

Price Control for Northern Ireland's Gas Distribution Networks

**Consultation Paper
16 July 2013**



About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive leads a management team of directors representing each of the key functional areas in the organisation: Corporate Affairs; Electricity; Gas; Retail and Social; and Water. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.

Our Mission

Value and sustainability in energy and water.

Our Vision

We will make a difference for consumers by listening, innovating and leading.

Our Values

Be a best practice regulator: transparent, consistent, proportional, accountable, and targeted.

Be a united team.

Be collaborative and co-operative.

Be professional.

Listen and explain.

Make a difference.

Act with integrity.

Abstract

We are publishing our price control proposals for the gas distribution companies, Phoenix Natural Gas Ltd (PNGL) and firmus energy (FE), over the period 2014-16. Our proposals set out the amount that the companies shall have to run their businesses and invest in the gas network. The key proposals for both companies are: operating expenditure allowances will be lower than requested, the setting of higher targets for new gas connections and the proposed rate of return to remain at 7.5% for the duration of the price control. Our price control proposals will result in lower bills for all gas consumers.

Audience

Industry, consumers & statutory bodies.

Consumer impact

The customer impact could result in the average PNGL domestic customer paying around £49 less per annum. For industrial and commercial (I&C) customers, particularly large ones, the difference will be greater given their higher consumption levels.

With regards to fe, this could result in the domestic customers paying on average around £74 less per annum. For I&C customers, particular large ones, the difference will be greater given their higher consumption levels.

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GLOSSARY

£	Pound sterling
A+M+PR mechanism	Advertising, marketing and PR mechanism
ARW	Airport Road West
BGE	Bord Gais Eireann (the owner of FE)
capex	Capital expenditure
CAPM	Capital Asset Pricing Model
CEO	Chief Executive Officer
CC or Commission	Competition Commission
DAV	Depreciated Asset Value, the depreciated rolled forward value of capex
DETI	Department of Enterprise, Trade and Industry
FCO	First call operative
FE	firmus Energy
FOIA	Freedom of Information Act
FTEs	Full time equivalents
GB	Great Britain
GD14	This is the forthcoming price control for both PNGL and FE, covering calendar years 2014, 2015 and 2016
GD17	The price control for both PNGL and FE, which will follow GD14 and is expected to cover calendar years 2017 to 2021
GDNs	Gas Distribution Networks
GIS	Geographical Information System
HMRC	Her Majesty's Revenue and Customs
I&C	Industrial and commercial
IFRS	International Financial Reporting Standards
IME3	The European Union's third internal energy package
IT	Information technology
JRG	Joint Regulatory Group
MEAV	Modern Equivalent Asset Valuation
NI	Northern Ireland
NICs	National Insurance Contributions
NIE	Northern Ireland Electricity
NIHE	Northern Ireland Housing Executive
NPV	Net Present Value
OAV	Opening Asset Value
OO	Owner Occupier
opex	Operating expenditure
PAS55	The British Standards Institution's (BSI) "Publicly Available Specification" for the optimised management of physical assets
PCR02	The immediate preceding price control for FE covering calendar years 2009 through to 2013
PC03	The price control for PNGL preceding PNGL12 covering calendar years 2007

	through to 2011
PES	Phoenix Energy Services
PNGL	Phoenix Natural Gas Limited
PNGL12	The immediate preceding price control for PNGL, covering calendar years 2012 and 2013
ppt	Pence per therm – herein used to refer to the conveyance tariff charged by PNGL and FE per therm of gas (for transportation through their respective networks)
Price Base	All monetary figures presented herein, unless otherwise stated, have been rebased using the Retail Price Index (RPI). For PNGL the RPI is as at September 2012 and for FE it is the average for 2012 (as per their respective licences)
PSL	Phoenix Supply Limited (now known as Airtricity Gas Supply (NI) Ltd)
RAB	Regulatory Asset Base
RAV	Regulatory Asset Value
RPI	Retail Price Index
SIC	Small industrial and commercial
SWRs	Supplier Work Requests
totex	Total expenditure (i.e. capex plus opex)
tpa	Therms per annum – a commonly used measure of gas consumption
TRV	Total Regulatory Value, the DAV plus any incentive adjustments including the profile adjustment. PNGL and FE receive an allowed annual return on TRV
UK	United Kingdom
UR	Utility Regulator
WACC	Weighted Average Cost of Capital, the return allowed on the TRV
WCA	Working Capital Allowances

1 EXECUTIVE SUMMARY

Introduction

- 1.1 There are two gas distribution licence holders in Northern Ireland (NI) – Phoenix Natural Gas Limited (PNGL) and firmus Energy (Distribution) Limited (FE).
- 1.2 The Utility Regulator (UR) determines how much the two licence holders can charge for the transportation of gas through their networks through a process called price controls. The current price controls for both PNGL and FE expire on 31 December 2013 and this document sets out our initial view of the price controls that should be applied from the beginning of 2014.
- 1.3 This document is a consultation on our Draft Determination for the forthcoming price control period (GD14) and we welcome responses; the process for responding is set out later in this section.
- 1.4 We will provide our conclusions on the price control in the Final Determination which we will issue later this year.

Our Statutory Duties

- 1.5 A full discussion of our statutory duties is set out in Section 3. The paragraphs below summarise the main points.
- 1.6 Our principal objective is set out in Article 14 of the Energy (Northern Ireland) Order 2003 ('the Energy Order'). This requires us, in carrying out our gas functions, to promote the development and maintenance of an efficient, economic and co-ordinated gas industry in NI, and to do so consistently with our fulfilment of the objectives set out at Article 40 (a) to (h) of the Gas Directive¹.
- 1.7 In meeting our principal objective, we must also have regard to a number of other considerations including:
 - the need to ensure a high level of protection of the interests of consumers of gas; and
 - the need to secure that licence holders are able to finance those activities which are subject to relevant obligations².
- 1.8 Consequently, in developing our proposals and in promoting the development and maintenance of the gas industry, we have strived to secure the most efficient outcome in the interests of consumers which also ensures that the companies will be able to finance their licensed activities

¹ Directive 2009/73/EC of the European Parliament and the Council of 13 July concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC. Article 40 includes the objective to protect consumers.

² That is, those obligations imposed by or under the Energy Order and Part II of the Gas (Northern Ireland) Order 1996 (NI 2) ('the Gas Order').

Summary of Approach

- 1.9 We determine price controls for the two companies by assessing an efficient level of operating costs and capital expenditure to run their businesses and to continue to promote the development of gas within NI.
- 1.10 This price control is proposed to run for three years from 2014 to 2016. As detailed in section 3, we have proposed that this will be a three year and not a five year price control to minimise the need for re-openers and to align with the end of the period (December 2016) for which the cost of capital for both PNGL and FE is fixed at 7.5%. Additionally, this enables us to establish and agree more robust information structures and submission procedures for the following price control.
- 1.11 To assess operating costs (opex), we have undertaken a detailed assessment and review of the larger costs items taking into account the current level of expenditure, any changes as a result of changes in outputs and, where appropriate, benchmarking against comparable organisations.
- 1.12 We have undertaken a detailed assessment of capital expenditure (capex) proposals in conjunction with our engineering consultants, Rune Associates. This has included a review of existing market rates and benchmarking to identify an efficient level of expenditure.
- 1.13 In order to set allowed revenues, we also have to determine an estimate of volumes and we have done this by starting with the current volumes and adjusting this for expected additional connections and specific changes in large customers.
- 1.14 In addition to assessing the appropriate opex and capex on an “as is” basis we have also set an efficiency target for each year as discussed in section 13. This has been assessed firstly by identifying whether there are any existing efficiencies and hence whether there should be a catch-up target and, secondly, assessing an appropriate efficiency target for each year which we have based on the general improvement in productivity within the United Kingdom (UK). Our assessment has been that there is no overall catch-up target but that there should be an efficiency target of a cumulative 1% per annum.
- 1.15 Each of the companies has an existing asset base – the Total Regulatory Value (TRV). For PNGL this comprises of four elements:
- **Net investment, less depreciation plus working capital**
This is past capital expenditure which has not yet been paid for by customers.
 - **Under-recoveries of revenue**
Revenue that PNGL was entitled to collect from customers between 1996 and 2006, but was deferred and carried forward to later years because PNGL priced below the price cap (then applying) to encourage customers to switch to natural gas.
 - **Unspent allowances**
This comprises capex that has been deferred to later years and historical outperformance retained in the TRV.
 - **Profile adjustment**
This is revenue carried forward to future years to maintain an even price profile over time to ensure that conveyance charges are not unduly high in the early phases of the gas market’s development. This will reduce to zero by the end of the licence period as growth in the network enables PNGL to recover higher revenues.

The TRV of FE includes just the first and last of these items. Detailed discussion of the items

comprising the TRV of the two companies is provided in section 10.

- 1.16 We have assessed the value of the TRV as at 31 December 2013. This entails adjusting the TRV for changes in outputs e.g. for the number of actual connections.
- 1.17 The licence of each company enables them to receive a real pre-tax return of 7.5% through to the end of 2016 and we are not minded to change this. We have updated the weighted average cost of capital (WACC) we use from 2017 in our model to match the latest Ofgem allowances for GB GDNs but this is for modelling purposes and does not set a precedent for what rate we will set in GD17. We are minded to use the capital asset pricing model (CAPM) methodology in setting the WACC in GD17 and Section 12 sets out some initial considerations for setting the rate of return post 2016. This includes discussion of the impact of high TRV:totex ratios in applying a CAPM methodology.
- 1.18 Determination of opex, capex, volumes, allowed returns and the TRV enables us to set tariffs. Tariffs are set on a “levelised” basis, that is, given the cost projections until the end of the recovery period, the tariffs are set equal in each year of the licence.
- 1.19 There is a difference between FE and PNGL. For PNGL we set allowed *revenue* each year. For FE we set allowed *tariffs* in each year. The capping of tariffs rather than revenue is more appropriate for a company in the early stage of its development as it provides strong incentives to increase volumes and to develop the gas industry. We may consider at some stage, after GD14, to also set allowances for FE on a revenue capped basis which will reduce its exposure to volume risk.
- 1.20 In addition, we have included two incentive mechanisms to appropriately encourage PNGL and FE to continue the growth of an economic gas industry. The two mechanisms are:
- A connections incentive which rewards the GDNs for connecting owner-occupied (OO) domestic customers. This is a continuation of the ‘A+M+PR mechanism’ in PNGL12 but updates the economic assessment to include infill mains. This results in a reduction in the allowance per connection compared to PNGL12.
 - A properties passed incentive, which incentivises the GDNs to lay infill mains to pass more properties that do not currently have access to natural gas.
- 1.21 This price control process has been carried out over a shortened period as we did not receive the GDN submissions until December 2012. This has slightly compressed the normal amount of time we have had to analyse the submissions. Therefore, we expect there will be significant further analysis and engagement with the GDNs and all stakeholders before the final determination is published.

Summary of Proposals

Phoenix Natural Gas Limited

- 1.22 A summary of our overall proposals for PNGL is presented in the table below.
- 1.23 In terms of capex, our proposed unit rate allowances are in line with those requested by PNGL. For opex, our proposal is less than the allowances requested by PNGL, so that they are more in line with current opex allowances as, in many cases PNGL has not provided adequate justification for the increases.
- 1.24 It should be noted that our proposals are based on a higher connection target for domestic owner occupiers (6,500 per year instead of an average of 4,700 proposed by PNGL). The

effect of using a higher connection target gives higher allowances for domestic services and meters as the allowance levels for these cost items are driven by forecast connections.

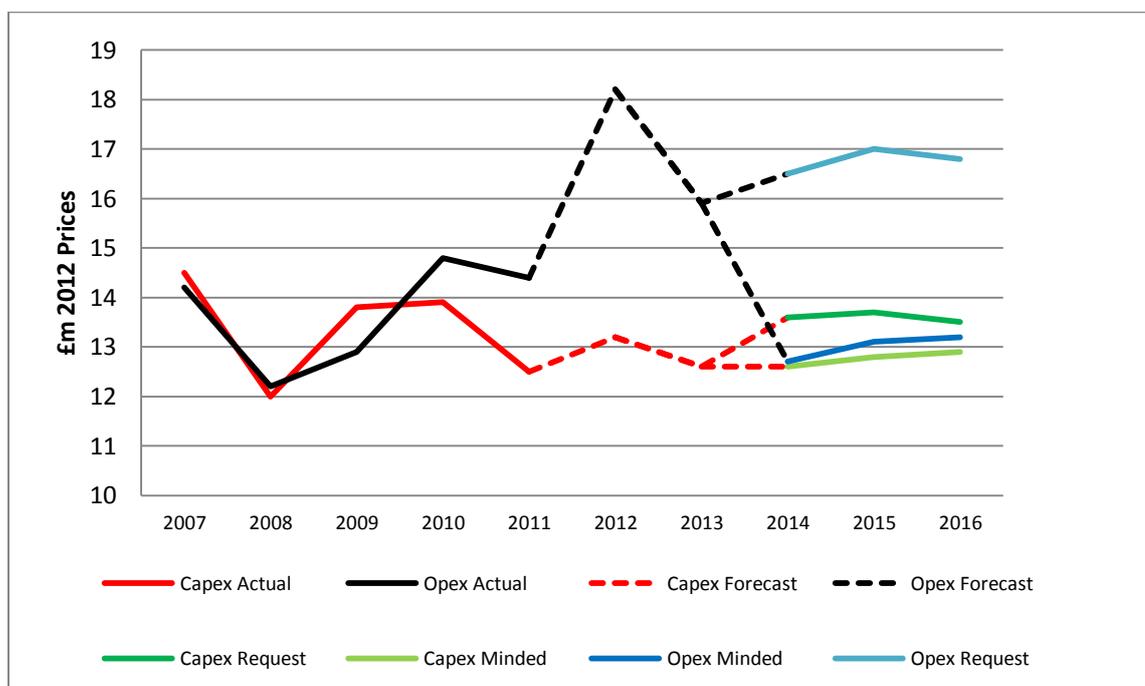
Table 1 – Proposed allowances for PNGL, £m

Component	PNGL submission				UR proposal				Difference	
	2014	2015	2016	Total	2014	2015	2016	Total	Total	%
Opex allowance	16.5	17.0	16.8	50.3	12.7	13.1	13.2	39.0	-11.3	-22%
Capex allowance	13.6	13.7	13.5	40.8	12.6	12.8	12.9	38.3	-2.5	-6%
Total	30.1	30.7	30.3	91.1	25.3	25.9	26.1	77.3	-13.8	-15%
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	58.1	60.0	61.8	179.9	43.9	45.4	46.8	136.1	-43.8	-24%

Source: PNGL and the Utility Regulator

1.25 The following graph shows PNGL’s actual for 2007-2011, the best available for 2012 and 2013 and their GD14 submission for 2014-2016. The graph also displays the ‘minded-to’ allowances as proposed by UR.

Figure 1 – PNGL operating and capital expenditure submission & proposed allowances, £m



Source: PNGL and the Utility Regulator

1.26 If we compare our proposals to the PNGL tariffs (as calculated in accordance with the final determination of the Competition Commission for PNGL12), it will result in domestic customers paying around £25 less per annum. Compared to the PNGL submission, our proposals will result in the average domestic customer paying around £49 less per annum.

1.27 For industrial and commercial (I&C) customers, particularly large ones, the difference will be greater given their higher consumption levels.

- 1.28 The main drivers for the differences above are the application of an updated WACC from 2017 in our model (which is set consistent with levels for GB GDNs) and the increase in forecast volumes compared to PNG12.

Firmus Energy

- 1.29 A summary of our overall proposals for FE is presented in the table below.
- 1.30 In terms of capex, our proposed unit rate allowances are significantly lower than those requested by FE but more in line with the current level of unit rates with only a slight reduction to ensure the achievement of efficiencies. For opex, our proposal is less than the allowances requested by FE, so that they are more in line with current opex allowances, as FE has not provided adequate justification for many of the increases.
- 1.31 We are inclined to accept the FE proposals on connections. For volumes, we have assumed growth continues in line with FE proposals in domestic and smaller I&C but we are not minded to accept the FE proposals for reductions in volumes as a result of closures or interruptions. We have also not assumed any large new I&C connections. Our proposal amounts to a cumulative volume for the 2014-2016 period of 191.5m therms compared to FE proposals of 175.3m therms.

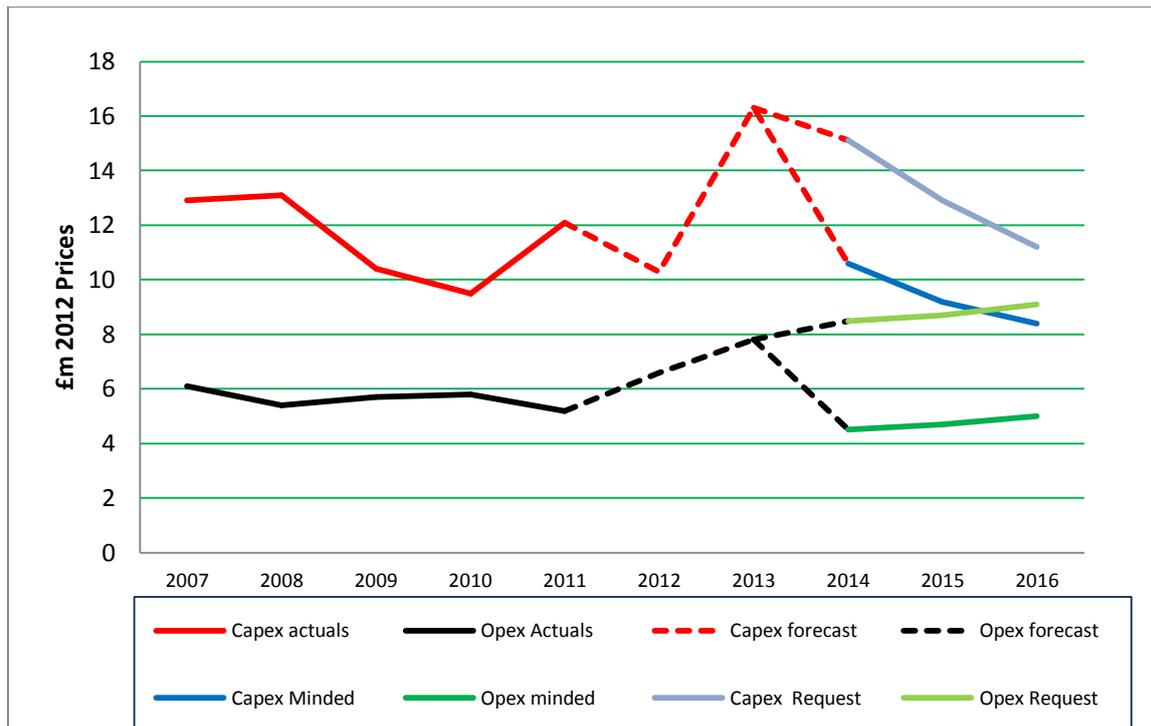
Table 2 – Proposed allowances for FE, £m

Component	FE submission				UR proposal				Difference	
	2014	2015	2016	Total	2014	2015	2016	Total	Total	%
Opex allowance	8.5	8.7	9.1	26.3	4.5	4.7	5.0	14.2	-12.1	-45%
Capex allowance	15.1	12.9	11.2	39.2	10.6	9.2	8.4	28.2	-11.0	-28%
Total	23.6	21.6	20.3	65.5	15.1	13.9	13.4	42.4	-23.1	-35%
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	21.6	22.9	23.6	68.1	15.8	16.6	17.7	50.1	-18.0	-26%

Source: FE and the Utility Regulator

- 1.32 The following graph shows FE's actual for 2007-2011, the best available for 2012 and 2013 and their GD14 submission for 2014-2016. The graph also displays the 'minded-to' allowances as proposed by UR.

