analysis has been set out above. Benchmarking of the repair activities is not possible, for the reasons outlined earlier in the section, and the PNGL estimates of these costs have been carried forward. The call centre costs have been reduced on the assumption that the number of emergency calls should be expected to fall in line with the reduction seen in the period 2007-2009 (3%/year). The ETM costs have been revised assuming the same unit

cost as seen in 2009 is maintained for the rest of the period until 2013. *Table 32* below therefore shows the overall recommendation for the total allowed costs in the emergency area.

**Recommendation 8    The allowances shown in Table 32 are considered for adoption by NIAUR**

PB Rune Recommendation (£m)	2010	2011	2012	2013
Emergency (PES)	0.577	0.593	0.605	0.616
Repair	0.253	0.273	0.278	0.285
Call Centre	0.346	0.363	0.380	0.392
ETM Meters (PES)	0.494	0.536	0.572	0.597
	1.669	1.765	1.835	1.890

***Table 32***

## **APPENDIX 3**

### **Deferred Capex – Information Set**

#### **Deferred Capex – Information Set**

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As part of its submissions for both this and the previous price control, PNGL submitted information on the status of those projects that sit within the scope of our deferred capex review. An extract of the pertinent information is set out in the table overleaf.

Deferred capex – information set on which analysis has been conducted

Project name	Category	Original deferral year	Estimated cost		Project status	Revised date of completion
			in £2000	in £2010		
O'Neill Road	4 bar	2000	210,000	275,556	No longer required	n/a
Legoneil MPRS	PRS	2000	30,000	39,365	Done	2010
Botanic Gardens MPRS	PRS	1999	25,000	32,804	Done	2007
Carrick MPRS	PRS	1999	25,000	32,804	To be done	2010
Donegall Road	4 bar	2000	140,000	183,704	Done	2008
Dee Street extension	7 bar	2000	75,000	98,413	Done	2008
Duncrue backup	7 bar	2000	150,000	196,826	Done	2010
Duncrue IPRS	PRS	1999	30,000	39,365	To be done	2014
Upper Road Carrick	4 bar	1999	150,000	196,826	Done	2010
Upper Road G'Island	4 bar	1999	100,000	131,217	To be done	2012
Bangor & N'ards MPRS	PRS	1999	210,000	275,556	To be done	2015
Albetbridge MPRS	PRS	1999	25,000	32,804	To be done	2015
Inverary Avenue IPRS	PRS	1999	30,000	39,365	No longer required	n/a
Lisburn Road MPRS	PRS	1999	25,000	32,804	No longer required	n/a
Shankhill Road MPRS	PRS	1999	25,000	32,804	To be done	2014
Stream 3 Lambeg	PRS	1999	20,000	26,243	To be done	2011
Stream 3 F'William	PRS	1999	20,000	26,243	To be done	2015
N'ards - Bangor IP	7 bar	2000	975,000	1,279,368	To be done	2020
Newtownards 7bar	7 bar	2000	300,000	393,652	To be done	2020
Bangor 250mm duplicate	7 bar	2000	600,000	787,303	To be done	2021
East Reinforcement	7 bar	2000	900,000	1,180,955	To be done	2022
Bangor Reinforcement	7 bar	2000	1,950,000	2,558,736	To be done	2023
Cutts IPRS	PRS	1999	30,000	39,365	To be done	2016
<b>Total</b>			<b>6,045,000</b>	<b>7,932,082</b>		

Source: PC03 and PNGL12 submissions

# APPENDIX 4

## Deferred Capex – Proposal

### Deferred Capex – Proposal

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We have calculated an appropriate downward adjustment to the opening TRV in 2012 of c£21.2 million. This figure represents the removal of:

- Any return earned prior to a project being completed; plus
- The original allowance that entered the asset base *if the project if not yet completed*.

The table on the page overleaf presents a summary of these calculations.