Figure 2 – FE operating and capital expenditure submission & proposed allowances, £m



Source: FE and the Utility Regulator

- 1.33 If we compare our proposals to the current FE determined tariffs, they will result in domestic customers paying around £51 less per annum. Compared to the FE submission, our proposals will result in the average domestic customer paying around £74 less per annum.
- 1.34 For I&C customers, particular large ones, the difference will be greater given their higher consumption levels.
- 1.35 The main driver for the difference in these figures is the increase in volumes and the application of an updated WACC from 2017 in our model (which is set consistent with levels for GB GDNs).

Consultation Process

- 1.36 This is an open consultation paper. In various parts of our paper we have drawn attention to particular issues on which we would welcome views and responses, but we have not posed any specific questions in the paper. We invite stakeholders to express a view on any particular aspect of the paper or any related matter they consider important.
- 1.37 Responses should be received by 1700 hrs on Friday 20 September 2013 and should be addressed to:

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 Gas Directorate
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 14 Queen Street
 Belfast
 BT1 6ED
 Tel: 028 9031 6652

E-mail: paul.harland@uregni.gov.uk

- 1.38 Our preference would be for responses to be submitted by e-mail.
- 1.39 Individual respondents may ask for their responses not to be published, in whole or in part, 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.
- 1.40 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 placed in the public domain. Hence, it is 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.
- 1.41 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.
- 1.42 Finally, in order to encourage and facilitate full stakeholder engagement, we plan to hold a workshop during the consultation period. Both industry representatives and stakeholders from consumer and community and voluntary organisations will be invited to attend in order to discuss the proposals for the GD14 price control. A provisional date of 6th or 7th August 2013 has been set for this workshop and details will be available on our website in due course.

2 INTRODUCTION

Background

- 2.1 Our principal objective in carrying out our gas regulatory functions is to promote the development and maintenance of an efficient, economic and co-ordinated gas industry in Northern Ireland (NI).³ As part of our role, we set overall limits on how much companies that own and operate the natural gas networks can charge for use of their pipelines, through a process called price controls.
- 2.2 There are two gas distribution licence holders in NI - Phoenix Natural Gas Limited (PNGL) and firmus energy (Distribution) Limited (FE). PNGL owns and operates the distribution network in the Greater Belfast and Larne areas. FE owns and operates the distribution network commonly referred to as the 'Ten Towns' and which runs off the North-West and South-North natural gas transmission pipelines.
- 2.3 The current price controls for both PNGL and FE end in 2013. New price controls therefore must be in place for the beginning of 2014. The present consultation paper outlines our proposals for the allowed revenues or tariffs (in the case of FE) over the next price control period for both licence holders. This is the first time that we are conducting a parallel price control and results from an explicit intent to align the timing of the two price reviews, which we consulted upon in 2010.
- 2.4 In this section, we provide broad overviews of the two licence holders and set out further relevant contextual information regarding the present price control process.

Company Overviews

PNGL

- 2.5 PNGL is the licensed owner and operator of the distribution network in the Greater Belfast Area and Larne, and is the larger of the two gas distribution businesses in NI. 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.
- 2.6 PNGL was awarded its conveyance licence and commenced operations in September 1996. Currently, the PNGL network extends to over 3,000 kilometres of intermediate, medium and low pressure mains, which distribute natural gas throughout the licence area.
- 2.7 PNGL manages the development of both the physical network and the market in Greater Belfast. Over 160,000 domestic and business customers have been connected to PNGL's network, while the market continues to grow at approximately 8,000 – 10,000 new customers each year.

FE

³ Our duties and the regulatory principles that guide our work are discussed further in section 3.

- 2.8 FE is a subsidiary of Bord Gais Eireann (BGE) which has been providing natural gas to customers in the Republic of Ireland for a number of years. FE was awarded its conveyance licence in March 2005 and has since constructed a network consisting of about 750 km of mains pipes across its licence area.
- 2.9 The Ten Towns licence area covers a geographical region that includes Londonderry, Limavady, Coleraine (including Portstewart and Bushmills), Ballymoney, Ballymena (Broughshane), Antrim (including Ballyclare and Templepatrick), Craigavon (including Portadown and Lurgan), Banbridge, Newry (Warrenpoint) and Armagh (Tandragee).
- 2.10 In the first few years of network development, FE's focus was on connecting the large industrial and commercial companies in each of the towns, such as factories, hospitals, large hotels and universities. Following the connection of these large users, FE's network development is directed towards the connection of small businesses, new-build housing developments and Northern Ireland Housing Executive (NIHE) properties, where economic in each of the towns. FE has around 19,000 customers connected to its network, and is currently growing at about 3,000 – 4,000 per year.

Price Control Context

Existing price controls: PNGL12 (2012-13) and PCR02 (2009-13)

- 2.11 In late 2009, we began scoping and planning the work necessary to develop PNGL's price control that would apply following the then effective control, PC03, spanning the period 2007 to 2011. In considering the issues involved, we also assessed the merits of aligning the timing of the price controls of the two NI gas distribution networks (GDNs) and how we might achieve this. The potential options were consulted upon in January 2010.⁴ A decision then followed to align the price controls by way of establishing a two-year control for PNGL covering 2012 and 2013, thereby achieving alignment of the two GDNs in 2014.
- 2.12 We subsequently prepared and presented the new determination (called PNGL12) to PNGL, which was rejected. The determination was therefore referred to the Competition Commission (CC) in March 2012. The CC's inquiry ended on 30 November 2012, and therefore PNGL12 is currently effective (subject to the changes arising from the CC's findings and recommendations) for the two-year control period ending in 2013.
- 2.13 FE's current price control runs from 2009 to 2013 and is referred to as PCR02, being the second price control in its history.

Differences between PNGL and FE

- 2.14 PNGL and FE have certain similarities regarding the nature of their business and the manner in which they are regulated. For example, both GDNs are regulated so that they have sufficient revenues or conveyance charges to enable the recovery of operating costs, capital expenditure and a permitted rate of return (which is set at 7.5% real, pre-tax for both businesses until the end of 2016). In addition, both companies were tasked with the development of new gas distribution networks (i.e. greenfield investments), as previously there was no (or limited) gas infrastructure in their respective licence areas.

⁴ "Aligning the Price Control Reviews of Northern Ireland's Gas Distribution Networks," the Utility Regulator, January 2010 (http://www.uregni.gov.uk/uploads/publications/NI_GDNs_Price_Control_Alignment_v10_FINAL.pdf)

- 2.15 There are however some significant differences between the two licensees. FE is currently at a different stage in its network roll-out. As mentioned above, FE was awarded its licence in 2005, compared to 1996 for PNGL. Also, the FE licence area is larger than PNGL's, but population (and therefore connection) density is much lower.
- 2.16 Given the different underlying technical, demographic and economic characteristics of the two licence areas and networks, FE's licence prescribes in its development plan that FE lay pipes to industrial and commercial (I&C) customers, and provide domestic connections only where they are in close vicinity to the network. By contrast, PNGL's licence contained a mandatory development plan specifically requiring PNGL to develop a network through which natural gas was available to no less than 81% of all properties within its licensed area within a fixed rolling timescale.
- 2.17 In addition, the regulatory treatment of the two GDNs varies in some respects. The key differences are the following:
- **Form of price control** - PNGL has a revenue cap, that is, we determine total allowed revenues and PNGL must set tariffs to avoid revenue over-recovery. FE, on the other hand, has a price cap which means that the maximum tariffs are fixed based on determined volumes. The price cap provides an incentive to outperform on volumes as the revenue derived from outperformance can be retained.⁵
 - **Levelised charging period** – given the 'new build' nature of the gas distribution networks, revenue recovery for both companies is profiled over an extended period to reflect the fact that it would take time for volumes to grow to a sustainable level. This is intended to ensure stable long-term prices and effectively delays an element of revenue recovery to later in the licence period. PNGL's levelised charging period is 40 years (extended from 20 years initially and now ending in 2046), while FE's is 30 years (i.e. out to 2035). Tariffs are set to remain broadly the same across the charging period with the result that some allowed revenue is deferred to future years and included in the Total Regulatory Value (TRV) as a 'Profile Adjustment'.
 - **Revenue under-recovery** – this occurs when prices charged to customers are below the allowed price cap. FE is currently permitted by its licence to recover the unrecovered revenues by future increases in tariffs above determined levels. In the past, PNGL was able to roll up under-recoveries into its TRV. Under the revenue cap regime now applying to PNGL, unrecovered revenues attract an interest rate below the allowed cost of capital, which incentivises PNGL not to under-recover.
 - **Rolling incentive mechanisms** – FE has a capex and opex rolling incentive mechanism within its licence, although this is currently 'switched off'. There is no such provision in the PNGL licence, although for capex we have adopted a roller through the retrospective adjustment mechanism, which has the same effect in practice.
- 2.18 In the present price control we have attempted to ensure as much consistency between the two GDNs as is appropriate and beneficial, while recognising that there are significant differences in the operational and business environment of the two companies and therefore their regulation.

⁵ PNGL had also operated under a price cap in the period 1996-2006, when it was at a similar stage of development to FE and therefore the focus was on providing incentives to grow the nascent gas market.

The GD14 Price Control

- 2.19 The alignment of the price controls for the two GDNs has offered us the opportunity (subject to recognising the differences just discussed) to adopt a coordinated approach to the PNGL and FE price controls. The intention is that this ensures a consistent approach to gas distribution across NI and facilitates benchmarking between the companies to provide downward pressure on costs and the continued pursuit of efficiencies and service enhancements, where these are available. Such ‘comparative regulation’ is widely used, to a beneficial effect, in the rest of the UK.
- 2.20 Our aim is that the GD14 process will benefit consumers by:
- Providing a strong foundation for the continued and long-term funding of gas distribution networks, delivering service improvements to consumers;
 - Challenging the GDNs to improve their efficiency and performance at an achievable and sustainable rate;
 - Promoting long term planning by the licensees and secure the continuity of necessary and efficient investment between years and price control periods; and
 - Ensuring that revenues and prices are set at the minimum levels that are consistent with the efficient operation of the businesses and with delivering the required outputs and investment.
- 2.21 The price control process commences with the submission by the GDNs of their business plan (including actual data for previous years), setting out their assessment of the funding necessary to deliver the outcomes specified in the plan. These are scrutinised by our office, following which we first issue a draft determination for consultation (which is the present document) and then, after a public consultation period of at least two months and detailed consideration of responses, our final determination.
- 2.22 We originally intended that the price control submissions be received in September 2012, but subsequently only received them at the end of last year. This has compressed the normal amount of time we have had to analyse the submissions. Therefore, we expect there will be significant further analysis and engagement with the GDNs and all stakeholders before the final determination is published. We intend to ensure future price controls submissions will be provided earlier to allow for a longer process before final determination.
- 2.23 The timetable for issuing the GD14 final price control determination is as shown in the table below – this includes both key milestones to date and those that are forthcoming.
- 2.24 In order to encourage and facilitate full stakeholder engagement in this consultation process, we will hold a workshop during the consultation period. Both industry representatives and stakeholders from consumer and community and voluntary organisations will be invited to attend in order to discuss the proposals for the GD14 price control. A provisional date of 6th or 7th August 2013 has been set for this workshop and details will be available on our website in due course.

Table 3 – GD14 price control timetable

Key milestones	Date
Consultation paper on our overall approach	3 December 2012
Submission of business plans by GDNs	End December 2012
Update paper on our overall approach	26 March 2013
Stakeholder engagement	April – June 2013
Publication of Draft Price Control Determination for consultation	July 2013
Stakeholder engagement during consultation period (incl. stakeholder workshop)	July – September 2013
PC Final Determination published	December 2013
GD14 commences	1 January 2014

Source: The Utility Regulator

3 APPROACH

Our Statutory Duties

- 3.1 Our statutory duties are set out in Article 14 of the Energy Order.
- 3.2 In accordance with these duties, our principal objective is to promote the development and maintenance of an efficient, economic and co-ordinated gas industry in NI, consistent with Article 40 of the Gas Directive.⁶ We believe this is best achieved through a regulatory framework that underpins investor confidence that they will receive:
- A fair return on continuing investment; and
 - Fair, incentive-based rewards (or penalties) for performance that departs from reasonable evidence-based *ex ante* expectations or, where they can be objectively determined, *ex post* assessments of efficient outcomes.
- 3.3 In furthering our principal objective, we must also have regard to the interests of gas consumers and their need for a high level of protection. This is not a zero-sum game as it is fundamentally in the consumers' interest also to have an efficient, economic and co-ordinated gas industry. The investor confidence we refer to above is therefore in the interest of consumers.
- 3.4 We do, however, need to guard against inappropriately excessive returns and unfair rewards/penalties, which could:
- Over-compensate investors, to the direct detriment of consumers; or
 - Under-compensate them, thereby damaging investor confidence, ultimately to the detriment of consumers; or
 - Undermine the effectiveness of incentives on the companies to strive for better outcomes, which would also be to the detriment of consumers.
- 3.5 These considerations have guided our work for the GD14 review and will remain at the front of our minds throughout.

Regulatory Principles

- 3.6 Our statutory duties lead us to some important regulatory principles. Because of the common themes in the duties across economic regulators within the UK, these principles draw from the wider body of principles and practice that have evolved in the UK over the last twenty years or so.
- 3.7 We subscribe to the overarching principles of better regulation, which are to ensure that:
- Any burdens we impose on regulated companies are proportionate to the issues they are designed to address;
 - In taking decisions and throughout the review, we are accountable to interested parties and to the Government;
 - We are consistent and have regard to past decisions;

⁶ Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC. Article 40 includes the objective to protect consumers.

- We are transparent, which means interested parties can see and challenge the rationale and the evidence basis for material decisions; and
 - Regulation is well targeted, which means our decisions are calculated to achieve our statutory duties.
- 3.8 These principles have important implications, which resonate strongly with our statutory duties.
- 3.9 We further acknowledge the importance of the regulatory asset base, identified as Total Regulatory Value (TRV) in the gas distribution licences, as an expression of regulatory commitment. This requires us to maintain the integrity of pre-specified mechanisms for rolling forward the TRV wherever investors might reasonably have relied on them prior to making investment or other decisions.

Form of Price Control

Cost allowances

- 3.10 The price controls for the two companies are set on the basis of attempting to ensure that the businesses are remunerated for efficient operations and investment. This in turn has required us to set allowances for operating expenditure (opex) and capital expenditure (capex) for PNGL and FE in each year of the control period. A full explanation of the rationale behind our opex and capex allowances is set out later in the relevant sections of this paper.
- 3.11 Our opex and capex allowances are those which we consider efficient for PNGL and FE to deliver the required outputs over the control period. Whilst we intend to scrutinise how the companies actually spend their allowances at the level of individual cost lines (via our annual cost reporting regime), the most important consideration is that we expect PNGL and FE to be able to deliver the necessary outputs whilst keeping within their *overall* cost allowances.

Indexation

- 3.12 We use the retail price index (RPI) to protect GDNs from inflation. RPI is applied to the TRV in each year. In addition, allowed tariffs (in the case of FE) and allowed revenues (in the case of PNGL) are increased annually by the relevant RPI.

Duration

- 3.13 Our original intention as documented in our overall approach paper released on 3 December 2012⁷ was to have a ‘standard’ five-year price control period. We noted at the time that the duration of a price control is largely a matter of judgement, but felt that this provided a fair balance between the need for allowing the licensees sufficient time to plan and deliver their services, and the requirement for new and material information about operating and financial conditions to be factored into the allowed revenues or tariffs of the companies.

⁷ “Price Control for Northern Ireland’s Gas Distribution Networks GD14, Consultation on Our Overall Approach, 3 December 2012”:
http://www.uregni.gov.uk/publications/consultation_into_overall_approach_for_price_controls_of_nis_gas_distributi

- 3.14 We also noted that a five-year price control was conditional upon allowing for a number of ‘re-openers’ within the control period, largely because the information submitted by the GDNs was only received at the end of 2012 and not sufficiently detailed. This could have created undue risks for the company and customers in setting allowances for five years.
- 3.15 Following the consultation on our overall approach and in response to concerns raised about the use of re-openers, we indicated in our follow-up approach paper published in March 2013⁸ that it would be sounder to shorten the duration of GD14 to a three-year control period. This would mean that GD14 would run from 2014 to 2016.
- 3.16 The reduced price control duration would have certain advantages, primarily it would minimise the need for re-openers. A three-year price control also aligns with the end of the period (December 2016) for which the cost of capital for both PNGL and FE is fixed at 7.5%, thereby enabling us to set a considered cost of capital for the following control, GD17, taking into account the prevailing financial conditions at that time. Moreover, the intervening period can be used to establish and agree more robust information structures and submission procedures ensuring that the GDNs provide transparent and high quality information in a consistent and timely manner.
- 3.17 We remain of the view that the advantages of a shorter price control outweigh any disadvantages and therefore the present price control covers the calendar years of 2014, 2015 and 2016. All forecasted information presented in the subsequent chapters relates solely to this three-year period.
- 3.18 It would be our intention that the following price control, GD17, would set prices for five years from 2017 through to 2021 and that there would then be more time for a more comprehensive review. The duration and form of control for GD17 will be consulted on in the future.

⁸ *“Update on Our Overall Approach for the price controls of NI’s gas distribution networks”*, Utility Regulator, 26 March 2013: (http://www.uregni.gov.uk/publications/update_on_our_overall_approach_for_the_price_controls_of_nis_gas_distributi)

4 PRICE CONTROL SUBMISSIONS

Introduction

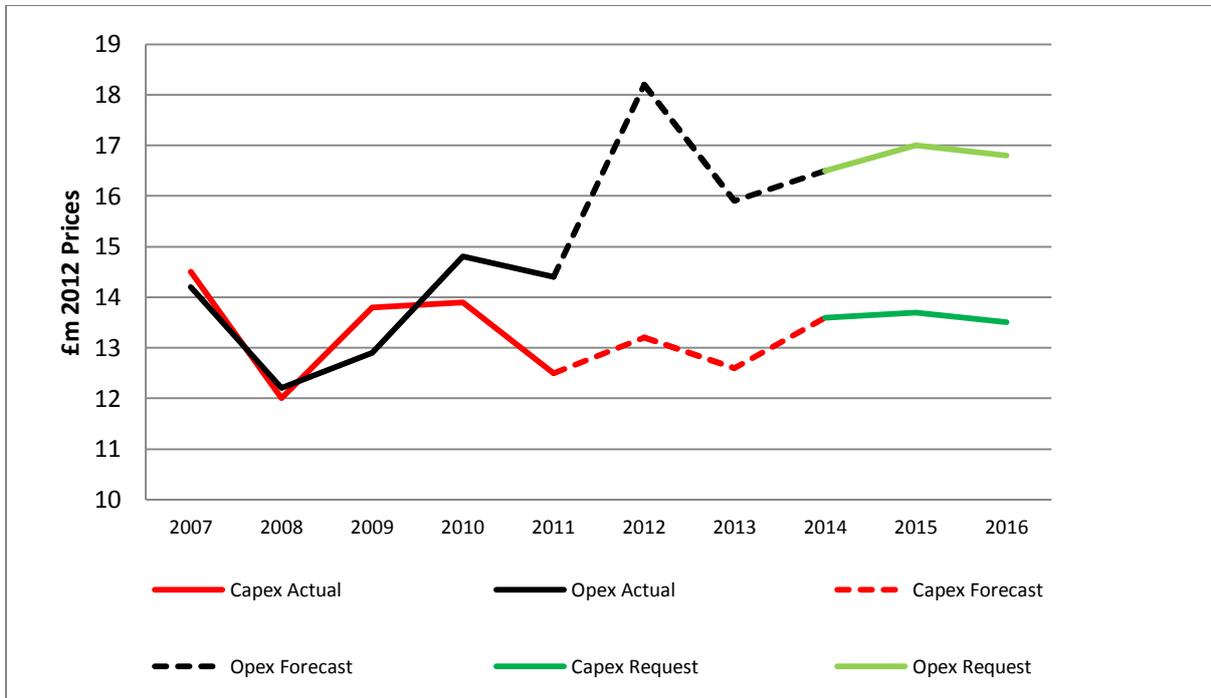
- 4.1 PNGL and FE are required as a condition of their gas conveyance licence to submit to the Utility Regulator relevant information necessary for us to complete a price control review.
- 4.2 In late 2012 both companies submitted their projections. This section presents a summary of the information submitted by PNGL and FE, focusing in particular on the resource requirements stated as necessary by the companies to operate and develop their networks over the control period.

Phoenix Natural Gas Limited

Overview

- 4.3 The graph below is a summary of PNGL’s opex and capex costs from 2007 to 2013, and its requested allowances for GD14. We note that 2012 and 2013 figures (represented by the dotted lines) are PNGL’s best projected forecast at the time of submission.

Figure 3 – PNGL operating and capital expenditure submission, £m



Source: PNGL and the Utility Regulator

- 4.4 Overall, PNGL’s capex request is in line with previous costs. In relation to operating expenditure, the graph demonstrates how PNGL costs increased significantly over the PNGL12 period, chiefly as a result of legal and consulting costs awarded from the

Competition Commission’s decision. The graph also shows that the GD14 requested opex allowances are significantly higher than previous allowances.

Operating Expenditure

4.5 The table below sets out a summary of the overall opex allowances requested by PNGL. More detail of the build-up of some of the individual cost lines was also provided, both in the original PNGL submission and following our information requests.

Table 4 – PNGL operating expenditure submission, £k

Cost item	2014	2015	2016	Total
Advertising, marketing and PR	860	829	789	2,479
Billing	214	222	231	666
Emergency costs	2,211	2,304	2,400	6,916
Entertainment	43	43	43	128
Fleet costs	265	266	260	792
Human resources	121	117	116	354
Incentives	783	724	666	2,173
Information technology	305	316	321	942
Insurance	1,032	1,059	1,084	3,175
Licence fees	128	128	128	385
Manpower	5,351	5,454	5,413	16,218
Network maintenance	2,438	2,669	2,374	7,481
Office costs	544	595	630	1,769
Own use gas	17	18	18	53
Professional and legal fees	670	633	632	1,936
Rates	1,228	1,390	1,457	4,075
Stationery	51	52	53	157
Telephone and postage	130	140	142	412
Travel and subsistence	71	71	71	213
Total	16,464	17,032	16,827	50,324

Source: PNGL

4.6 In section 5 we examine PNGL’s opex claims and allowances in some detail. At an aggregate level, however, PNGL’s requested average annual opex allowance is significantly higher than both our determined allowances in PNGL12 (+11.4%) and PNGL’s actual cost performance during PC03 i.e. the years 2007-2011, being the period for which we have detailed final audited numbers (+23%).

4.7 The cost lines that are contributing mostly to the increase in the operating expenditure claim are the following:

- Insurance
- Manpower
- Network Maintenance
- Rates.

Capital Expenditure

- 4.8 The table below sets out a summary of the overall capex allowance requested by PNLG. More detail regarding some of the individual cost lines was also submitted by PNLG, which is examined and discussed in section 7.

Table 5 – PNLG capital expenditure submission, £k

Cost item	2014	2015	2016	Total
4 bar mains	0	0	0	0
Pressure reduction stations	119	119	0	238
Feeder Mains	110	121	131	362
Infill mains	3,090	3,214	3,314	9,618
Domestic services	3,586	3,503	3,401	10,490
Domestic meters	1,758	1,730	1,692	5,179
I&C services	589	589	589	1,768
I&C meters	373	374	374	1,121
Other capex (network code, fixtures & fittings, IT)	298	296	250	844
Traffic Management Act	2,755	2,791	2,770	8,317
Management fee	963	965	950	2,878
Total	13,641	13,703	13,471	40,815

Source: PNLG

- 4.9 PNLG's capex request for GD14 is similar to its capital expenditure during the PNLG12 price control period with no significant changes in the level of costs assumed.

PNLG Connection Assumptions

- 4.10 PNLG's assumed annual level of incremental connections for the control period is set out below.

Table 6 – PNLG proposed new connections (average per year)

Customer category	Annual average connections
Domestic – Owner Occupier (OO)	4,700
Domestic – New Build (NB)	2,533
Domestic – Northern Ireland Housing Executive (NIHE)	1,000
Industrial and Commercial (I&C)	378
Total	8,611

Source: PNLG

GD14 Projected Outputs versus PNLG12 and PC03 Outputs

- 4.11 As part of its submission, PNLG also provided information on the level of outputs it plans to deliver over the control period, the main ones being:
- Kilometres of mains laid;

- Number of properties passed; and
- Number of properties connected.

4.12 For illustrative purposes, we set out below the following:

- PNGL’s historical performance comparing actual audited accounts for 2007 to 2011 (the latter being the most recent year for which we had detailed audited data at the time of writing) against the PC03 determination with allowances adjusted as foreseen by the retrospective mechanism; and
- PNGL’s actual performance in calendar years 2007 to 2011 compared with its allowance requests and forecast outputs for GD14 (i.e. 2014 to 2016).

4.13 The two sets of data are respectively shown in the tables that follow.

Table 7 – PC03 actuals versus PC03 determination (with retrospective adjustments), £k

Cost items	2007	2008	2009	2010	2011	Average	2007	2008	2009	2010	2011	Average
	Actuals 2007-2011						PC03 allowances (retrospectively adjusted)					
Capex, £m	14.5	12.0	13.8	13.9	12.5	13.3	15.7	12	13.4	13.2	12.1	13.3
Opex, £m	14.2	12.2	12.8	14.8	14.4	13.7	13.1	13.3	13.7	14.8	15.6	14.1

Source: PNGL and the Utility Regulator

Table 8 – PC03 actuals versus PNGL GD14 submission, £k

Allowances and outputs	2007	2008	2009	2010	2011	Average 2007-11	2014	2015	2016	Average GD14 submission
	Actuals						PNGL submission			
Capex, £m	14.5	11.9	13.8	13.9	12.5	13.3	13.6	13.7	13.5	13.6
Opex, £m	14.2	12.2	12.8	14.7	14.4	13.7	16.5	17.0	16.8	16.8
Total cost, £m	28.7	24.1	26.6	28.5	26.9	26.9	30.1	30.7	30.3	30.4
Pipe laid, km	80	61	78	73	56	70	67	70	73	70
Properties passed	8,438	8,027	8,168	9,350	8,074	8,411	5,703	5,953	6,153	5,936
Connections (domestic)	10,902	7,900	8,118	8,081	9,719	8,944	8,778	8,628	8,428	8,611
Connections (I&Cs)	532	506	457	455	427	475	378	378	378	378
Connections (OO)	4,034	4,087	4,051	4,449	6,298	4,584	5,100	4,700	4,300	4,700

Source: PNGL and the Utility Regulator

4.14 From the tables above the following may be observed:

- Table 7 highlights how PNGL has historically performed in line with PC03 determined allowances, retrospectively adjusted for actual outputs. Results show that in the period 2007-11, PNGL achieved its budgeted forecast for capex and slightly over-performed (i.e. underspent) on opex.
- Going forward, PNGL is seeking higher allowances in GD14 to deliver fewer overall outputs than historically delivered during 2007-2011 (Table 8).
- Overall, requested annual allowances sought in GD14 (2014, 2015 and 2016) are higher than in PC03 (£30.4 m vs. £27.0 m). On average, PNGL is seeking £3.4 million more allowances in each year of GD14 than it has actually spent in PC03, which represents an increase of 13% in real terms.
- PNGL’s capex allowance request for GD14 (£13.6 million) is broadly equivalent to its actual capex spend in 2007 to 2011 (£13.3 m) albeit for fewer outputs, while the opex

allowance request for the 2014-2016 period is significantly higher (23%) than actual opex in PC03 (£16.8 m vs. £13.7 m annually).

- PNLG on average expects domestic connections to be higher than they have been historically in PC03. This reflects a major refocus in PNLG's connection strategy towards domestic customers, and especially owner occupied and social housing rather than new build (given the deterioration in the housing market). Nevertheless, the projected connections are lower than those achieved in 2012 (10,378) and slightly below those expected in 2013 (9,288).

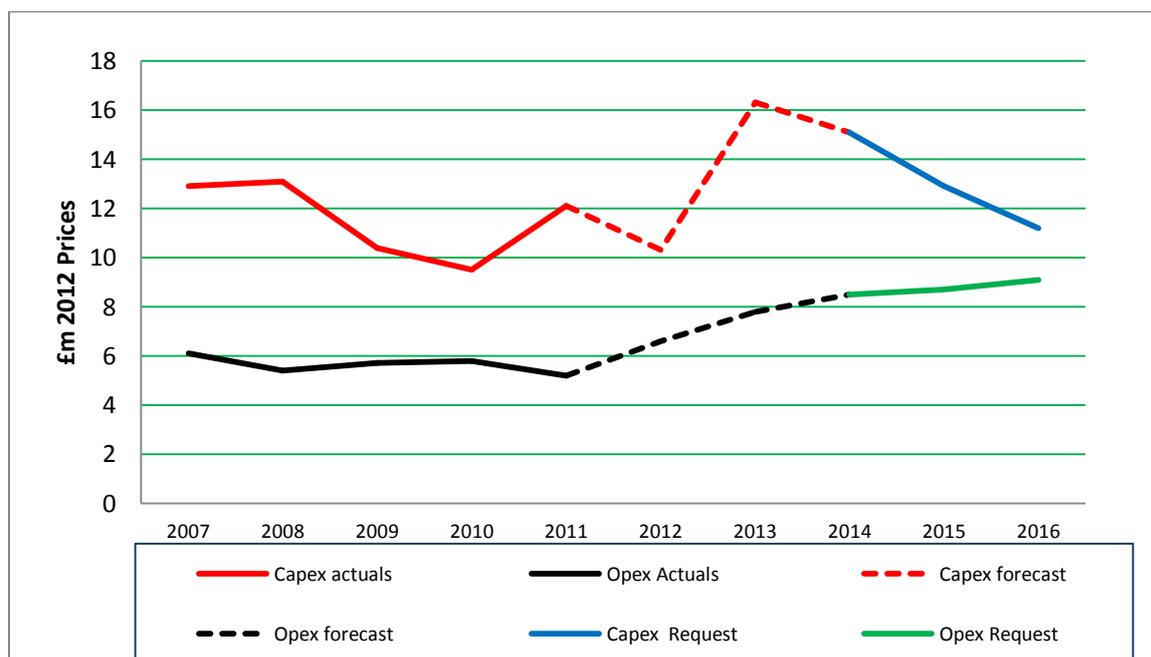
4.15 It is worth noting that PNLG did provide some detail and supporting commentary to explain why costs are forecast to increase. More detail and discussion is provided in the sections to follow.

Firmus Energy

Overview

4.16 The graph below is a summary of FE's opex and capex costs from 2007 to 2013, and its requested allowances for GD14. We note that 2012 and 2013 figures (represented by the dotted lines) are FE's best projected forecast at the time of submission.

Figure 4 – FE operating and capital expenditure submission, £m



Source: FE and the Utility Regulator

4.17 Overall, FE's requested allowances are significantly higher than historical costs. This is particularly the case for opex. Capex is also significantly higher, especially in the early years and then it gradually falls to historical levels by the end of the GD14 period.

Operating Expenditure

4.18 The table below contains a summary of the overall opex allowances requested by FE. FE provided more detail of the build-up of some of the individual cost lines in its original submission and after we issued our information requests.

Table 9 – FE operating expenditure submission, £k

Cost item	2014	2015	2016	Total
Advertising, marketing and PR	1,555	1,505	1,405	4,465
Bank charges	9	9	9	27
Fees and consulting	223	123	123	469
Insurance	232	270	305	806
Licence fees	280	280	280	840
Manpower	2,091	2,210	2,430	6,730
Network maintenance	1,214	1,326	1,522	4,063
Office costs (incl. IT)	456	459	459	1,374
Parental recharges	1,210	1,132	1,155	3,498
Professional subscriptions	12	12	12	36
Rates	918	1,039	1,065	3,022
Training	88	90	119	297
Travel and transport	229	239	242	711
Total	8,517	8,695	9,126	26,338

Source: FE

4.19 FE's opex claims and allowances are reviewed in detail in section 6 of this consultation paper. At this point we note that the aggregate opex claim for FE has increased significantly compared to prior years. The average annual opex claimed is 30% higher than our determined allowances for the most recent price control (PCRO2, covering 2009-2013) and 58% higher than FE's actual costs for the 2009-2011 period. The main drivers for this increase appear to be:

- Office costs
- Maintenance
- Manpower.

Capital Expenditure

4.20 The table below sets out a summary of the overall capex allowance requested by FE. More detail regarding some of the individual cost lines was also submitted by FE, which is examined and discussed in section 8.

Table 10 – FE capital expenditure submission, £k

Cost item	2014	2015	2016	Total
4 bar mains	3,905	2,641	2,519	9,064
Governors	200	133	132	465
Infill Mains	3,454	3,219	2,620	9,292
Low pressure	819	566	498	1,882
Domestic services	3,558	3,609	3,396	10,564
Domestic meters	793	805	755	2,354
I&C services	625	422	209	1,256
I&C meters	198	134	66	397
Large Loads Services	17	17	17	52
Large Loads Meters	17	17	17	52
Telemetry	38	37	24	99
Other Capex	300	300	50	650
Traffic Management Act	1,147	958	854	2,959
Total	15,072	12,858	11,158	39,087

Source: FE

4.21 FE's requested capex allowance is 23% higher (in real terms) than average actual capital expenditure during the previous price control, PCR02. This is both because the workload is projected to increase and also because FE has suggested that unit rates will increase.

FE Connection Assumptions

4.22 FE's assumed level of connections over the control period is set out below.

Table 11 – FE proposed new connections (average per year)

Customer category	Annual connections
I&C medium	2
I&C small	100
New build	800
NIHE	1,133
Existing / 'warm' homes	2,000
Total	4,035

Source: FE

GD14 Projected Outputs versus FE PCR02 Outputs

4.23 As part of its submission, FE also provided information on the level of outputs it plans to deliver over the control period, the main ones being:

- Kilometres of mains laid; and
- Connections.

4.24 For illustrative purposes, we set out below:

- FE's historical performance comparing actual audited accounts for 2009 to 2011 (the latter being the most recent year for which we had audited data at the time of writing) against the PCR02 determination (with and without retrospective adjustments); and
- FE's actual performance in calendar years 2009 to 2011 and compare this with its allowance requests and forecast outputs for 2014 to 2016.

Table 12 – PCR02 actuals versus PCR02 determination (with and without retrospective adjustments), £k

Cost items and outputs	2009	2010	2011	Average	2009	2010	2011	Average	2009	2010	2011	Average
	Actuals 2009-11				PCR02 Determination				PCR02 retrospectively adjusted			
Capex, £m	10.4	9.5	12.1	10.6	13.9	13.7	10.9	12.8	12.3	11.9	14.5	12.9
Opex, £m	5.7	5.8	5.2	5.6	5.9	5.5	5.5	5.6	5.6	5.2	5.0	5.3
Pipe laid, km	79	90	110	93	100	94	76	90	79	90	110	93
Connections-Total	2,080	2,449	3,506	2,678	2,115	2,087	2,082	2,095	2,080	2,449	3,506	2,678
Connections (OO)	400	523	1,034	652	400	400	400	400	400	523	1,034	652

Source: FE and the Utility Regulator

Table 13 – PCR02 actuals versus FE GD14 Submission, £k

Allowances and Outputs	2009	2010	2011	Average	2014	2015	2016	Average GD14
	Actuals				2009-11	FE Submission		
Capex, £m	10.4	9.5	12.1	10.7	15.1	12.9	11.2	13.1
Opex, £m	5.7	5.8	5.2	5.6	8.5	8.7	9.1	8.8
Total cost, £m	16.1	15.3	17.3	16.3	23.6	21.6	20.3	21.9
Pipe laid, km	79	90	110	93	87	71	63	74
Connections - total	2,080	2,449	3,506	2,678	4,152	4,102	3,852	4,035
Connections - OO	400	523	1,034	652	2,000	2,000	2,000	2,000

Source: FE and the Utility Regulator

4.25 From the tables above, we make the following observations:

- Table 12 demonstrates how FE has performed historically against PCR02 determined allowances and retrospectively adjusted determined allowances for actual outputs. The results show that FE has outperformed its retrospective forecasted targets in capex and opex, achieving greater connections, meeting its outputs using less money than forecasted at the PCR02 determination. Key efficiencies were achieved in manpower, fees and consultancy and the market development allowance within opex and mains, domestic meters and additional capital within capex.
- Overall allowances sought by FE in 2014, 2015 and 2016 are significantly higher than PCR02 actuals (see Table 13).
- FE is seeking on average £2.4 million more capex allowances in each year of GD14 than it has actually spent on average per year in PCR02. This represents an increase of 23% in real terms.
- FE has requested £3.2 million more in opex allowances in each year of GD14 than it has actually spent on average per year in PCR02. This represents an increase of about 57% in real terms.
- However, FE forecasts a significant increase in connections – 51% in comparison to the PCR02 actual average. This is driven mostly by an increase in domestic connections and particularly for OO and NIHE, rather than new build housing given the deterioration in economic activity.

5 OPERATING EXPENDITURE, PNGL

Introduction

5.1 PNGL categorises its operating expenditure into 19 different cost lines 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	

5.2 In assessing the reasonableness of the expenditure claimed by PNGL for these cost lines, we have first grouped them into broader categories and then applied what we consider to be an appropriate approach to each.

5.3 Our grouping takes into account the importance of the cost items in PNGL's cost structure, with greater scrutiny exercised over those that represent the greater cost. We also consider the extent to which some cost items must be separately examined because of the particular way they are treated (e.g. pass-through), or due to other specific circumstances calling for individual treatment, irrespective of their magnitude.

5.4 More specifically, we first identify the items that collectively constitute the largest proportion of total operating expenditure and which separately represent a material share of overall claimed costs (typically, more than about 5%). We examine these in some detail on an individual basis, using evidence furnished by PNGL in its original submission and in responses to our subsequent information requests. The relevant cost lines are:

- Advertising, marketing and PR (including customer incentives);
- Emergency costs;
- Insurance;
- Manpower;
- Network maintenance; and
- Rates.

Together, these items represent 80% of PNGL's claimed allowances.

5.5 Next, we examine cost items that by their nature require individual assessment, although they might not represent a significant component of overall expenditure. This could be because they are pass-through items (as is the case with licence fees), or if there are other specific circumstances applying, such as for:

- Office costs and IT, where the requested allowances are significantly higher than historical actual costs and/or determined allowances; and
- Professional and legal fees, in light of the 'abnormal' costs incurred in 2012 in the context of the Competition Commission (CC) inquiry and the significant increase in PNGL's claimed allowances for this category.

- 5.6 We have considered the remaining (smaller) cost lines collectively, following the precedent set in PNG12.
- 5.7 We first 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 *ex ante* allowances and later in the retrospective adjustments that are made *ex post* once actual connections are known. (The way we will make retrospective adjustments is discussed later in Section 14).

Our Connection Assumptions

- 5.8 PNGL submitted a Market Development Paper to UR as part of its business plan submission for GD14 outlining that difficult economic conditions have impacted connection numbers in the past and their sustainability going forward. It has also been indicated that fewer owner occupier properties are likely to switch to gas as the number of new build rises. On this basis, PNGL proposed that owner occupier connections would drop from the current level to average 4,700 during GD14.
- 5.9 We have considered the PNGL arguments but do not believe they justify reducing the target from current levels. The connections incentive was introduced in 2012 to ensure PNGL had a strong incentive to encourage owner occupiers to switch to gas and provided a high level of flexibility for PNGL to target the incentive however it considered appropriate – e.g. advertising, discounts, etc. This mechanism has been very successful and has seen large increases in connections allowing PNGL to earn c.£2m in outperformance in 2012-2013.
- 5.10 The success of the mechanism allows us to reset the connections target at the current level. Therefore we have set the target for owner occupied connections in the formation of the connections incentive mechanism (discussed further below) as 6,500 per annum against an average of 4,700 as submitted by PNGL. The most recent performance of PNGL in OO connections is seen as a fair indicator as to the level of connections achievable for this price control period.
- 5.11 The targets in respect of NIHE and I&C connections were accepted as submitted. Our proposed connection targets are set out in the table below.