## Deferred capex – information set on which analysis has been conducted

A Project name	B Project status	C Revised date of completion	D Proposed treatment	E All monies in £2010			
				Original allowance	Management fee @ 20%	Return to end 2011	Total
O'Neill Road	No longer required	n/a	Remove capex + return	275,556	55,111	443,816	774,484
Legoneil MPRS	Done	2010	Remove surplus return	39,365	7,873	59,859	59,859
Botanic Gardens MPRS	Done	2007	Remove surplus return	32,804	6,561	47,466	47,466
Carrick MPRS	To be done	2010	Assume will be done, remove surplus return	32,804	6,561	57,720	57,720
Donegall Road	Done	2008	Remove surplus return	183,704	36,741	242,464	242,464
Dee Street extension	Done	2008	Remove surplus return	98,413	19,683	129,892	129,892
Duncrue backup	Done	2010	Remove surplus return	196,826	39,365	299,297	299,297
Duncrue IPRS	To be done	2014	<i>Remove capex + return</i>	39,365	7,873	72,807	120,045
Upper Road Carrick	Done	2010	Remove surplus return	196,826	39,365	346,319	346,319
Upper Road G'Island	To be done	2012	<i>Remove capex + return</i>	131,217	26,243	242,689	400,150
Bangor & N'ards MPRS	To be done	2015	<i>Remove capex + return</i>	275,556	55,111	509,647	840,315
Albetbridge MPRS	To be done	2015	<i>Remove capex + return</i>	32,804	6,561	60,672	100,037
Inverary Avenue IPRS	No longer required	n/a	No action required since allowances have been used for Harbour reinforcement works	n/a	n/a	n/a	n/a
Lisburn Road MPRS	No longer required	n/a		n/a	n/a	n/a	n/a
Shankhill Road MPRS	To be done	2014	<i>Remove capex + return</i>	32,804	6,561	60,672	100,037
Stream 3 Lambeg	To be done	2011	Assume will be done, remove surplus return	26,243	5,249	48,538	48,538
Stream 3 F'William	To be done	2015	<i>Remove capex + return</i>	26,243	5,249	48,538	80,030
N'ards - Bangor IP	To be done	2020	<i>Remove capex + return</i>	1,279,368	255,874	2,060,575	3,595,816
Newtownards 7bar	To be done	2020	<i>Remove capex + return</i>	393,652	78,730	634,023	1,106,405
Bangor 250mm duplicate	To be done	2021	<i>Remove capex + return</i>	787,303	157,461	1,268,046	2,212,810
East Reinforcement	To be done	2022	<i>Remove capex + return</i>	1,180,955	236,191	1,902,069	3,319,215
Bangor Reinforcement	To be done	2023	<i>Remove capex + return</i>	2,558,736	511,747	4,121,149	7,191,633
Cutts IPRS	To be done	2016	<i>Remove capex + return</i>	39,365	7,873	72,807	120,045
<b>Total</b>				<b>7,859,913</b>	<b>1,571,983</b>	<b>12,729,066</b>	<b>21,192,578</b>

Column code	Commentary
A, B and C	These columns are as per those in the previous appendix.
D	<p>UR proposes the following:</p> <ol style="list-style-type: none"> <li>For projects no longer required, to remove the original sum that went into the asset base and the return earned to 2012.</li> <li>For projects deferred from the original date but completed before 2012, to remove the surplus return earned between the original and actual dates of completion.</li> <li>For projects deferred and still to be completed (text in italics in Column D above), to remove the original sum and the return earned to 2012. However PNGL can request the monies again and, if granted, this would then re-enter the asset base in future price controls (such as PNGL12).</li> <li>For projects no longer required but substituted for other projects, no action to be taken.</li> </ol>
E	<ul style="list-style-type: none"> <li>We have used the original allowances for these calculations.</li> <li>We have added on an uplift of 20 per cent for the Management Fee. This uplift is necessary in order to value the true total cost of each individual project.</li> <li>The total return calculated is on the original allowance plus management fee, from the original date of deferral, at the appropriate rate of return.</li> <li>This analysis indicates PNGL's asset base is c£21.2 million higher than it should be given the level of capital projects PNGL has delivered.</li> </ul>

# **APPENDIX 5**

## **Retrospective Adjustment Mechanism**

### **Retrospective Adjustment Mechanism**

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This appendix sets out in full on the pages overleaf the agreement on the retrospective adjustment mechanism agreed as part of PC03. We propose retaining this mechanism as part of this price control, see Section 8 of the main report.