Table 14 – Proposed cumulative connections for PNGL for the GD14 period

Connection type	PNGL submission	UR proposal
Domestic – OO	14,100	19,500
Domestic –NB	7,600	7,600
Domestic – NIHE	3,000	3,000
I&C	1,134	1,134
Total	25,834	31,234

Source: PNGL and the Utility Regulator

Connections Incentive

The connections incentive mechanism

- 5.12 In PNG12, we moved away from setting fixed allowances for sales-related costs and toward remunerating PNGL on the basis of outputs, that is, connections – this was referred to as a

'A+M+PR' incentive . Moreover, in setting a per connection allowance, we sought to emphasise the need for all future connections made by PNGL to its network to be economic.

- 5.13 Accordingly, we developed the 'A+M+PR' mechanism in a way that sought, on average, to ensure that making a new connection to the network would deliver positive net present value (NPV) revenues over a suitable time period. That is, the per-connection allowance was calculated so that the present value of direct revenues from a connection was equal to or exceeded the present value of direct costs of making that connection. The allowance was payable only for Owner Occupier (OO) housing connections and for those above 25% of the targeted number of connections, on the assumption that some customers would switch to gas in any case without any direct marketing or selling.
- 5.14 Allowances of this type to incentivise consumers to connect were not originally envisaged at the start of PNGL's operations in 1996, but we determined that this was needed to increase connections in the early years. Indeed, originally PNGL had intended to complete all connections by 2016. A significant reason for allowing such cost allowances was to enhance the reputation of gas so that it was seen as the fuel of choice in Greater Belfast. Given the high ongoing levels of connections, it appears this goal has largely been achieved.
- 5.15 In the PNGL12 determination we considered that it was appropriate to continue to grant PNGL allowances but at the same time, we moved to an output-based mechanism where the allowance would be obtained only for connections actually achieved. Hence, the per connection allowance of the A+M+PR mechanism was employed to substitute for (a sub-set of) PNGL's sales-related costs, namely, advertising, marketing and PR, incentives (i.e. monies offered to customers to connect to gas), relevant staffing costs and associated corporate overheads that can be apportioned to sales activities.

Review of the mechanism

- 5.16 In our previous price control determination, we also stated that the connections incentive and its components would be reviewed to assess whether it has worked as anticipated and whether it is reasonable to retain going forward. In undertaking this assessment, we have tried to answer the following two questions:
- Is it necessary to retain a connections incentive mechanism and, if so,
 - Is the present mechanism 'fit for purpose' or does it require some change?
- 5.17 In answer to the first question, we estimate using PNGL figures that OO connections in 2012 and 2013 will be 47% higher (on an average annual basis) than the connection assumptions we adopted in the PNGL12 price determination and 32% more than actual average annual connections during the PC03 period (2007-2011). Although this performance may not be solely attributed to the A+M+PR mechanism, we believe it has been an important contributing factor.
- 5.18 Notwithstanding the above, even without this output-based mechanism, a significant number of residential customers would connect to gas (regardless of any marketing and sales effort from PNGL). The intention of the incentive allowances was never meant to be long term. We had indicated in PNGL12 that with the market maturing and as we moved beyond 2016 there would be a case for reducing the allowance by 50% from 2017. This still remains the intention as we think it important to phase the allowance out over time and move to a more standard approach consistent with a mature network. We plan to conduct a general review of connections policy as part of GD17 and will consider the level of incentive (if any) required to maintain connection activity.
- 5.19 For GD14, we plan to continue with a mechanism which excludes 25% of the targeted connections from the calculation of the allowances on the basis that they are 'non-

additional'. Importantly, the allowance also only applies to OO domestics where the incentive to switch may not be as strong as for I&C customers.

- 5.20 Turning to the second question, we feel that it is necessary to review the quantum of the allowance. We have reviewed the basis of the calculation in PNG12 and also taken into account the actual performance of PNG12 since the incentive was introduced.
- 5.21 In taking into account direct capex costs associated with a new connection, the calculation assumed that these only entail service and meter costs. However, in addition to these costs, we believe that it is appropriate to include infill costs typically incurred that should be attributed to new connections. Accordingly, our calculations below for determining the proposed per connection allowance for GD14 also take into consideration infill costs. While much of infill has already been constructed, it has mainly been built to ensure domestic properties have been passed and it is appropriate that such costs should be taken into account in this calculation. This still means that the opex costs associated with each new customer and the larger mains costs forming the network backbone are not included in the calculations.
- 5.22 Separately, we also reviewed the actual costs per connection that will be incurred by PNG12 during the 2012-2013 control period. We estimate that PNG12's actual costs during PNG12 will be £462 per connection (£2012) on the basis of 12,350 connections in total. This equates to a per connection allowance of £557 (£2012) when adjusted to account for and exclude the 'non additional' connections (which were fixed at 1,050 connections per year in PNG12).

Mechanism principles

- 5.23 The main principles used in the development of the mechanism remain largely unchanged from PNG12, subject to the modifications discussed above. The key elements 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:

$$\text{Revenue per connection} = \text{Average consumption} \times \text{Conveyance tariff}, \\ \text{Discounted over the defined Recovery period}$$

AND

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

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

Revenue per connection

5.24 A reminder of the formula:

$$\text{Revenue per connection} = \text{Average consumption} \times \text{Conveyance tariff, Discounted over the defined Recovery period}$$

5.25 The assumptions we have used are as follows:

Variable	Assumption
Average consumption (A)	410 therms per annum (tpa) This is the approximate average consumption figure for both gas distribution licensees ⁹
Conveyance tariff (B)	40 pence per therm (ppt) This is an estimate of the approximate tariff applicable to domestic customers
Recovery period (C)	15 years This is considered a suitable payback period for the recovery of direct connection costs. Thereafter, all future revenues would contribute to the costs of the wider network
Average revenue per annum per OO connection	£164 Calculated as: (A) x (B)
Net present value (NPV) of average revenue over recovery period	£1,728 NPV of: (A) x (B) discounted over the years in (C)

Direct capex cost per connection

5.26 A reminder of the formula:

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

5.27 We look at capex allowances in detail in section 7, but to summarise:

Variable	OO customers
Infill cost	£507
Service cost	£550
Meter cost	£200

Allowance per connection

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

$$\begin{aligned} \text{Allowance (£)} &= (\text{Revenue per connection}) - (\text{Direct capex cost per connection}) \\ &= 1,728 - (507 + 550 + 200) \\ &= 471 \quad (\text{which we will round up to £480}) \end{aligned}$$

5.29 The figure of £480 is somewhat lower than our calculation of PNGL's expected actual per connection costs for 2012-13 (£557). However, it is important that economic principles are

⁹ We have sought to develop a common per connection allowance for both PNGL and FE and therefore adopt similar assumptions for both companies.

applied in setting the incentive and we therefore propose to set the allowance at £480 for all additional OO connections.

Allowance application

- 5.30 We have calculated an appropriate allowance of £480 per connection to cover those opex costs we believe can be directly apportioned to sales-related activities for domestic OO properties. However, the full allowance is not applicable to *all* new OO connections.
- 5.31 As already discussed and consistent with our PNG12 determination, we consider that there will be a certain number of OO connections that would occur anyway without any direct marketing or selling to these customers. We describe these connections as “non-additional”. Since PNG12 could in theory avoid any sales-related costs to connect such customers, no allowance will be applicable for these customers. We have assumed (as for PNG12) that 25% of all new connections will fall into this category.
- 5.32 The total number of forecast OO connections is 6,500 per annum as set out in Table 14. This makes the non-additional connections 1,625.
- 5.33 It is important that we ensure all connections allowances claimed by GDNs relate to properties which have a supplier and are burning gas. We plan to review the mechanisms in place to ensure this is the case in the coming months. We expect the GDNs to be able to demonstrate that all connections have a supplier agreement in place and burn a minimum quantity of gas. We will further discuss with GDNs how this should be defined.

What costs are being replaced by the mechanism?

- 5.34 The relevant opex costs are:
- Advertising, marketing and PR;
 - Incentives;
 - OO Sales related staff, including relevant director; and
 - Shared corporate overheads.
- 5.35 The full allowances requested against the distribution business for these cost items are as follows:

Table 15 – Potential PNG12 costs to be replaced by Connections Incentive Mechanism, £k

Cost item	2014	2015	2016
Advertising, Marketing and PR			
<i>Market development</i>	860	829	789
TOTAL	860	829	789
Incentives			
<i>Domestic</i>	746	687	629
<i>I&C</i>	37	37	37
TOTAL	783	724	666
OO Sales Related Staff (inc. Director)	1,403	1,383	1,357
Corporate overheads (apportioned)	622	626	625
Total	3,668	3,563	3,437

Source: PNG12 and the Utility Regulator

5.36 The *Corporate Overheads (apportioned)* cost line above refers to a share of overhead costs we consider appropriate to apportion to the Business Development Department. The costs are:

- Fleet costs;
- Human Resources;
- Insurance (buildings and car insurance);
- IT;
- Office Costs;
- Rates (excluding network rates);
- Stationery;
- Telephone and postage;
- Travel and subsistence; and
- Corporate support personnel AND their apportioned share of the above costs (by this we are referring to staff in the Finance department including the Finance Director and the Regulatory Affairs section of the Commercial Department, 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 29 are slightly higher than those presented in the final overall opex allowance proposals summarised in Table 30 at the end of this section.)

5.37 We consider that the costs PNLG 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.

5.38 The fixed sums we propose, along with our rationale, are set out in the table below. Note that total costs in our proposed fixed allowances have been rounded to the nearest £k.

Table 16 – PNLG fixed allowances, £k

Cost Item	2014	2015	2016	Rationale
Advertising, Marketing and PR				
<i>Market development</i>	37	36	35	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.
TOTAL	37	36	35	
Incentives				
<i>Domestic</i>	-	-	-	Incentives offered to domestics are to be fully recovered via the mechanism.
<i>I&C</i>	-	-	-	Consistent with our PNLG12 determination, we will no longer grant an explicit allowance for I&C incentives.
TOTAL	-	-	-	
Business development department (incl. Sales Director)	660	660	660	A detailed review of the Business Development 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 Business Development will spend some time on activities not related to OO domestics.
Corporate overheads (apportioned)	-	-	-	Corporate overheads have already been apportioned using a ratio of those staff in the Business Development Department (whose focus is on OO domestics) to the total staffing complement at PNLG. Therefore no fixed sum is proposed.
Total	697	696	695	

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

Source: The Utility Regulator

- 5.39 Another modification we are considering entails the introduction of a risk-reward mechanism to provide stronger incentives to PNLG to outperform its connection targets. This is in response to the CC's price determination, which recommended that changes to the connections incentive be explored for strengthening the PNLG volume incentive (see paragraphs 10.48 to 10.50 of the CC decision).
- 5.40 The CC asked UR to examine whether the connections incentive in PNLG12 was providing an incentive of the same magnitude as the previous volume incentive before the price cap regime was removed. The magnitude of the price cap regime is highlighted by the loss PNLG made under this in 2006, which amounted to almost £10m. For comparison, if we take the most extreme example and assume PNLG connected no customers under the PNLG12 connections incentive regime we calculate that it could lose up to £3m. This analysis would support the position that the PNLG12 regime did not provide an incentive regime of similar magnitude to the volumes incentive.
- 5.41 Given this analysis, we have set out below a proposal for how the magnitude of the incentive could be increased.
- 5.42 Under the existing A+M+PR mechanism, PNLG receives the stipulated per connection allowance for all 'additional' connections (i.e. those above the 25% threshold) irrespective of whether it under- or outperforms the connection targets. In order to reinforce PNLG's incentive to connect customers, we could provide a reward if PNLG exceeds the target connections that would increase the per connection allowance for additional connections exceeding the target number of connections by the same proportion that the connections target is overachieved. Conversely, a penalty would apply if PNLG falls short of the target connections that would reduce the per connection allowance for all additional connections by the same proportion that the connections target is underachieved.
- 5.43 To demonstrate how the new incentive mechanism might work, consider the following examples:
- *Outperformance* – the connection allowance is £480 and the target (excluding non-additional) connections is 4,875, but PNLG outperforms by connecting 5,363 OO customers (excluding non-additional). As the connections outperformance is 10% ($= 5,363 / 4,875 - 1$), a unit connection allowance of £528 ($= £480 \times (1+10\%)$) will be payable for the 488 extra connections gained; the standard allowance of £480 would still apply to the original 4,875 connections. Total allowances would therefore equal £2,597,664 (i.e. $(£480 \times 4,875) + (£528 \times 488)$).
 - *Underperformance* – the connection allowance is £480 and the target (excluding non-additional) connections is again 4,875, but PNLG this time underperforms by connecting 4,387 OO customers (excluding non-additional). As the connections underperformance is 10% ($= 4,387 / 4,875 - 1$), the unit connection allowance payable will be £432 ($= £480 \times (1-10\%)$) for all connections (excluding non-additional). Total allowances in this case would equal £1,895,184 (i.e. $£432 \times 4,387$).
- 5.44 We would be interested in respondents' views on whether this would be an appropriate addition to the connections incentive.

Summary

- 5.45 The connections incentive mechanism is summarised as follows:
- The full allowance is £480 per OO connection, applicable to all new OO connections after consideration of non-additional connections.

- The total aggregate allowance has been calculated by multiplying this allowance by the forecast number of OO connections (excluding non-additionals), less a sum for recharges to Phoenix Energy Services (PES) of £50k per annum.
- The aggregate allowance will be retrospectively adjusted at the time of the next price control using the actual number of connections.
- The allowance per connection could also be retrospectively adjusted according to whether PNGL achieves the targeted number of OO connections. The proportional increase (reduction) in the allowance would be equal to the percentage of over (under) achievement of the connection target.
- The allowances to be recovered via the mechanism will replace those costs set out in Table 15. Where an element of fixed allowance is considered appropriate, this has been included in our overall allowances.
- We expect to reduce the full per connection allowance by 50% from 2017 onwards. We will consult on connections costs and incentives further as part of GD17.

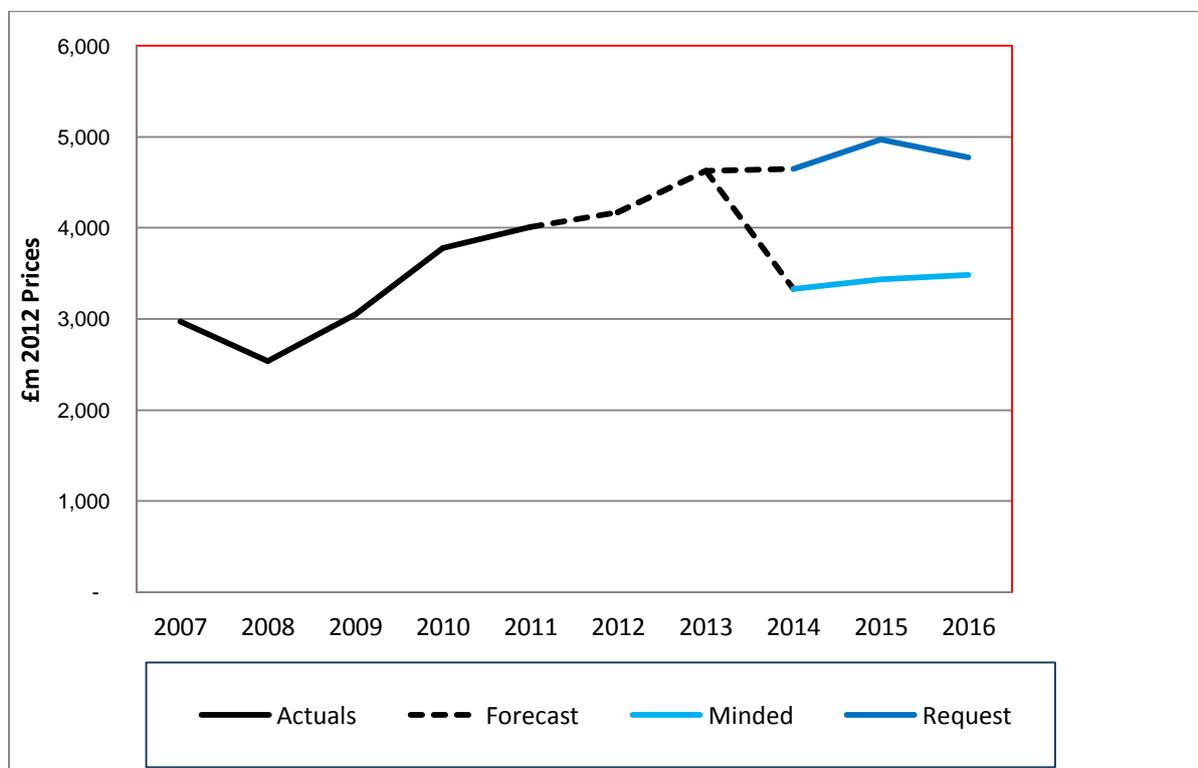
Emergency and Network Maintenance Costs

Overview

5.46 PNGL has requested allowances of £4.6 million, £5.0 million and £4.8 million in 2014, 2015 and 2016 respectively to cover emergency and maintenance costs. For comparison, historical actual costs for 2010-2011 averaged around £3.9 million.

5.47 The following graph compares the historical actuals against the GD14 submission and shows the recommended allowances for GD14.

Figure 5 – PNGL emergency and network maintenance historical costs and GD14 Submission, £m



Source: PNGL and the Utility Regulator

- 5.48 The graph clearly shows that PNGL has forecast increasing maintenance costs year on year for 2014-2016, where the recommended allowances indicate a reduction for 2014 and then a generally flat trend. The key factors influencing the proposed emergency and maintenance allowances are:
- PNGL is being targeted for 2014-2016 to reduce the number of calls received by its emergency call centre, as the number of inappropriate/general inquiry calls received historically has been around 50% of the total calls, which is particularly high compared with counterparts in GB.
 - We have proposed that PNGL and FE work more closely together in procuring a single emergency call centre contract in order that savings be made.
 - We have retained the approach used in the last two price controls where we remove the profit element from Phoenix Energy Services (PES)-related works. However, in GD14 we have not only deducted the profit element from the emergency first calls; we have also removed the profit element from the specific maintenance activities where PNGL has informed us these activities are completed by the First Call Operatives.
 - We have proposed a change of policy for domestic meter exchanges where PNGL will no longer be granted an allowance to cover the cost of all domestic meter exchanges. In some cases, customers would be required to pay the cost of the meter exchanges up front. This amounts to a c.£580k reduction in allowances over the three-year period compared to PNGL's requested allowances. However, it is important to note that PNGL will recover these costs directly from customers and therefore this is not a reduction in PNGL revenues.
 - As in PNGL12 an efficiency factor of 10% has been applied to the baseline maintenance costs to reflect the efficiencies which we consider PNGL should be achieving if it had fully implemented an asset maintenance system.
- 5.49 These reasons and the analysis of emergency and maintenance costs are explained in more detail throughout this section, and supplementary information has also been provided in Appendix 1.
- 5.50 We commissioned our engineering consultants, Rune Associates Limited (Rune), to advise on the appropriateness of PNGL's allowance request for emergency and network maintenance costs.
- 5.51 PNGL has previously reported its costs and forecasts in terms of the account headings used within its business. To undertake the review for the GD14 price control for both PNGL and FE, we asked Rune to develop a reporting template that would attempt to get both companies to move to a common reporting format and would provide an element of comparability to GB networks.
- 5.52 We have analysed and reported the emergency and maintenance costs under the following headings:
- Call centre costs
 - Emergencies (First Call Costs)
 - Repair activities
 - Maintenance activities.
- 5.53 Rune has attempted to allocate the costs and forecasts from the PNGL submission into these four headings, and has been assisted in this objective by PNGL through additional information submitted in the new template.

- 5.54 The following sections consider each of these headings in turn and a summary table is provided at the end of this section showing the summary submission and allowance for each area.
- 5.55 Illustrative unit rates for comparison purposes in tables are shown in italics; these rates are shown to the nearest £.

Call Centre Costs

- 5.56 Call Centre calls comprise emergency reports that require investigation by a first call operative (FCO) and calls which can be generally categorised as general enquiries and no further action is required. PNGL has requested an allowance of £0.6m per year in 2014, 2015 and 2016 for this purpose.
- 5.57 The principal driver for the call centre activity has been identified as the total number of customers connected to the network. PNGL forecasts an on-going flat rate for the number of calls per 10,000 customers, whereas we believe that the trend should indicate a reduction. This view is based on the increasing scale of the established customer base relative to the level of new customer connections that initially may generate a higher emergency call rate.
- 5.58 Rune developed a model to determine appropriate call centre costs for 2014 – 2016. Further details of the model, including the principles and assumptions behind the model have been provided in Appendix 1.
- 5.59 The model targets PNGL to reduce the number of calls received from existing customers by 3% per year and by 1% per year from new customers.
- 5.60 The model generated forecasts for the number of calls received (based on number of calls per 10,000 consumers). PNGL's calls per 10,000 consumers are at a higher level than call volumes that would typically be seen by GB GDNs, despite allowing for additional calls in NI as a result of the large number of prepaid meter problems. In 2010 and 2011, around 50% of the total calls received by the emergency call centre were general enquiry calls. This is an extremely high level of inappropriate calls, and PNGL would be expected to manage these levels downwards. We therefore consider the target reductions in call numbers are set at an achievable level.
- 5.61 An increasing call rate trend has been assumed for the total number of calls, albeit at a lower level than the PNGL forecast submission. This incorporates the efficiency improvements of between 1% and 3% as outlined above.
- 5.62 Rune has also formed the opinion that whilst PNGL and FE use the same provider for the call centre, each places its own contract for the provision of emergency call handling and dispatch. Rune believes that savings could be made in the fixed provision costs of this service by PNGL and FE working more closely together. In the event that further licences are granted within NI, such savings should also be possible to be extended to any further licence holder.
- 5.63 We wish to discuss further with the GDNs how they can achieve better collaboration in this area and we have incorporated a 50% saving of the fixed modelled call centre costs to calculate the proposed allowances. Over the three years of the control, this would be a reduction of £127,500.
- 5.64 The combination of call volumes and the cost per call generated by the model results in an increasing trend in total call centre costs. However, PNGL's forecast trend indicates a significantly greater increase.

5.65 Based on this analysis, the recommended allowances for call handling average £456 per annum over 2014 – 2016. The allowances are shown in the table below along with PNGL’s submission.

Table 17 – Emergency call centre workloads and costs for PNGL

Cost element	Average 2010-2011	PNGL submission			UR recommendation		
		2014	2015	2016	2014	2015	2016
Emergency Calls (no.)	29,914	36,020	37,698	39,420	32,383	32,898	33,309
Cost per Emergency Call £	15	17	16	16	14	14	14
Total Emergency Call Centre Cost £k	460	596	620	644	450	457	462

Source: PNGL and the Utility Regulator

Emergencies (First Call Costs)

- 5.66 PES provides a first call response service to PNGL which has an associated level of fixed cost. There is a degree of flexibility in the workload/deployment of PES manpower which results in less non-productive time compared with an arrangement based simply on provision of dedicated FCOs engaged on emergency response only. Hence, PNGL’s overall costs are driven to a greater extent by the level of operational activity rather than the fixed costs of service provision.
- 5.67 Similar to call centre costs, the principal driver for emergency activity is the total number of customers connected to the network. Rune developed a model to determine appropriate allowances for emergency costs. Further details on the model are included in Appendix 1.
- 5.68 PNGL forecasts a slight reduction in the number of emergency jobs per 10,000 customers, whereas Rune believes that the trend should indicate a greater reduction. This view is based on the increasing scale of the established customer base relative to the level of new customer connections that initially is likely to generate a higher emergency workload.
- 5.69 PNGL’s total first call emergency actual costs show a reducing trend over the period 2010 – 2011, however, PNGL has forecast a substantial rising trend in the forecast period. The model also generates a rising trend in the forecast period, but at a much slower rate.
- 5.70 Based on this analysis, we have recommended allowances for first call emergency costs.
- 5.71 PNGL contracts with its subsidiary company, PES, for the provision of emergency FCOs. In line with previous policy, we have decided to disallow profit margins of any related party. Therefore, the profit margin on PES-related emergency and maintenance activity will be removed.
- 5.72 We have assessed the PES profit element based on the 2011 Kellen Accounts and have determined that 14% of the costs relating to PES activities will be removed as we believe this represents the profit element of the contract. Our assessments of these costs are shown in the following table. With the profit element removed, we are proposing to grant allowances of c.£1.3m per annum to PNGL for First Call Emergency work.

Table 18 – First call emergency workload and cost information for PNGL

Cost element	Average 2010-2011	PNGL submission			UR recommendation		
		2014	2015	2016	2014	2015	2016
Emergencies (no.)	14,997	18,034	18,874	19,736	17,542	17,844	18,128
Cost per Emergency Job	101	87	87	86	85	85	85
Assessed Emergency Cost £k	1,515	1,566	1,634	1,703	1,497	1,520	1,542
PES Profit Element (14%)					210	213	216
Total Emergency Cost £k	1,515	1,566	1,634	1,703	1,288	1,308	1,326

Source: PNGL and the Utility Regulator

Repair Activities

- 5.73 Repair costs result from either gas escapes from main or service pipes due to joint problems (condition problems) or third party interference damage.
- 5.74 PNGL has confirmed that the costs reported and forecast are net, i.e. after recovery of costs from third parties, yet PNGL has submitted costs of £20,000 for damage repairs in each year, both in the actual and forecast periods. We expect that the majority of these costs should be recoverable through third parties and, therefore, the forecast expenditure for this activity has been reduced to a nominal level.
- 5.75 Rune has modelled the cost of repairs based on the 2010 reported numbers as figures in 2011 onwards show a rising trend which has not been justified. They noted that PNGL has not yet incurred any mains or service condition repair costs and Rune has no information to substantiate why costs will begin to be incurred in the coming period as submitted by PNGL. Rune has taken the average costs for damage repairs (net) for 2010 and 2011 and rolled these figures forward to the period 2014-2016.
- 5.76 The recommended total cost allowances for repair activity are detailed in the following table.

Table 19 – PNGL total repair costs, £k

Costs £'000s	Average 2010-2011	PNGL Submission			UR Recommendation		
		2014	2015	2016	2014	2015	2016
Total Repair Cost	42	86	88	91	42	42	42

Source: PNGL and the Utility Regulator

Maintenance Activities

- 5.77 Maintenance activities are those direct activities which are necessary to keep the network in safe working order with the exception of those activities carried out by FCOs and repair teams. In this context, the activities are broad and include disparate activities such as repairing telemetry electronics to the maintenance of district pressure reduction equipment.
- 5.78 This wide range of activities creates great difficulty in undertaking specific activity benchmarking both with NI and across GB. The nature of the costs and activities vary greatly depending on the age, design and nature of the networks being operated.
- 5.79 The information collected within GD14 has improved the commonality of the data provision by both companies, although it is not at a sufficient stage of maturity to robustly benchmark at the detailed activity level.

- 5.80 We have therefore taken an approach of reviewing the detailed actual expenditures reported by both companies and setting to one side items considered exceptional (i.e. not a regular and consistent item of expenditure). This expenditure has then been rolled forward from the levels at 2011 through 2012 and 2013 to provide a base level of expenditure in 2014-2016.
- 5.81 We then looked at adding to this base level of expenditure items which have been identified by the companies as being a justified extra expenditure required in the years 2014-2016. We were not convinced that certain items have been sufficiently justified as expenditure required in the GD14 period; therefore, some items have been excluded from the recommended allowances. Additional details on the model, including the principles and assumptions of the model, and details of the costs which have been excluded from the baseline and then added back for 2014-2016 are included in Appendix 1.
- 5.82 The model developed by Rune uses customer numbers as a primary driver to roll forward the base level expenditure into the forecast years. They also considered that Modern Equivalent Asset Valuation (MEAV)¹⁰ could be used as a driver as this is used by Ofgem in benchmarking GB network maintenance. However, MEAV has not been collected in NI in the run-up to GD14 and could not be expected to be gathered in the timescale required for the GD14 review. We would like to explore the possibility of using MEAV in future controls as a driver for network maintenance activities. Following the approach used in GB, this will require companies to undertake an inventory of their network assets and their replacement values. It is expected that the primary driver would be above ground assets, as this is understood to drive most of the maintenance cost.
- 5.83 We are satisfied that the use of forecast customer numbers would give a reasonable and fair uplift in the costs to reflect the growth of the network provided the mix of domestic and I&C customers was taken into account.
- 5.84 We propose a change of policy to domestic site works. We have reviewed the current arrangement in relation to meter exchanges under domestic Supplier Work Requests (SWRs) and propose to amend the policy to align it with the policy currently in place with FE. We propose that meter exchanges from credit to prepay will be free of charge to the customer (up to a maximum of one exchange per year), and we have proposed allowances for this in this price control. However, these proposals mean that domestic consumers will no longer be entitled to a free meter exchange from prepay to credit. We will provide an exception to this for vulnerable customers.
- 5.85 The impact of this change of policy to the GD14 price control is that reduced allowances will be provided for domestic meter exchanges. This amounts to c. £580 for the three-year period compared to PNGL's requested allowances. However, it is important to emphasise that PNGL will not be required to cover the cost of the meter exchanges where no allowance is provided in the price control. PNGL would charge the cost of the exchange to the appropriate supplier or customer. Therefore, this reduction in the overall maintenance costs is not directly comparable with historical maintenance costs.
- 5.86 We would welcome views on this proposal before making any decision in the final determination.
- 5.87 It is proposed that a 10% efficiency is applied to the baseline maintenance costs in each year in recognition that PNGL is in all likelihood still not operating to the most efficient maintenance schedule. In PNGL12, we also applied a reduction of 10% in respect of network

¹⁰ MEAV is employed by Ofgem as a means of creating an equivalent new network which can be used as a scale driver for various cost activities. MEAV can recognise the size, asset base and complexity of a network, and represents the cost of creating an equivalent new network.

and meter maintenance but stated that we were prepared to increase this in the 2014 review if PNGL continued to resist the development of an asset risk management system such as PAS55. As PNGL has now commenced progress on the development of a comprehensive asset management system based on the principles of PAS55 and incorporating Reliability Centred Management (RCM) techniques, we propose retaining the efficiency at 10% and are not minded to increase this.

5.88 As outlined earlier, we have decided to disallow the profit margin on all PES activity. PNGL's contract with PES is primarily for the provision of emergency FCOs; however, based on the information PNGL has provided, the FCOs also carry out planned meter work for domestic and small commercial consumers (for example, battery changes and meter exchanges). We have therefore decided to disallow the 14% profit margin from the maintenance activities, which are completed by the FCOs.

5.89 The table below shows a comparison between the allowance requested by PNGL and the recommended allowance when the PES profit margin has been removed from the appropriate maintenance activities.

Table 20 – PNGL maintenance costs, £k

Costs	Average 2010-2011	PNGL submission			UR recommendation		
		2014	2015	2016	2014	2015	2016
Total Assessed Maintenance Cost	1,879	2,401	2,631	2,336	1,738	1,812	1,855
Assessed Maintenance Cost (PES Related)	1,323	1,686	1,778	1,724	1,354	1,325	1,439
Assessed Maintenance Cost (other)	556	716	853	612	384	487	416
PES Profit Element (14%)					190	186	201
Recommended Allowance	1,879	2,401	2,631	2,336	1,549	1,627	1,654

Source: PNGL and the Utility Regulator

Summary of Emergency & Network Maintenance Costs

5.90 The following table provides a summary of the recommended allowances for emergency and network maintenance activities. For comparison, the table also provides the average historical actual costs for 2010 – 2011 and PNGL's forecast submission for 2014 – 2016.

Table 21 – PNGL emergency & maintenance costs, £k

Costs	Average 2010-2011	PNGL submission				UR recommendation				Difference	
		2014	2015	2016	Total	2014	2015	2016	Total	Total	%
Call Centre Costs	460	596	620	644	1,860	450	457	462	1,368	-492	-26%
First Call Costs	1,515	1,566	1,634	1,703	4,903	1,288	1,308	1,326	3,922	-981	-20%
Repair Team Costs	42	86	88	91	265	42	42	42	127	-138	-52%
Maintenance Activities	1,879	2,401	2,631	2,336	7,369	1,549	1,627	1,654	4,829	-2,540	34%
Total Direct Opex	3,897	4,649	4,973	4,774	14,397	3,329	3,433	3,484	10,246	-4,151	29%

Source: PNGL and the Utility Regulator

Insurance

- 5.91 PNGL has requested allowances of £1.03 m, £1.06 m and £1.08 m for insurance in 2014, 2015 and 2016, respectively. This includes the costs of business insurance (i.e. insurance for the gas network, public liability, etc.), car insurance and building insurance. According to PNGL's data, business insurance accounts for 87% of the total requested allowances, while car and building insurance account for 12% and 1%, respectively.
- 5.92 Historically, PNGL's actual insurance costs decreased year-on-year between 2007 and 2009, but increased in 2010 before falling again in 2011. Over this period, PNGL's insurance costs were highest in 2007 at £812k. In 2012, however, PNGL's costs are estimated to have increased to £845k and in 2013 they are expected to be higher still at £915k.
- 5.93 The main element of PNGL's insurance costs is business insurance, which in turn is dominated by business interruption and public liability, and to a lesser extent employer's liability insurance. PNGL states that these costs are assumed to be driven by changes in company turnover and therefore would need to be calculated on the basis of the final allowable income derived.
- 5.94 For car insurance costs, PNGL has requested an allowance of £1,905 per annum for each company car. PNGL has requested this allowance for 68 company cars in 2014 and 2015 and 66 cars in 2016. In 2012, PNGL had a total of 64 company cars and in 2013 this number has increased to 66.
- 5.95 The business insurance costs requested by PNGL represent a significant increase on historical premiums. For example, the increase between 2011 (the last year for which we have audited numbers) and the request for 2016 is almost 50%. We do not have any evidence to warrant such an increase and believe PNGL can negotiate lower premiums.
- 5.96 PNGL has stated that there are risks associated with its insurance costs, in particular the premiums related to business interruption, which are very specific to the PNGL network. However, this does not provide a sufficient rationale for why premiums are expected to increase over time in relation to the same (or even slightly expanded) PNGL network. We also note that the historical trend for actual insurance costs has not increased year on year.
- 5.97 In the absence of adequate justification warranting the magnitude of the claimed increases in business insurance, we have instead granted allowances based on a 3-year average of the actual costs incurred during 2009 – 2011, as these are the most recent audited numbers that have been provided.
- 5.98 It should be noted that in PNGL12, we adopted the approach used by Ofgem to base business insurance costs on 1.04% of turnover. However, Ofgem have ceased using this approach and therefore we do not consider it is appropriate for us to continue with this approach. The allowances we have proposed for GD14 are higher than we granted in PNGL12.
- 5.99 In the case of car insurance, we consider that PNGL's requested allowance of £1,905 per annum per car is unreasonably high. We have researched car insurance costs and are minded to allow £750 per car in line with the AA's average premium for annual comprehensive car insurance in 2013. We are granting this allowance to an assumed fleet of 66 cars (consistent with the number of cars in 2013 and again in 2016).
- 5.100 Finally, for building insurance costs, we have granted allowances on the basis of a 2-year average of the actual costs for 2010-11.

5.101 Our determined allowances for 2014 -2016 are shown in the table below along with PNGL’s requested allowances and the variance between the two. We note that the determined allowances shown in this table are higher than the final allowance proposed in the summary table after paragraph 5.151, as we have apportioned an element of the insurance allowance to be recovered through the Connection Incentive Mechanism.

Table 22 – PNGL insurance costs, requested and allowed, £k

	2014	2015	2016
PNGL requested allowances	1,032	1,060	1,084
UR’s determined allowances	711	711	711
Variance	-321	-349	-372

Source: PNGL and Utility Regulator

Manpower

5.102 PNGL has requested an annual allowance of between £5.35 million and £5.45 million for the 2014-2016 period.

5.103 By comparison, historical actual costs for 2007-2011 were between £4.3 million and £4.6 million per year. PNGL has also provided best available figures for actual manpower costs in 2012 and estimates for 2013 at £4.9 million and £5.2 million, respectively. The following table shows PNGL’s historical manpower costs (including estimates for the current calendar year) compared to allowances we have determined in the two previous price controls.

Table 23 – PNGL manpower allowances and actual costs, £k

	PC03					PNGL12	
	2007	2008	2009	2010	2011	2012	2013
UR’s determined allowances	4,836	4,748	4,647	4,565	4,587	3,894*	3,910*
Amounts recoverable under A+M+PR						768	782
Total allowances						4,662	4,692
Actual costs (2012-13 are best available)	4,953	4,325	4,343	4,638	4,612	4,921	5,170

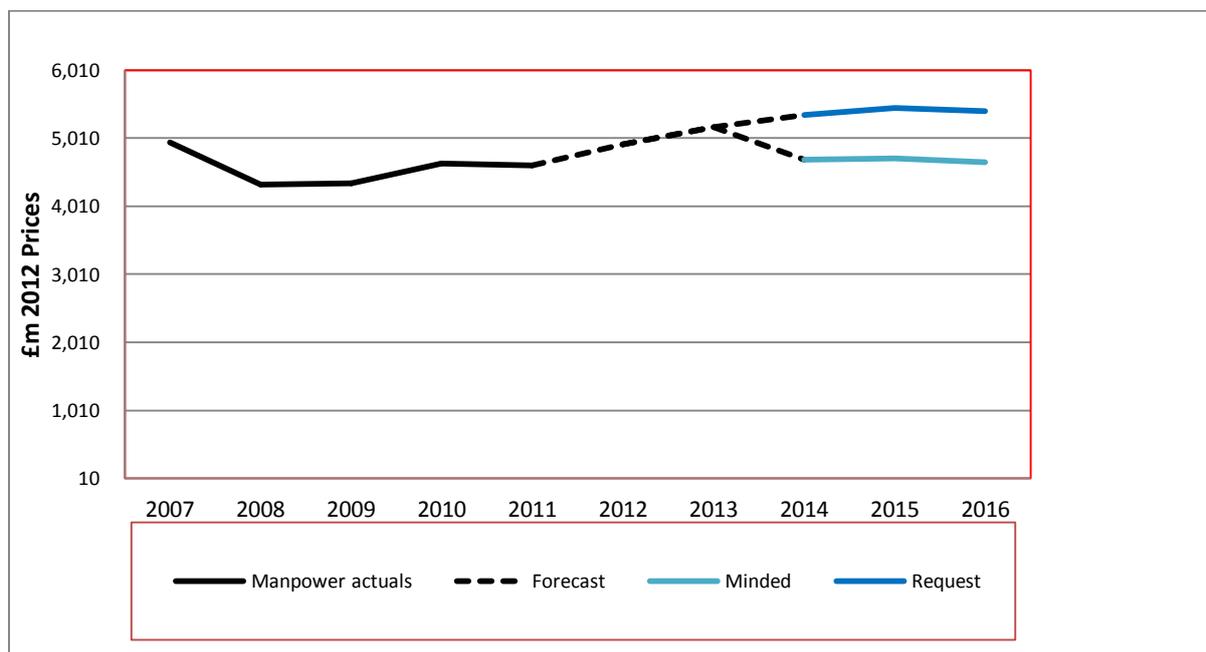
* These are the fixed manpower allowances for 2012 and 2013. However, an element of manpower costs was also recoverable under the A+M+PR mechanism introduced with PNGL12 as shown in the table.