PNG Distribution Third Price Control (PC03)  
2007 to 2011

Supplemental

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Retrospective Adjustments and Rolling Capex Incentive

July 2010

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## Introduction

1. On the 30<sup>th</sup> November 2007 the Utility Regulator (“UR”) issued Phoenix Natural Gas Limited (“PNG”) with its Price Control Determination (“the determination”) for the period 2007 – 2011.
2. Since issue of the determination and associated determined distribution charges, the TRV in 2006 has been revised<sup>23</sup>, corporate affairs and market development allowances have been reviewed and revised<sup>23</sup> which in turn recalculates the determined distribution charges ( $P_i$ s) and the profile adjustment (PA). For clarity we include the revised determined distribution charges, determined revenues and profile adjustment below.

### Determined Distribution Charges

Sector	Designation	$P_{E,i}$ , 2006£/therm
Tariff Domestic, Tariff I&C <2,500	$P_{E,1}$	0.3294
Tariff I&C 2,500-25,000	$P_{E,2}$	0.2965
Firm I&C 25,000-75,000, Firm I&C >75,000	$P_{E,3}$	0.2793
Int I&C >75,000	$P_{E,4}$	0.1405

### Determination Revenue

£k, 2006 prices	2007	2008	2009	2010	2011
$R_{E,t}$	28,822	30,394	31,804	33,447	35,082

### Profile Adjustment

£k, 2006 prices	$PA_{E,n=2011}$
$PA_{E,n=2011}$	75,702

3. As part of the determination it was agreed that PNG’s licence would be modified to replace the volume revenue driver with a fixed revenue control from 2007. These modifications were implemented in 2009 along with a connections incentive mechanism, the objective of which is to provide PNG with a monetary incentive to maximise new connections to the distribution network each year and over the control period. For clarity the connections incentive revenue is defined separately from the determined conveyance revenue and passes directly to customers in reduced/increased distribution charges. PNG publishes its conveyance charges statement for each forthcoming year by 1 October of the preceding year e.g. PNG must publish its conveyance charges statement for 2011 by 1 October 2010. The 2009 connections incentive revenue will pass directly to customers in reduced/increased distribution charges in 2011. The connections

<sup>23</sup> UReg consulted with PNG on the corporate affairs and market development allowances as part of its review of the licence modifications to implement the move to a fixed revenue control and to implement the connections incentive mechanism. These licence modifications also confirmed UReg’s acceptance of the value of  $TRV_{F,t}$ , £312.8m (£2006), in respect of formula year  $t=2006$ . PNG consented to the licence modifications in its letter of 18<sup>th</sup> March 2009. UReg issued PNG with its determination for Market Development and Connection Incentives for the period 2007-2011 on 2<sup>nd</sup> April 2009. The licence modifications became effective on 5<sup>th</sup> June 2009.

incentive revenue therefore does not impact on the determination revenue, determined distribution charges and profile adjustment detailed above.<sup>1</sup>

4. In subsequent reviews some minor errors in transposing capex unit rates into the determination paper were identified due to misallocation of costs. For clarity, we include the revised unit rates below and this note and \*. xls supersedes the PC03 determination for these.

(£1996)	2007	2008	2009	2010	2011
Infill	£22.85	£21.56	£21.42	£20.65	£20.17
Feeder	£34.56	£34.34	£34.13	£33.91	£33.70
Domestic Prepayment Meters	£106.71	£106.86	£106.60	£106.60	£105.93
Domestic Standard Credit Meters	£48.96	£48.82	£48.61	£48.43	£48.13
I&C Meters	£234.05	£232.58	£211.17	£196.49	£195.26
Domestic Services	£351.88	£355.00	£351.20	£348.99	£346.80
I&C Services	£791.57	£786.80	£774.92	£765.99	£761.36

5. Following the determination (section 6.11.5[1] of the determination), PNG obtained advance approval from UR for the costs of undertaking a number of large load projects which were not included within the determination. These additional projects are detailed below:

<b>Additional Projects (£1996)</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Bombardier <sup>24</sup>	27,569			
Larsen <sup>2</sup>	46,884			
McQuillan Quarry <sup>25</sup>	298,939			
Precision Liquids <sup>26</sup>	92,802			
Contour Global <sup>27</sup>	310,030			
Bombardier AAB Building <sup>28</sup>		32,072	33,260	12,128
Large IC Connections cost <sup>2</sup>	16,301	16,198	16,097	15,995

6. Similarly, any projects which are included in the determination but do not go ahead will be removed from the asset base. [Note that by “projects” we mean defined 7 bar or 4 bar mains laying (to include governors) and/or large load connections.] We anticipate that this will be considered as part of the fourth price control review.

<sup>24</sup> Letter from Brian McHugh to Ivan Bell on 17<sup>th</sup> April 2008

<sup>25</sup> Letter from Brian McHugh to Ivan Bell on 22<sup>nd</sup> July 2008

<sup>26</sup> Letter from Brian McHugh to Ivan Bell on 29<sup>th</sup> September 2008

<sup>27</sup> Letter from Brian McHugh to Ivan Bell on 29<sup>th</sup> October 2008

<sup>28</sup> Letter from Brian McHugh to Ivan Bell on 17<sup>th</sup> August 2009

## Background

7. As part of the determination it was decided that certain items within PNG's cost base for PC03 would be retrospectively adjusted at the start of subsequent control periods based on actual performance. The purpose of this paper is to set out UR's determination of how such adjustments will be made.
8. These adjustments will be accounted for at the time of PNG's fourth price control review "PNGL12" for each formula year where actual data is available. Where actual data is not available for a formula year, the adjustment will be accounted for at the time of PNG's fifth price control from 2014.
9. The determination also contained a commitment to implement a "rolling incentive" to account for over and under expenditure of capex. This paper also sets out UR's determination of how such adjustments will be made.
10. During the PC03 price control review PNG advised that all deferred capex contained within its asset base will eventually be constructed. The Utility Regulator removed such deferred activity from PNG's future forecasts in setting its determination for PC03. The determination also stated that the Utility Regulator wished to consider the appropriateness of deferred capex (4/7bar and governors) planned for future construction, and would review the planned activity to ascertain when/if it will be carried out and if it would be in the customers interests to use the "deferred" cash within the asset base for other construction activities. It is anticipated that this analysis will be considered as part of PNGL12.

## Retrospective adjustments

11. The determination included cost allowances for certain capex and opex items which would be adjusted at the start of subsequent price control periods depending on actual performance within PC03.

## Capex

12. The adjustments fall into one of three categories set out in the determination:

*Outturn* – UR determined a unit price for some capex items. The amount included within the PC03 cost base was the determined unit price times the forecast driver for that item e.g. connections, properties passed etc. Any difference between the allowance in the determination (i.e. the determined unit price times the forecast driver) and the calculation based on actual outturn (i.e. the determined unit price times the actual driver) will result in a retrospective adjustment at the next review.

*Pass through costs* – any difference between the allowance in the determination and the actual costs incurred will result in a retrospective adjustment at the next review.

*Ring fenced sums* – any difference between the allowance in the determination and the costs which PNG requested within PC03 and UR approved will result in a retrospective adjustment at the next review.

13. The retrospective capex items are limited to those listed below together with the basis on which they were set and the paragraph from the determination to which they refer. The order is the same as that used in the \*.xls spreadsheet.

Para	Capex	Basis
6.11.1	Traffic Management Act	Ringfenced
6.9.1	Domestic Meter Failures	Retrospective based on outturn cumulative domestic connections and determined unit rates
6.11.2	Infill mains	Retrospective based on outturn properties passed and determined unit rates
6.11.2	Feeder mains	Retrospective based on outturn properties passed and determined unit rates
6.11.4	Meters	Retrospective based on outturn connections and determined unit rates. In addition, the weighted cost of a meter in the determination was calculated based on 50% prepayment and 50% standard credit meters being installed. This limit has been removed following the modification to Condition 2.6 of PNG's licence on 25 <sup>th</sup> February 2010 and applies from the start of PC03.
6.11.4	Services	Retrospective based on outturn connections and determined unit rates
6.11.4	Management fee on retrospective capex	Retrospective based on connections services and meters costs above and determined %
6.11.3	Comber & Temple Quarry Costs	Any difference between what UR considers reasonable following its review and the allowed costs in the determination will be subtracted from the cost base at the start of the next review.
6.11.5	Capex over and under spend	Additional projects which UR has approved within PC03 will retrospectively be allowed into the cost base at the time of the next review. These are listed in paragraph 5 above. Similarly any projects within the price control which do not go ahead will be removed from the cost base (see paragraph 6 above).