Source: PNGL and the Utility Regulator

5.104 The following line graph displays PNGL’s actual manpower costs incurred from 2007 to 2011. It also shows PNGL’s best estimate for 2012 and 2013 costs and their forecast costs for the GD14 period. The graph compares this to the UR’s determined allowances for 2014-2016. The allowances shown in the graph include the amounts which have been removed from

manpower to be recovered through the Connections Incentive Mechanism in order to provide a like-for-like comparison.

Figure 6 – PNGL manpower historical costs including Connections Incentive Mechanism and GD14 Submission, £m



Source: PNGL and Utility Regulator

5.105 PNGL provided a detailed build-up and explanation of its forecast manpower costs, permitting us to undertake an in-depth analysis of the submission and to complement the thorough review completed as part of the PNGL12 price control.

5.106 When reviewing the manpower submission, we have assessed whether the level of staffing resources requested by PNGL is appropriate for operating and maintaining its network and the level of remuneration across the job grades.

PNGL staffing resources

5.107 Since the PNGL12 price control, PNGL has been reorganised into three main departments as follows:

- **Commercial operations** – this department is responsible for the safe, reliable and efficient operation of the network and now also includes the regulatory affairs function.
- **Business development** – this division is mainly responsible for sales and customer service, including marketing and PR.
- **Finance** – this branch provides corporate support functions including finance, human resources and IT support, as well as revenue protection and business planning.

5.108 PNGL’s senior management team consists of four executive directors, namely a Chief Executive Officer (CEO) and the heads of the three departments above i.e. Director of Commercial Operations, Director of Business Development and Director of Finance.

5.109 The table below sets out total FTEs in post and those forecasted by PNGL. For 2012 and 2013, PNGL has provided best available information and estimates, respectively. The

majority of the FTEs are employees of PNGL, however a small number of agency staff are also included in the total staffing complement.

Table 24 – PNGL staffing complement (FTEs), historical and requested

Department	2009	2010	2011	2012	2013	2014	2015	2016
	Actuals			Best available / Estimate		Requested		
Senior management	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Commercial operations	45.8	49.3	51.3	50.0	51.5	53.0	53.5	53.0
Business development	37.8	40.3	42.6	45.3	47.5	48.0	48.5	48.0
Finance	30.4	31.7	33.1	32.1	29.8	29.8	28.8	28.8
Total	118.0	125.3	131.0	131.4	132.8	134.8	134.8	133.8
Agency staff (included in Total)	11.3	12.8	12.3	13.4	3.8	3.8	3.8	3.8

Source: PNGL

- 5.110 In assessing the manpower requirements, it is important to note that as part of the sale of the supply business to Airtricity¹¹, PNGL entered into a Service Agreement to provide some shared services to Airtricity on an interim basis. Most of the services provided under this arrangement were for a period of 3 or 6 months and have therefore ceased, however PNGL will continue to provide IT support and facilities management until mid-2014. PNGL's manpower recharges to the Supply Company will therefore cease in 2014.
- 5.111 The reorganisation of PNGL has created some difficulties for UR in gauging trends in the number of full-time equivalents (FTEs) within each department. However, our interpretation of the information provided is that the requested number of FTE staff is generally in line with the historical actuals.
- 5.112 As set out earlier in this section (see paragraph 5.12 onwards, the connections incentive mechanism) we intend continuing with 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. Hence, a significant element of the manpower costs will be removed and replaced by the connections incentive mechanism.
- 5.113 We have generally accepted the FTE numbers as requested by PNGL, with the only exception being two new customer service FTEs within the Business Development department, which we believe have not been sufficiently justified. Also, in line with the PNGL12 determination, we have provided no explicit allowance for agency staff as we expect PNGL to fund the cost of agency staff through their general allowance.

Remuneration levels

- 5.114 PNGL provided a detailed build-up of the remuneration offered to its staff. In order to inform our proposed allowances, we have reviewed these remuneration packages and have compared against the PNGL12 determination at which time we had conducted a similar review with the assistance of remuneration consultants and the employment of benchmarking.
- 5.115 PNGL has incorporated a real 1% salary increase in its submission for 2014 and 2015. We do not consider that an increase of 1% above RPI is justified and we note that PNGL did not pass on an increase of 1% above RPI to employees in 2012 and 2013, therefore we have disallowed the requested increase for 2014 and 2015.

¹¹ In June 2012, PNGL sold the entire issued share capital of its gas supply business, Phoenix Supply Limited, to Airtricity Energy Supply (Northern Ireland) Ltd. The supply business was subsequently renamed Airtricity Gas Supply (NI) Ltd ("Airtricity").

- 5.116 Additionally, we find that the proposed remuneration levels for the senior management team exceed the packages typically observed in similar industries and business types. Hence, we have retained remuneration for this team at the levels determined in PNG12 and rolled forward.
- 5.117 PNG1 provided a hard-coded value for Employer’s National Insurance Contributions (NICs). We recalculated the NICs using the determined remuneration levels as a driver. We have allocated an element of the NICs to be recovered through the Connections Incentive Mechanism to account for staff who are considered to be responsible for OO new connections.
- 5.118 Finally, as stated earlier, significant manpower costs have been removed to be recovered through the Connections Incentive Mechanism. These costs can be summarised as follows:
- Costs have been removed from the Business Development department to account for the costs of employing staff who are responsible for OO new connections;
 - A small element of the costs of support staff from the Finance department has been removed as some of their costs can be attributed to creating OO new connections;
 - We have allocated an element of the NICs to be recovered through the Connections Incentive Mechanism to account for staff who are considered to be responsible for OO new connections.

Summary

- 5.119 We are proposing a fixed manpower allowance of c£3.6 million in 2014, 2015 and 2016. The following table shows PNG1’s requested allowances for the 2014 – 2016 period compared to UR’s determined allowances. The amounts which have been removed to be recovered through the Connections Incentive Mechanism are also displayed. We would note that our assessment of the manpower costs directly related to OO sales has resulted in a higher amount being removed to be recovered through the Connections Incentive Mechanism than in PNG12.

Table 25 – PNG1 manpower costs, requested and allowed, £k

	2014	2015	2016
PNG1 requested allowances	5,351	5,454	5,413
UR’s determined allowances	3,585	3,632	3,607
Amounts removed to be recovered through Connections Incentive Mechanism	1,109	1,083	1,050
Total allowances*	4,694	4,715	4,657
Variance	-657	-739	-756

* The fixed manpower allowances are displayed in the second row of the table. However, to ensure a like-for-like comparison with PNG1’s request, total allowances also include the sums recoverable under the Connections Incentive Mechanism.

Source: PNG1 and Utility Regulator

Rates

- 5.120 PNG1 has requested an allowance for rates, covering both network and office rates. The amounts requested are shown in the following table.

Table 26 – PNGL requested rates allowances, £k

	2014	2015	2016
PNGL total requested allowances	1,228	1,390	1,457
Network rates	1,097	1,246	1,313
Office rates	239	239	239
Recharged office rates	-108	-95	-958

- 5.121 We have in the past set network rates using a formula which links the allowance to PNGL permitted revenues. PNGL’s allowance request was also calculated using the current formula, however, PNGL has requested that network rates be treated as a pass-through cost going forward.
- 5.122 Nevertheless, we are comfortable with the approach of using a formula linked to revenue in order to set the network rates allowances for PNGL. We have used this approach historically in PC03 and PNGL12 and we intend retaining it for the present price control. The network rates allowances have therefore been calculated accordingly.
- 5.123 For office rates, PNGL has requested £239k per annum before recharges. PNGL recharges elements of its office rates to capex, PES, Airtricity (and previously PSL) and to another sub-tenant. PNGL’s recharges are forecast to decrease from the c.£137k recharged in 2010 and 2011 to c.£95k in 2015 and 2016.
- 5.124 We consider that PNGL should be able to continue to sub-let sections of its building going forward and therefore the recharges should not decrease substantially.
- 5.125 Our determined allowances for rates in total for the 2014 -2016 period are shown in the table below along with PNGL’s requested allowances and the differences between the two amounts.

Table 27 – PNGL requested and determined rates allowances, £k

	2014	2015	2016
PNGL requested allowances	1,228	1,390	1,457
UR determined allowances	1,207	1,369	1,436
Variance	-21	-21	-21

Source: PNGL and the Utility Regulator

- 5.126 Note that the network rates have been calculated using the formula based on PNGL’s forecast revenues; however in the final determination the allowances granted for network rates will be calculated using the formula and the revenues as determined in the price control.
- 5.127 As per the treatment in PC03 and PNGL12, the allowance for rates will continue to form part of the retrospective mechanism.

Licence Fees

- 5.128 Licence fees are apportioned between the distribution licence holders according to their share of the total forecasted gas volumes conveyed in their respective areas for the year to which the fees relate. We treat licence fees as pass-through and therefore retrospectively adjust them to reflect the actual fees levied on PNGL by our office.

- 5.129 For the purposes of setting an *ex ante* allowance, we take the total cost to be apportioned to the two distribution licence holders, namely £162,715 per annum and use our determined volumes for each year of the price control to split the fee between PNGL and FE. In general, PNGL is expected to convey about 70% of total forecasted NI volumes and therefore the determined licence fees for PNGL are in the order of £114k in each of the control period years. This will be updated for the final determination.

Office Costs

- 5.130 PNGL has requested £544k, £595k and £630k (an average of £590k) for the three respective years of the price control, representing a significant increase on office cost allowances we have determined in the recent past.
- 5.131 As part of PNGL12, office costs were assessed on a ‘smaller item’ basis in setting determined allowances. In GD14, we requested more disaggregated information from PNGL subsequent to its initial submission to allow a more detailed review of individual categories where necessary.
- 5.132 Our review of the disaggregated information received outlined a claim for a 15% rise in rental for the Airport Road West (ARW) Offices in 2015 as well as an increase in relation to the loss of the Airtricity sublet in mid-2014. Neither of these requests have been granted and overall draft allowances equate to £437k, £468k and £469k (prior to connection incentive mechanism reductions), giving an average of £458k over the price control period.
- 5.133 A review of PC03 actual costs from 2009 to 2011 shows an average spend of £448k (in 2012 prices), therefore, the draft allowances are comparable and reasonable on this basis.

Information Technology

- 5.134 PNGL has requested an average allowance of £314k per annum for 2014-2016, compared to an actual average of £211k per annum in the period 2007-2011 and determined allowances of £201k per annum for PNGL12. For 2012, PNGL estimates its actual IT costs at £250k and thereafter assumes that IT costs move with inflation, with the exception of an incremental increase in 2013 associated with the development of its ‘Concerto’ system.¹²
- 5.135 We commissioned consultants, Gemserv, to advise on the appropriateness of PNGL’s allowance request. Gemserv was asked to examine both recent actual expenditure on IT compared to determined levels and to assess whether the future requested allowances were appropriate and justifiable. Further, Gemserv undertook benchmarking with comparable GB organisations (to the extent that this was feasible) and also took into account the possible impacts of changes in the NI industry ownership structure (as this could impact on IT costs).
- 5.136 Overall, Gemserv’s conclusion regarding PNGL’s IT opex allowances is that, *“Despite our general view that an increase in the level of IT Opex costs is justified we do not agree that the full allowance requested by PNGL is reasonable.”* Key reasons cited include:

¹² Concerto is PNGL’s main IT system that records and manages its infrastructure assets. PNGL also assumes an upgrade of the Finance system, but this is planned for 2017 and therefore is now outside the GD14 period.

- While the size and complexity of the Concerto system has increased with the introduction of supply competition, the development costs associated with this system have been separately reimbursed and therefore the level of allowances that seem to be associated solely with the maintenance and general support of the expanded systems are excessive, notwithstanding the added complexity of the Concerto system;
- PNGL has sought to recover costs that were previously recharged to PSL – Gemserv’s view is that it may be inappropriate to allocate these costs to the regulated business and therefore NI gas customers; and
- The cost of accessing Ordnance Survey of Northern Ireland information appears to be disproportionate when compared to the overall costs, particularly as PNGL only requires access to information relating to the Greater Belfast area. There may, therefore, be grounds for PNGL renegotiating this cost.

5.137 We have accepted the findings of the consultant’s report and consequently set IT allowances at approximately £239k per year consistent with Gemserv’s recommendations. This is slightly higher than the average actual spend for PC03 years 2009 to 2011 of £217k (in 2012 prices) per annum.

Professional and Legal Fees

- 5.138 This item covers consultancy costs and legal fees relating to finance, engineering, health and safety, competition, human resources and regulation. It also incorporates audit and accountancy fees, fees relating to rating agencies and the cost of PNGL’s non-executive directors.
- 5.139 Historically, our determined allowances for this cost category averaged approximately £350k between 2009 and 2011. There was an exception to the determination in 2012, when the final determined allowance was in fact £1.758 million because the CC granted PNGL an additional amount to cover some of its costs associated with the PNGL12 referral.
- 5.140 PNGL has requested £670k, £633k and £632k for professional and legal fees in 2014, 2015 and 2016, respectively. PNGL stated that it used its estimated 2013 outlay as a baseline. However, the requested allowances far exceed those we have granted in the past (excluding exceptional items such as the costs related to the CC referral) and the average actual historical costs reported by PNGL (over a reasonable time to smooth out annual fluctuations). The request is also higher than that submitted by PNGL in the previous price control.
- 5.141 PNGL has provided a breakdown of its requested allowances. According to PNGL’s submission, professional and legal fees have averaged £686k in the last three years (2010-2012), excluding all costs relating to the CC referral. However, the costs for 2011 (£897k) are significantly higher than other years (thereby raising the historical average for the last 3 years), but we have not been provided with a sufficient explanation for this.
- 5.142 In light of the above, we consider that basing future allowances on historical actual costs for the 2010-2013 period would be unsound. We are proposing therefore to roll forward the allowances granted in the PNGL12 determination for professional and legal fees in 2014 – 2016 as the baseline.

5.143 PNGL has also requested one-off costs during 2014 for work required as a result of IFRS reporting and to support revision of the pension scheme due to auto-enrolment changes. We accept that some costs will be required in relation to IFRS reporting requirements and have granted PNGL a one-off additional allowance of £16k in 2014 for this, as requested. However, we consider that any costs related to the pension scheme revisions should be covered in the baseline allowance and therefore no additional allowance is granted.

5.144 Our determined allowances for 2014 -2016 are shown in the table below along with PNGL’s requested allowances and the variance.

Table 28 – PNGL requested and determined allowances for professional and legal fees, £k

	2014	2015	2016
PNGL requested allowances	670	633	632
UR determined allowances	428	412	412
Variance	-242	-222	-221

Source: PNGL and the Utility Regulator

Smaller items

5.145 The residual PNGL cost lines shown below amount to approximately 5.5% of total claimed opex allowances:

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	

5.146 In general, these are treated collectively with the exception of Entertainment for which, as with our PNGL12 decision, we set allowances consistent with HMRC guidance on non-taxable employee benefits. More specifically, we set an allowance of £20k per annum, based on offering around £150 per employee. This compares with PNGL’s request for £43k per annum.

Collective approach to smaller items

5.147 For the remaining cost lines, we adopt again a similar approach to that established in PNGL12. At that time, we had 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 then using this trend to extrapolate forward.

5.148 We had concluded that using a trend is less credible than using an average, since trending tends to exaggerate expenditure anomalies in any one particular year. Furthermore, we argued that there is no evidence to support an assumption that these costs are rising in line with the expanding customer base.

5.149 We have reviewed these arguments again and believe that there is no reason to depart from the approach established in PNGL12. We therefore propose setting allowances for these

cost lines using an average, and for the purposes of our calculations we have selected the most recent five-year timeframe for which we have audited numbers (i.e. 2007 to 2011).

5.150 The allowances are shown in the following table.

Table 29 – Small items allowances for PNGL, £k

Cost Item	PNGL submission				UR proposed allowance				Difference			
	2014	2015	2016	Total	2014	2015	2016	Total	2014	2015	2016	Total
Billing	214	222	231	666	103	103	103	309	-111	-119	-128	-357
Entertainment	43	43	43	128	20	20	20	60	-23	-23	-23	-68
Fleet costs	265	266	260	792	238	238	238	715	-27	-28	-22	-77
Human resources	121	117	116	354	68	68	68	204	-53	-49	-48	-150
Own use gas	17	18	18	53	14	14	14	43	-3	-3	-4	-10
Stationery	51	52	53	157	36	36	36	109	-15	-16	-17	-48
Telephone and postage	130	140	142	412	86	86	86	257	-45	-54	-56	-155
Travel and subsistence	71	71	71	213	54	54	54	161	-17	-17	-17	-52
Total	912	928	933	2,774	619	619	619	1,857	-293	-309	-314	-916

As mentioned earlier, 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, Stationery, Telephone and postage, Travel and subsistence. A full explanation for this adjustment was provided in the description of the Connections Incentive Mechanism.

Source: PNGL and the Utility Regulator

PNGL Opex Summary

5.151 In the table below we set out a summary of the total PNLG opex allowances we propose for 2014, 2015 and 2016.

Table 30 – PNLG opex summary, £k

Cost Item	PNGL Submission				UR Proposed Allowance				Difference				
	2014	2015	2016	Total	2014	2015	2016	Total	2014	2015	2016	Total	Total, %
Advertising, marketing and PR	860	829	789	2,479	37	36	35	109	-823	-793	-754	-2,370	-96%
Billing	214	222	231	666	103	103	103	309	-111	-119	-128	-357	-54%
Emergency costs + Network Maintenance	2,211	2,304	2,400	6,916	3,329	3,433	3,484	10,246	-1,321	-1,540	-1,290	-4,151	-29%
Entertainment	43	43	43	128	20	20	20	60	-23	-23	-23	-68	-53%
Fleet costs	265	266	260	792	192	192	192	576	-73	-74	-68	-216	-27%
Human resources	121	117	116	354	55	55	55	164	-66	-62	-62	-190	-54%
Incentives	783	724	666	2,173	0	0	0	0	-783	-724	-666	-2,173	-100%
Information technology	305	316	321	942	192	192	192	577	-113	-124	-128	-365	-39%
Insurance	1,032	1,059	1,084	3,175	700	700	700	2,101	-332	-359	-383	-1,074	-34%
Licence fees	128	128	128	385	115	114	115	344	-14	-14	-14	-42	-11%
Manpower	5,351	5,454	5,413	16,218	3,585	3,632	3,607	10,823	-1,767	-1,822	-1,806	-5,395	-33%
Office costs	544	595	630	1,769	352	377	378	1,108	-192	-218	-252	-661	-37%
Own use gas	17	18	18	53	14	14	14	43	-3	-3	-4	-10	-18%
Professional and legal fees	670	633	632	1,936	428	412	412	1,252	-242	-222	-221	-684	-35%
Rates	1,228	1,390	1,457	4,075	1,186	1,345	1,412	3,943	-42	-45	-45	-131	-3%
Stationery	51	52	53	157	29	29	29	88	-22	-23	-24	-69	-44%
Telephone and postage	130	140	142	412	69	69	69	207	-61	-71	-73	-205	-50%
Travel and subsistence	71	71	71	213	43	43	43	130	-28	-28	-28	-83	-39%
Total	16,464	17,032	16,827	50,324	10,449	10,768	10,861	32,078	-6,015	-6,265	-5,966	-18,246	-36%
Potential £ from connections incentive mechanism					2,290	2,290	2,290	6,870	2,290	2,290	2,290	6,870	N/A
Total	16,464	17,032	16,827	50,324	12,739	13,058	13,151	38,948	-3,725	-3,975	-3,676	-11,376	-23%

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 connections incentive mechanism.

Source: PNLG and the Utility Regulator

6 OPERATING EXPENDITURE, FE

Introduction

6.1 FE categorises its operating expenditure into 11 different cost lines as follows:

Advertising, marketing and PR	Manpower	Network maintenance
Bank charges	Office costs (including IT)	Training
Fees and consulting	Parental recharges	Travel and transport
Insurance	Professional subscriptions	

6.2 In assessing the reasonableness of the expenditure claimed by FE for these cost lines, we have followed the approach used for PNGL in the previous section. That is, we first grouped the cost lines into broader categories and then applied what we consider to be an appropriate approach to each. One additional issue for FE is the allocation of costs between its distribution and supply businesses. We discuss our approach to supply costs below but we note that these distribution allowances may be adjusted once allocations have been finalised.