14. For infill and feeder the determination states that *“the number of properties passed will form part of a retrospective mechanism for infill and feeder mains. At the time of the next review, if the number of properties passed is less than forecast (outlined below) the cost associated with infill and feeder mains in relation to these properties will be subtracted from RAV”*. We have subsequently agreed<sup>29</sup> that retrospective adjustments will be based on cumulative properties passed rather than annual properties passed. This is reflected in the \*.xls.

<sup>29</sup> E-mail from Brian McHugh to Ivan Bell dated 5<sup>th</sup> February 2010.

## Opex

15. The adjustments fall into one of three categories set out in the determination:

*Outturn* – UR determined a unit allowance for some opex items. The amount included within the PC03 cost base was the determined unit allowance times the forecast driver for that item e.g. connections. Any difference between the allowance in the determination (i.e. the determined unit allowance times the forecast driver) and the calculation based on actual outturn (i.e. the determined unit allowance times the actual driver) will result in a retrospective adjustment at the next review.

*Pass through costs* – any difference between the allowance in the determination and the actual costs incurred will result in a retrospective adjustment at the next review.

*Ring fenced sums* – any difference between the allowance in the determination and the costs which PNG requested within PC03 and UR approved will result in a retrospective adjustment at the next review.

16. The retrospective opex items are limited to those listed below together with the basis on which they were set and the paragraph from the determination to which they refer. The order is the same as that used in the \*.xls spreadsheet.

	Opex	Basis
5.18.1	Rates	Pass through except for change in formula Rates are currently calculated using a formula based on PNG's turnover. UR's decision on Rates is to set the allowance based on the current formula and any variation in turnover will be accounted for retrospectively.
5.18.2	Licence fees	Pass through
5.18.3	Corporate Affairs	2007 pass through up to limit
5.18.3	Market development	Retrospectively adjusted based on Owner occupier connections and determined unit rates
5.18.3	Customer Incentives	Retrospectively adjusted based on Owner occupier connections and determined unit rates
5.18.4	Supply Competition Costs	Ring-fenced
PNGL License condition 1.18 - 1.22	Financial Ring-fencing and Corporate Governance	Following implementation of the financial ring-fencing and corporate governance licence conditions on 26 <sup>th</sup> June 2009, PNG has been allowed the costs of obtaining credit rating, £57k (£1996) in 2009, annual review of credit rating, £25k (£1996) in 2010 and 2011, and £70,241 (£1996) in 2010 and 2011 for non-executive directors (NEDs). Note that the retrospective allowance in 2010 and 2011 for NED remuneration will account for any monies already allowed within PC03.
5.18.5	Own Use Gas	The PNG forecast for own use gas was accepted in the determination, but with the proviso that these costs may be reviewed to consider the potential for an incentive mechanism. Given that work is now progressing on PNGL12, this cost item will not be reviewed as part of PC03.
5.18.6	Unregulated Revenue	In PC03 the Utility Regulator stated that unregulated revenue may be reviewed and may result in a re-opener going forward. However, as per own use gas, this cost item will now not be reviewed as part of PC03.
5.18.7	Domestic Regulator Replacement	Ring-fenced amount

5.18.8	PAYG Switchers	Ring-fenced amount
5.18.9	Recharges	In PC03 the Utility Regulator stated that the recharging methodology used to apportion costs from PNG distribution to other Phoenix businesses may be reviewed and a re-opener considered to take account of any changes. However, as per own use gas and unregulated income, recharges will now not be reviewed as part of PC03.
5.0.0	Transmission Recharges	As part of the PNG12 review, UR is minded to remove charges on the basis of the E-Mail to PNG on the 4 <sup>th</sup> October 2007, subject to any other correspondence that clearly details the matter, relating to the now sold off Transmission business and PNG's asset base.
2.3.18	Working Capital and Capital Creditors	Pass through based on current licence conditions

17. The accompanying spreadsheet (\*.xls ) illustrates the methodology and calculations for each item to be retrospectively adjusted. The spreadsheet includes references to the determination for guidance. \*.xls has been set up so that when outturn connections and properties passed are entered the adjustments to allowances based on these are automatically calculated.

#### **Implementing the retrospective adjustment**

18. The following calculations are illustrated in the accompanying spreadsheet and for the avoidance of doubt this paper sets out PNG's and UR's agreement on how the retrospective adjustments are to be implemented.
19. At the time of the next price control review and only for the years for which capex and opex are actualised, PNG will calculate the allowed capex and the allowed opex for each year i.e. the capex and opex within the 30<sup>th</sup> November 2007 determination adjusted for the various retrospective adjustments identified above.
20. It has been agreed that this adjustment up to formula year  $t=a$  will be made at the start of the next control period by including the capex and opex variances in opening 2012 TRV.
21. For capex, the adjustment equals the return (at the PC03 rate of return) and depreciation on the variance between allowed capex and capex within the 30<sup>th</sup> November 2007 determination.
22. For opex, the adjustment equals the variance in allowed opex from opex within the 30<sup>th</sup> November 2007 determination together with the return (at the PC03 rate of return) on this variance.
23. The variance in allowed capex from capex within the 30<sup>th</sup> November 2007 determination will be accounted for when capex is actualised as set out in Condition 2.3.14 of PNG's licence.

## Capex Rolling Incentive

24. The determination contained a commitment to implement a “rolling incentive” for over and under expenditure of capex. For clarity, this is the difference between actual capex and allowed capex (i.e. capex within the 30<sup>th</sup> November 2007 determination adjusted for the various retrospective items listed above) and therefore cannot be calculated until the retrospective capex adjustments identified in the section above have been made and the allowed capex for each year established.
25. The capex rolling mechanism calculations are included at 6.11.5 of \*.xls. For the avoidance of doubt this paper sets out PNG’s and UR’s agreed methodology for implementing the capex rolling incentive. The calculations are illustrated in the accompanying spreadsheet.
26. Annex 2 of the determination set out how capex under and over-spend would be treated as follows;

*[1] For efficiently incurred Capex projects not included in the Price Control which are clearly in the interests of customers we will allow the inclusion of these costs into the RAV at the time of spend. Examples of such projects could include Utility Regulator approved network extensions. We would expect PNG to approach us in advance to get approval for such projects. Likewise any projects within the price control which do not go ahead will be removed from the RAV.*

*[2] As requested by PNG, all other Capex under spend will be removed from the RAV on a five year rolling basis. We recognise that this is inconsistent with the current licence and we plan to implement a licence modification to reflect this. Capex over spend will be treated symmetrically with under spend where PNG demonstrate to the Utility Regulator that the over spend has been incurred efficiently. In reaching a determination on this, the Utility Regulator will take into account material changes to the utility cost environment since the last Price Control determination*

27. Under the scheme PNG retain five years of financing costs (equivalent to 4 years return and 5 years depreciation) on under spend and will forego five years of financing costs on approved overspend<sup>30</sup>. Overspend and under spend are thus treated symmetrically under the scheme providing PNG demonstrate to UR that any overspend has been incurred efficiently.
28. We have agreed the licence modification referred to for capex roller is unnecessary at this stage.

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<sup>30</sup> For the avoidance of doubt, the term “approved overspend” in the context of the capex rolling incentive refers only to situations where total actual capex proves to be higher than total allowed capex for each year i.e. the capex within the 30 November 2007 determination adjusted for the various retrospective adjustments identified above. If PNG can justify this outcome by demonstrating the overspend to be efficient, and we approve this, then and only then will the overspend qualify for the capex rolling incentive.



29. For underspends, where the full five years of financing benefit roll into the next price control period the present value of the benefit within the next control period (i.e. return and depreciation) will be included in TRV in 2012.
30. For (approved) over spend the depreciated value will be included in the opening DAV on the 5<sup>th</sup> anniversary of the over spend.
31. Depreciation will be calculated based on weighted average asset life as set out in \*.xls where there is a mixture of assets with different lives.
32. For clarity under and over spend here means the difference between audited actual costs and allowed costs.
33. TMA and management fee and other ring fenced costs are not included in the scheme.
34. The retrospective sheet has been integrated with the Regulatory model used to calculate P<sub>s</sub> and other regulatory values.

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