6.3 We first identify the items that collectively constitute the largest proportion of total operating expenditure and which separately represent a material share of overall claimed costs (typically, 5% or more). We examine these in some detail on an individual basis, using evidence furnished by FE in its original submission and in responses to our subsequent information requests. The relevant cost lines are:

- Advertising, marketing and PR (which is replaced by the connections incentive mechanism);
- Manpower;
- Parental recharges;
- Network maintenance;
- Office costs; and
- Rates - FE includes rates in its office cost expenditure line but, as we point out later, we have dealt with this separately given the magnitude of the claimed allowances.

Together, these items represent almost 90% of FE's claimed allowances.

6.4 Next, we examine cost items that by their nature require individual assessment, although they might not represent a significant component of overall expenditure. This is because they are pass-through items (as is the case with licence fees, which FE includes in its fees and consulting cost line) or there are other specific circumstances applying, as is the case for fees and consulting and insurance where FE's claims significantly exceed historical spending and allowances.

6.5 We have considered the remaining (smaller) cost lines collectively, following again the approach for PNGL.

6.6 We first 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 *ex ante* allowances and later in the retrospective adjustments that are made *ex post* once actual connections are known. (The way we will make retrospective adjustments is discussed later in Section 14).

Our connection assumptions

- 6.7 The targets in respect of owner occupied, new build, NIHE and I&C connections were accepted as submitted.
- 6.8 OO connections of 2,000 per annum were assessed as reasonable, which are in line with the current level of connections.
- 6.9 Our proposed connection targets are set out in the table below.

Table 31 – Proposed annual connections for FE

<i>Cost Item</i>	<i>FE Submission</i>	<i>UR Proposal</i>
Domestic – OO	2,000	2,000
Domestic –NB	800	800
Domestic – NIHE	1,133	1,133
I&C	100	100
Total	4,033	4,033

Source: FE and the Utility Regulator

Connections incentive

The market development review (MDR)

- 6.10 As part of the FE PCR02 (2009-2013) price control determination, we had set 2009 allowances covering advertising, marketing and PR (including customer incentive payments), subject to a re-opener to review market development by the end of that year. We subsequently consulted on a proposed approach to market development in October 2009 and again in January 2010, before formulating our final positions in April 2010.
- 6.11 Our analysis and methodology at the time emphasised the need for a per connection allowance in order to achieve efficiency in connection acquisition costs. Accordingly, in the domestic owner occupier (OO) and small industrial and commercial (SIC) sectors we replaced market development allowances, for the period 2010-2013 inclusive, with a per connections allowance the value of which would depend on the number of outturn connections. The main price control allowances were retained for the other customer categories for the PCR02 period.
- 6.12 FE had indicated at the time of the MDR finalisation that a simpler incentive mechanism would be welcomed, thus GD14 has allowed us to align both NI GDNs with a common mechanism in rewarding OO connections. The SIC connections are now separate to the connections incentive mechanism for FE.

The connections incentive mechanism

- 6.13 In order to simplify the mechanism and also align the approach between the NI GDNs we propose adopting the connections incentive mechanism for FE in the same way as it is applied to PNL moving forward.¹³

¹³ Please refer to the discussion in paragraphs 5.12 to 5.22.

Mechanism principles

6.14 The principles used in the development of the connections incentive mechanism were outlined in the PNLG opex section of this paper, but for reasons of completeness we also re-state them here for FE.

6.15 The key elements 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:

$$\text{Revenue per connection} = \text{Average consumption} \times \text{Conveyance tariff,} \\ \text{Discounted over the defined Recovery period}$$

AND

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

- 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 OO housing (i.e. the per connection allowance no longer applies to SIC customers). We have therefore separately granted a certain level of fixed allowances for sales-related costs that are NOT associated with OO connections.

Revenue per connection

6.16 A reminder of the formula:

$$\text{Revenue per connection} = \text{Average consumption} \times \text{Conveyance tariff,} \\ \text{Discounted over the defined Recovery period}$$

6.17 We have sought to develop a common per connection allowance for both FE and PNLG and therefore adopt similar assumptions for both companies. The assumptions we have used are as follows:

Variable	Assumption
Average consumption (A)	410 therms per annum (tpa) This is the approximate average consumption figure for FE
Conveyance tariff (B)	40 pence per therm (ppt) This is an estimate of the approximate tariff applicable to domestic customers
Recovery period (C)	15 years This is considered a suitable payback period for the recovery of direct connection costs. Thereafter, all future revenues would contribute to the costs of the wider network
Average revenue per annum per OO connection	£164 Calculated as: (A) x (B)
Net present value (NPV) of average revenue over recovery period	£1,728 NPV of: (A) x (B) discounted over the years in (C)

Direct capex cost per connection

6.18 A reminder of the formula:

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

6.19 The assumed capex costs for the purposes of the connections incentive mechanism are summarised below:

Variable	OO customers
Infill cost	£507
Service cost	£550
Meter cost	£200

Allowance per connection

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

$$\begin{aligned} \text{Allowance (£)} &= (\text{Revenue per connection}) - (\text{Direct capex cost per connection}) \\ &= 1,728 - (507 + 550 + 200) \\ &= 471 \quad (\text{which we will round up to £480}) \end{aligned}$$

Allowance application

6.21 The allowance of £480 per connection is intended to cover those opex costs we believe can be directly apportioned to sales-related activities for domestic OO properties. However, the full allowance is not applicable to *all* new OO connections.

6.22 As already discussed for PNGL, we consider that there will be a certain number of OO connections that would occur anyway without any direct marketing or selling to these customers. We describe these connections as “non-additional”. Since FE could in theory avoid any sales-related costs to connect such customers, no allowance will be applicable for these customers. We have assumed (as for PNGL) that 25% of all new connections will fall into this category.

6.23 The total number of forecast OO connections is 2,000 per annum as set out in Table 31. This makes the non-additional connections 500.

What costs are being replaced by the mechanism?

6.24 The relevant opex costs are:

- Advertising, marketing and PR;
- Incentives;
- OO Sales related staff including relevant director; and
- Shared corporate overheads.

6.25 The full allowances requested against the distribution business for these cost items are as follows:

Table 32 – Potential FE costs to be replaced by Connections Incentive Mechanism, £k

Cost item	2014	2015	2016
Advertising, Marketing and PR			
<i>Market development</i>	805	805	755
TOTAL	805	805	755
Incentives			
<i>Domestic</i>	600	600	600
<i>I&C</i>	150	100	50
TOTAL	750	700	650
OO Sales related staff (incl. Director)	859	859	859
Corporate overheads (apportioned)	278	288	288
Total	2,691	2,652	2,552

Source: FE and the Utility Regulator

6.26 The *Corporate overheads (apportioned)* cost line above refers to a share of overhead costs we consider appropriate to apportion to OO-sales related activity. The costs are:

- Human Resources Training;
- Insurance (buildings and car insurance);
- IT;
- Office Costs (including stationary, telephone & postage);
- Rates (excluding network rates);
- Travel and subsistence; and

6.27 Corporate support personnel AND their apportioned share of the above costs (by this we are referring to staff in the Finance department including the Finance Director and the Regulatory Affairs section, 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 48 are slightly higher than those presented in the final overall opex allowance proposals summarised in Table 49 at the end of this section.)

6.28 We consider that the costs FE 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.

6.29 The fixed sums we propose, along with our rationale, are set out in the table below. Note that total costs in our proposed fixed allowances have been rounded to the nearest £k.

Table 33 – PNGL fixed allowances, £k

Cost item	2014	2015	2016	Rationale
Advertising, Marketing and PR				
<i>Market development</i>	19	19	19	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.
TOTAL	37	36	35	
Incentives				
<i>Domestic</i>	-	-	-	Incentives offered to domestics are to be fully recovered via the mechanism.
<i>I&C</i>	-	-	-	No I&C incentives are proposed for the GD14 price control.
TOTAL	-	-	-	
Sales development department (incl. Director)	460	460	460	Given the nature of the FE customer base, some members of the sales team (incl. the Director) are clearly not exclusively focused on OO domestics.
Corporate overheads (apportioned)	-	-	-	Corporate overheads have already been apportioned therefore no fixed sum is proposed.
Total	479	479	479	

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

Source: The Utility Regulator

6.30 As with PNGL, in order to reinforce FE's incentive to connect customers, we are considering providing a reward if FE exceeds a target level of connections that would increase the per connection allowance for non-additional connections exceeding the target number of connections by the same proportion that the connections target is overachieved. Conversely, a penalty would apply if FE falls short of the target connections that would reduce the per connection allowance for all non-additional connections by the same proportion that the connections target is underachieved.

6.31 For the purposes of setting an allowance, we will use the target connections and will correct for actual connections through the retrospective adjustment mechanism.

6.32 To demonstrate how the new incentive mechanism could work, consider the following examples:

- *Outperformance* – the connection allowance is £480 and the target (excluding non-additional) connections is 1,500, but FE outperforms by connecting 1,650 OO customers (excluding non-additional). As the connections outperformance is 10% ($= 1,650 / 1,500 - 1$), a unit connection allowance of £528 ($= £480 \times (1+10\%)$) will be payable for the 150 extra connections gained; the standard allowance of £480 would still apply to the original 1,500 connections. Total allowances would therefore equal £799,200 (i.e. $(£480 \times 1,500) + (£528 \times 150)$).
- *Underperformance* – the connection allowance is £480 and the target (excluding non-additional) connections is again 1,500, but FE this time underperforms by connecting 1,350 OO customers (excluding non-additional). As the connections underperformance is 10% ($= 1,350 / 1,500 - 1$), the unit connection allowance payable will be £432 ($= £480$

x (1-10%)) for all connections. Total allowances in this case would equal £583,200 (i.e. £432 x 1,350).

- 6.33 We would be interested in respondents' views on whether this would be an appropriate addition to the connections incentive.

Summary

- 6.34 The connections incentive mechanism is summarised as follows:

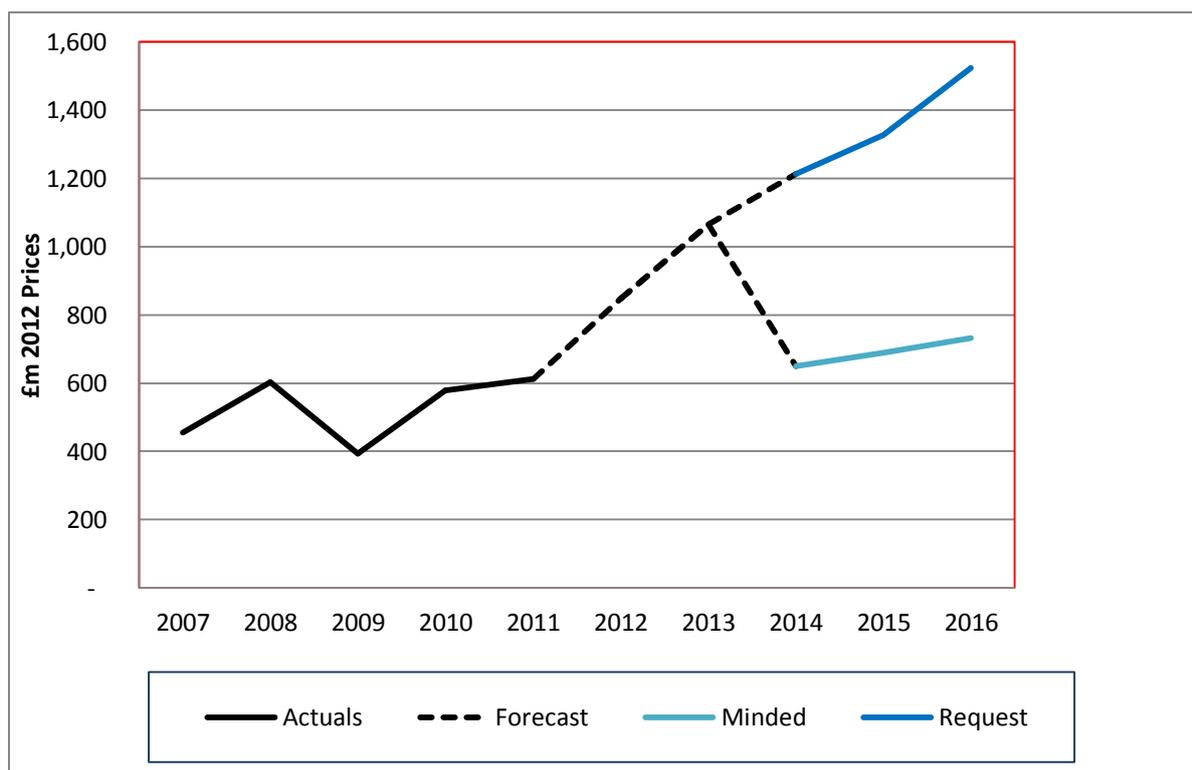
- The full allowance is £480 per OO connection, applicable to all new OO connections after consideration of non-additional connections.
- The total aggregate allowance has been calculated by multiplying this allowance by the forecast number of OO connections (excluding non-additionals), less a sum for recharges to FE Supply of £100k per annum.
- The aggregate allowance will be retrospectively adjusted at the time of the next price control using the actual number of connections.
- The per connection allowance could also be retrospectively adjusted according to whether FE achieves the targeted number of OO connections. The proportional increase (reduction) in the allowance will be equal to the percentage of over (under) achievement of the connection target.
- The allowances to be recovered via the mechanism will replace those costs set out in Table 32. Where an element of fixed allowance is considered appropriate, this has been included in our overall allowances.
- We expect to reduce the full per connection allowance by 50% from 2017 onwards, but this will be subject to review and possible modification, dependent on the outcome of consultation as part of GD17.

Emergency & network maintenance costs

Overview

- 6.35 FE has requested allowances of £1.2 million, £1.3 million and £1.5 million in 2014, 2015 and 2016 respectively to cover emergency and maintenance costs. For comparison, historical actual costs for 2010-2011 averaged around £600k.
- 6.36 The graph below shows that FE's actual emergency and maintenance costs have fluctuated between c.£400k and c.£600k from 2007 to 2011. FE does not have available actual costs for 2012 and 2013, but their best estimates show substantial increases. These increases extend further into the GD14 forecast period. The graph demonstrates that the proposed allowances for 2014 – 2016 are more aligned with the historical actual costs incurred during 2010 and 2011.

Figure 7 – FE emergency and maintenance historical costs and GD14 Submission, £m



Source: The Utility Regulator

- 6.37 As with PNL, we commissioned Rune to advise on the appropriateness of FE’s allowance request for emergency and network maintenance costs.
- 6.38 FE has previously reported its costs and forecasts in terms of the account headings used within its business. To undertake the review for the GD14 price control for both FE and PNL, we asked Rune to develop a reporting template that would attempt to get both companies to move to a common reporting format and would provide an element of comparability to GB networks.
- 6.39 Emergency and maintenance costs are reported under the following headings:
- Call centre costs
 - Emergencies (First Call Costs)
 - Repair activities
 - Maintenance activities.
- 6.40 We have had some difficulty in interpreting how FE costs are allocated under the four headings and have made some assumptions in arriving at our conclusions. We will continue to work with FE before the final determination to ensure the allocations are appropriate.
- 6.41 Illustrative unit rates for comparison purposes in tables are shown in italics; these rates are shown to the nearest £.
- Call Centre Costs**
- 6.42 Call Centre calls comprise emergency reports that require investigation by a first call operative (FCO) and calls which can be generally categorised as general enquiries and no further action is required. FE requested an allowance of £0.2m per year in 2014, 2015 and 2016 in its submission.

- 6.43 In line with the approach taken for PNGL, the principal driver for the call centre activity has been established as the total number of customers connected to the network. FE forecasts a flat trend in the number of calls per 10,000 customers, whereas Rune believes that the trend should indicate a reduction. This view is based on the increasing scale of the established customer base relative to the level of new customer connections that initially may generate a higher emergency call rate.
- 6.44 Rune has developed a model for call centre costs to determine appropriate allowances for 2014 – 2016. Further details of the model, including the principals and assumptions used in the model are provided in Appendix 2.
- 6.45 The model has generated forecasts for the number of calls per 10,000 consumers at a much higher level than would typically be seen by GB GDNs. This is despite allowing for a large number of prepaid meter problems which are not directly comparable between NI installed volumes and GB. We therefore consider that target reductions in call numbers should be set and Rune has determined that achievable targets are for FE to reduce the number of calls received from existing customers by 3% per year and by 1% per year for new customers.
- 6.46 The trend assumed for the total number of calls therefore incorporates the efficiency improvement of between 1% and 3% as outlined above.
- 6.47 As explained in the PNGL emergency & maintenance chapter, Rune has formed the opinion that FE and PNGL could make savings in relation to their call centre contracts if they worked more closely together and place a single contract. We have therefore recommended that a 50% saving of the fixed modelled call centre costs is incorporated into the proposed allowances. Over the three years of the control this represents a reduction of £127,500.
- 6.48 The model forecasts a lower unit rate for handling calls than that submitted by FE. However, the increasing customer numbers in FE drive an increasing total cost for call centre costs, albeit at a lower level than was submitted by FE.
- 6.49 The recommended allowances for call centre costs are detailed in the following table.

Table 34 – FE emergency call centre workloads and costs

Cost element	Average 2010-2011	FE submission			UR recommendation		
		2014	2015	2016	2014	2015	2016
Emergency Calls (no.)	3,051	6,213	7,310	8,339	4,841	5,406	5,853
Cost per Emergency Call £	42	30	27	26	21	20	20
Total Emergency Call Centre Cost £k	127	184	201	216	103	110	116

Source: FE and the Utility Regulator

Emergencies (First Call Costs)

- 6.50 McNicholas Construction provides a first call response service to FE which has an associated level of fixed cost. There is assumed to be a lower degree of flexibility in the workload/deployment of FE emergency manpower than PNGL can derive from its contract with PES for emergency response. This potentially results in more non-productive time compared with PNGL. Hence, FE's overall costs are driven less by the level of operational activity which should result in a lower rise in costs as new customers/workload is added to the network.
- 6.51 Similar to call centre costs, the principal driver for emergency activity is the total number of customers connected to the network. Rune developed a model to determine appropriate

allowances for emergency costs. Further detail on this analysis and the model is shown in Appendix 2.

- 6.52 FE has forecast a step change in the number of emergency jobs per 10,000 customers in 2012 compared to the actual levels reported for previous years. We are not convinced by the robustness of the FE forecasts for the volume of jobs and how they relate to the cost submission. We found no evidence for any increase in the number of calls per 10,000 customers and taking account of the expected fall towards GB levels as the gas market matures, the model generates a reduction.
- 6.53 FE's actual costs per emergency job show a substantial reducing trend over the period 2009 – 2013 and a forecast flat ongoing trend. The model also projects a reducing trend in cost per emergency job, but the trend is smoother.
- 6.54 FE's total first call emergency actual costs show an increasing trend over the period 2009 – 2016. The model also generates an increasing trend, albeit at a much lower rate .
- 6.55 The recommended allowances for first call emergency costs are detailed in the following table along with FE's submission for comparison.

Table 35 – FE emergency workload and cost information

Cost element	Average 2010-2011	FE submission			UR recommendation		
		2014	2015	2016	2014	2015	2016
Emergencies (no.)	622	2,905	3,418	3,899	1,628	1,861	2,078
Cost per Emergency Job £	185	126	125	124	126	120	116
Total Emergency Cost £k	115	366	426	483	205	224	241

Source: FE and the Utility Regulator

Repair Activities

- 6.56 Repair team costs result from either gas escapes from main or service pipes due to joint problems (condition problems) or third party interference damage.
- 6.57 FE has confirmed that the costs reported and forecast are net i.e. after recovery of costs from third parties.
- 6.58 The repair figures provided by FE are erratic and in some cases negative. Rune's interpretation of the figures being £-548, £38,518 & £-24,111 for the years 2009, 2010 and 2011 respectively. We would expect that the majority of repair costs should be recoverable through third parties. Therefore, we have recommended using FE forecasts for 2012 of £7,916 as the figure to be rolled forward for the period 2014-2016.
- 6.59 The recommended total cost allowances for repair activity are detailed in the following table.

Table 36 – FE total repair costs, £k

Cost item	Average 2010-2011	FE submission			UR recommendation		
		2014	2015	2016	2014	2015	2016
Total Repair Cost	7	13	15	17	8	8	8

Source: FE and the Utility Regulator

Maintenance Activities

- 6.60 Maintenance activities are those direct activities which are necessary to keep the network in safe working order with the exception of those activities carried out by FCOs and repair teams. A wide range of activities are included within maintenance costs, and activities vary greatly depending on the age, design and nature of the networks being operated. This makes benchmarking these activities more difficult.
- 6.61 We have therefore taken an approach of reviewing the detailed actual expenditure reported by FE and removing exceptional items to create a base level of expenditure. This expenditure has then been rolled forward from the levels at 2011 through 2012 and 2013 to provide a base level of expenditure in 2014-2016.
- 6.62 We then analysed the exceptional costs items requested for 2014-2016 to identify which costs have been justified to be incurred during the GD14 period. Rune was not convinced that certain items have been justified as required expenditure for the forecast period and therefore some items have been excluded from the recommended allowances. Appendix 2 provides additional detail on the model developed by Rune and the details of the costs which have been excluded to create the base line and the analysis of the costs to be added back.
- 6.63 The model uses a primary driver of the number of customers which would cause the base expenditure identified from actuals to be rolled forward to the forecast years. We are satisfied that the use of forecast customer numbers would give a reasonable and fair uplift in the costs to reflect the growth of the network provided the mix of domestic and I&C customers was taken into account.
- 6.64 Rune also considered that Modern Equivalent Asset Valuation (MEAV)¹⁴ could be used as a driver as this is used by Ofgem in benchmarking GB network maintenance. However, MEAV has not been collected in NI in the run-up to GD14 and could not be expected to be gathered in the timescale required for the review of GD14. However, we would like to explore the possibility of using MEAV in future controls as a driver for network maintenance activities. Following the approach used in GB, this would require companies to undertake an inventory of their network assets and their replacement values. It is expected that the primary driver would be above ground assets as this is understood to driver most of the maintenance cost.
- 6.65 In its submission, FE stated that it plans to implement PAS55 during GD14 to ensure the optimal management of its physical assets and to ensure cost savings for consumers are realised. We are not minded to grant any allowance for implementing such a system given that this system should have been part of how FE set up its business and it would actually be beneficial to FE. We note also that UR has never made an allowance to PNL to implement an equivalent system, and Ofgem has never made an allowance to a GDN for this activity.
- 6.66 Nevertheless, we support FE's intention and do expect FE to go ahead with implementing a comprehensive asset management system based on PAS55 principles that will drive cost effective optimisation of maintenance and replacement policies during the GD14 period.
- 6.67 We are proposing a reduction of 10% to the baseline maintenance costs to reflect that FE has not implemented, or even started to develop an asset risk management system such as PAS55. Our opinion is that FE should have developed such a system from set-up in 2006. It is considered best industry practice to operate such a system, and would in fact be beneficial to FE.

¹⁴ MEAV is employed by Ofgem as a means of creating an equivalent new network which can be used as a scale driver for various cost activities. MEAV can recognise the size, asset base and complexity of a network, and represents the cost of creating an equivalent new network.

6.68 The table below shows the recommended allowances for FE's maintenance activities compared with the FE submission.

Table 37 – FE maintenance costs, £k

Cost	Average 2010-2011	FE submission			UR recommendation		
		2014	2015	2016	2014	2015	2016
Total Maintenance Cost	354	651	684	806	333	347	366

Source: FE and the Utility Regulator

Summary of Emergency & Network Maintenance Costs

6.69 The following table provides a summary of the recommended allowances for FE's emergency and network maintenance activities. For comparison, the table also provides the average historical actual costs for 2010 – 2011 and FE's forecast submission for 2014 – 2016.

Table 38 – FE emergency & maintenance costs, £k

Costs	Average 2010- 2011	FE submission				UR recommendation				Difference	
		2014	2015	2016	Total	2014	2015	2016	Total	Total	%
Call Centre Costs	127	184	201	216	601	103	110	116	329	-272	-45%
First Call Costs	115	366	426	483	1,276	205	224	241	670	-606	-47%
Repair Team Costs	7	13	15	17	45	8	8	8	24	-21	-47%
Maintenance Activities	354	651	684	806	2,140	333	347	366	1,047	-	-51%
Total Direct Opex	603	1,214	1,326	1,522	4,063	649	689	731	2,069	-	-49%
										1,994	

Source: FE and the Utility Regulator

Manpower

- 6.70 FE has requested annual allowances of £2.1 million, £2.2 million and £2.4 million in 2014, 2015 and 2016, respectively.
- 6.71 By comparison, historical actual costs for 2009-2011 were £1.7 million, £2.0 million and £1.2 million, respectively. FE's best available figures for the actual manpower costs in 2012 and 2013 are £1.9 million and £2.1 million.
- 6.72 The table below shows FE's historical manpower costs (and the estimates for 2012-2013) compared to allowances we had determined in the previous FE price control. The graph which follows the table below also displays the historical actual manpower costs incurred by FE and compares these to FE's submission for the GD14 period. The graph also shows the UR's proposed allowances for the GD14 period.

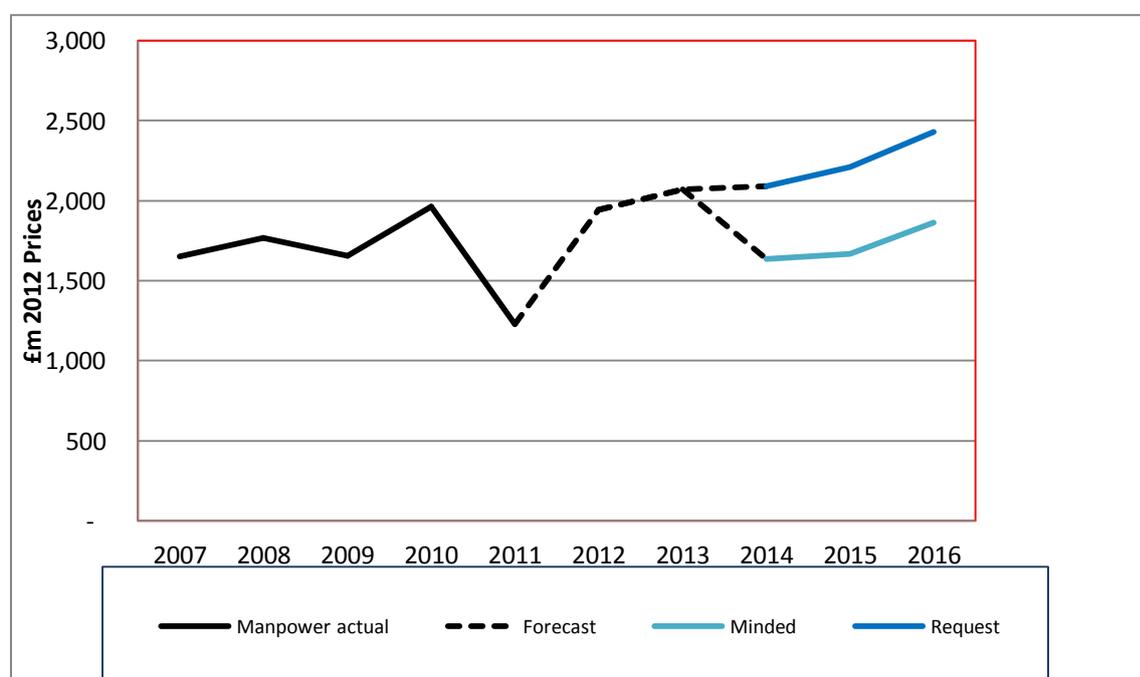
Table 39 – FE manpower allowances and actual costs, £k

	PCR02				
	2009	2010	2011	2012	2013
UR's determined allowances	2,003	1,743*	1,697*	1,542*	1,368*
UR's determined allowances with amounts recoverable under Market Development Mechanism included	2,003	1,983	1,937	1,782	1,608
Actual costs (2012-13 are best available)	1,657	1,963	1,230	1,945	2,071

* These are the fixed manpower allowances. However, an element of manpower costs was also recoverable under the 'market development' mechanism introduced in 2010. These are included in the following row.

Source: FE and the Utility Regulator

Figure 8 – FE manpower historical costs including Connections Incentive Mechanism and GD14 Submission, £m



Source: FE and the Utility Regulator

6.73 FE has informed us that its staffing resources are organised around the following departments:

- **Engineering and maintenance** – this department is responsible for the safe construction and maintenance of the network and for new connections sales to residential customers. It also houses the customer care team, who are engaged on supply activities.
- **Sales and customer operations** – this department is mainly responsible for I&C new connection sales. This department also manages customer switching within the Ten Towns network.
- **Regulation and pricing** – this department is responsible for regulatory relationships and reporting as well as managing transportation services and project management.

- **Finance** – this department provides support functions such as finance, HR and facilities management.
- **Marketing** – this department is responsible for marketing and PR.

There are also 4 senior managers employed on distribution activities.

FE staffing resources

6.74 The following table shows the actual number of FTE employees that FE has reported were employed by the distribution business during 2009 – 2011, as well as the best available information for the number of FTEs in 2012 and 2013 and the requested number for 2014 – 2016. The table also shows the percentage of FTE employees that is recharged to capex each year.

Table 40 – FE staffing complement (FTEs) and proportion recharged to capex, historical and requested

	Actuals			Best available		Requested		
	2009	2010	2011	2012	2013	2014	2015	2016
FTEs in distribution	48	58	48	59	60	62	62	62
% of distribution staff recharged to capex	33%	31%	39%	32%	32%	32%	31%	24%

Source: FE and the Utility Regulator

- 6.75 The number of FTEs fluctuates substantially from 2009 to 2012. FE has provided no explanation for these variances, and has only provided limited explanation for the increase in employees that are forecast to remain during the GD14 period.
- 6.76 The actual costs for manpower have also fluctuated over the PCR02 period with a substantial fall in costs during 2011.
- 6.77 FE argued that additional manpower expenditure was incurred over the PCR02 period (2009-2013) due to market opening occurring earlier than originally planned. However, we do not accept this reasoning as the start of market opening was in fact delayed. Originally, the Ten Towns market opening was to be phased over a period from 2011 to 2018, but a decision was made in 2011 to delay this for large I&C customer until October 2012, with the remainder of the I&C market and domestic market opening to competition from April 2015.
- 6.78 Due to these fluctuations in the 2009-2011 actuals, and the lack of explanation provided in the GD14 submission, we have decided to use the 2008 actuals as a baseline for determining the GD14 allowances. The main reason for using the 2008 actuals is that this was last year of full and consistent information provided for meaningful analysis.
- 6.79 In 2008, FE had 46 FTE employees in the distribution business with 35% of these employees being recharged to capex. We note that by 2011, the actual number of FTEs was 48 and so this is consistent with our proposed allowances.

Assessment

- 6.80 To determine allowances for the GD14 period we have used the 2008 actuals as a baseline and have extrapolated forward, taking into consideration additional information that FE has provided in their GD14 submission.
- 6.81 In its original GD14 submission, FE indicated that 2 FTEs were currently employed in roles relating to market opening and it projected that an additional 2 FTEs would be required from 2015 to assist with the extension of market opening to residential customers.
- 6.82 We accept that FE will require additional staff in order to introduce market opening for the Ten Towns market. We are therefore minded to allow an additional 2 FTEs from 2014 in line

with the number of staff that FE currently employs for transportation services. We are also minded to allow an additional 2 FTEs from 2015 to assist with market opening for the remainder of the I&C market and the domestic market.

- 6.83 Our proposal is therefore to grant an allowance for 48.5 FTEs in 2014 for the total distribution business and this will increase to an allowance of 50.5 FTEs for 2015 and 2016.
- 6.84 Regarding capitalisation, FE has proposed that this should be reduced throughout the GD14 period, as the distribution business will see a shift away from the engineering emphasis with FE gradually moving from the network build phase to placing a greater focus on network maintenance. We have accepted FE's proposed percentage reductions for the capitalisation of manpower costs, specifically, 32%, 31% and 25% for the respective years of the GD14 price control.
- 6.85 Regarding staff remuneration levels, we have again used 2008 actuals and rolled these forward in order to determine the allowances for the GD14 period. In line with the approach taken for PNL's manpower allowances, we have not granted any percentage salary increases above RPI in our proposed allowances.
- 6.86 Sales and marketing staff costs related to OO new connections have been removed to be recovered through the Connections Incentive Mechanism. We have also removed a small element of the costs of support staff including NICs as some of their costs can be attributed to creating OO new connections.
- 6.87 In summary, we are proposing a fixed allowance for manpower of c£1.1 million in 2014 and 2015 and c.£1.3 million in 2016 as outlined in the following table. The amounts removed from manpower to be recovered through the Connections Incentive Mechanism are also displayed in the table.

Table 41 – FE manpower costs, requested and allowed, £k

	2014	2015	2016
FE requested allowances	2,091	2,210	2,430
UR's determined allowances	1,084	1,104	1,301
Amounts to be recovered through the connections incentive mechanism	552	562	562
Total allowances*	1,636	1,666	1,863
Variance	-455	-544	-567

* The fixed manpower allowances are given by the second row of the table. However, to ensure a like-for-like comparison with FE's request, total allowances also include the sums recoverable under the connections incentive mechanism.

Source: FE and Utility Regulator

Office Costs

- 6.88 Excluding rates (which are treated separately below), FE has requested between £456k and £459k for the three respective years of the price control, representing a significant increase on office costs incurred in the earlier part of PCRO2 and continuing an upward trend that appears to have begun in 2011. As a result, we requested more disaggregated information

from FE subsequent to its initial submission and have undertaken a detailed review of the individual items that comprise this cost category.

- 6.89 The major revisions we have made to FE's submitted costs are explained below.
- 6.90 **IT support.** FE has requested £61k per annum for IT support from 2014-2016 and this has been agreed subject to FE confirming subsequent to this consultation publication that its parent company no longer uses the IT system the request relates to (FELIVE).
- 6.91 **Heat & light, postage and courier, cleaning.** All of these cost lines are set to increase significantly in the last one or two years of PCR02 with the new higher levels extended by FE into its GD14 requested allowances. However, we have not been able to ascertain the rationale for these expected increases and have therefore taken average spend over recent years to determine our proposed allowances. For this group of costs we are collectively permitting £232k versus a requested £338k for the three years of the price control.
- 6.92 **Other items.** We have removed the 5% uplift in rent claimed by FE. We have also provided lower allowances than requested for a number of less material cost lines such as office rental, security, service charges, stationery and 'other office costs'. Allowances for the remaining categories have been set broadly in line with historical spend (after adjusting for any sudden spikes in cost).
- 6.93 Overall, we believe that reasonable office costs allowances for the GD14 price control are £369k per annum.

Parental Recharges

- 6.94 'Parental Recharges' are incurred by FE in settlement of the services provided by its parent company, BGE, in relation to the following:
- Central corporate services covering matters such as HR support, training, procurement services (including tendering for the period contract and downstream installers), legal services, treasury / corporate finance and audit functions, maintenance and development of an IT platform, engineering project planning, payments / invoicing, tariff maintenance and billing, customer relationship management, secretariat services and costs associated with establishing and running the Board of Directors, etc.;
 - Grid control and transportation services, including engineering maintenance activities and network pressure monitoring;
 - Geographical Information System (GIS) support;
 - Health and safety support including technical and safety training; and
 - Meter Reading.
- 6.95 FE considers that these services are required to avoid having to employ external consultants and professional services that it feels would be at a higher cost than those incurred via the recharge mechanism. Our focus has been on assessing whether overall the allowances requested appear reasonable.
- 6.96 In the case of grid control, GIS and meter reading, which collectively account for about one-quarter of all recharges, we are minded to grant the allowances as requested. The claimed costs for grid control and GIS are generally in line with those of the PCR02 price control.

Metering costs are expected to rise, but we believe this is consistent with the expected increase in customer numbers over the GD14 period. We note that only 10% of meter reading costs are charged to the distribution business.

- 6.97 Regarding central services costs (accounting for 75% of total parental recharges), FE has requested allowances that significantly exceed previous allowances and historical costs. The average of the claimed allowances for GD14 are over 50% higher than the average for the PCR02 control period, even after taking into account a large budgeted increase for 2013. According to FE, *“The increase in the shared services cost results from the increasing size of the network and our customer base within our licence area, and the additional roles firmus energy has had to undertake in relation to market opening – IT Development, shipper services, grid control etc.”*
- 6.98 FE had put forward similar arguments at the time of the previous price control. While we accept that the expanded network and market opening *may* increase costs in this area, we believe the claimed allowances are not commensurate with the planned network expansion and the expected volume of transactions under the open market. Moreover, FE has not provided sufficient detail or justification for those areas where there may be increased costs (such as financial transactions), while other costs included in this category (such as the Gas Transmission Management System (GTMS) upgrade) seem to be unrelated to the distribution business.
- 6.99 In setting our allowances for central services, therefore, we have used the same allowances as we previously granted in PCR02 as we have not seen any arguments which would justify significant increases in this cost.
- 6.100 The table below shows our proposed allowances for parental recharges together with FE’s request and the differences between the two sets of costs.

Table 42 – FE allowances for parental recharges, £k

Cost Item	FE submission				UR proposed allowance				Difference			
	2014	2015	2016	Total	2014	2015	2016	Total	2014	2015	2016	Total
Central services	789	710	731	2,230	266	266	266	799	-523	-444	-465	-1,432
Grid control	75	75	75	225	75	75	75	225	0	0	0	0
GIS, Drawing Office & SCADA	146	146	146	438	146	146	146	438	0	0	0	0
Meter reading	8	9	11	28	8	9	11	28	0	0	0	0
Total	1,018	940	963	2,922	495	497	498	1,490	-523	-444	-465	-1,432

Source: FE and the Utility Regulator

Rates

- 6.101 As discussed above, FE’s office costs include rates, but we have decided to treat these as a separate cost line given the significance of this item in overall FE opex. The FE submission for rates includes the costs for both network rates and office rates.
- 6.102 Under the previous FE price control and for the purposes of setting the allowances, network rates were calculated using a formula based on forecast revenues. However, the rates were then treated as a pass-through cost. For 2014 – 2016, FE has used the same formulas to calculate network rates. In addition, FE has included £20k per annum to cover office rates. The allowances requested are shown in the following table.

Table 43 – FE requested rates allowances, £k

	2014	2015	2016
FE total requested allowances	918	1,039	1,065
Network rates	898	1,019	1,045
Office rates	20	20	20

Source: FE and Utility Regulator

- 6.103 We are proposing to accept the requested allowance for office rates of £20k per annum as this is in line with actual costs incurred in recent years.
- 6.104 We are also minded to continue using the formula approach to set allowances for network rates. Rates will be treated as a cost pass-through, subject to FE demonstrating that it has taken appropriate actions to minimise the valuations. The allowances will therefore be modified to reflect actual costs incurred via the retrospective mechanism.
- 6.105 Our determined allowances for rates in total for the 2014 -2016 period are shown in the table below along with FE’s requested allowances and the differences between the two amounts.

Table 44 – FE requested and determined rates allowances, £k

	2014	2015	2016
FE requested allowances	918	1,039	1,065
UR determined allowances	918	1,039	1,065
Variance	0	0	0

Source: FE and the Utility Regulator

- 6.106 Note that the network rates have been calculated using the formula based on FE’s forecast revenues; however in the final determination the allowances granted for network rates will be calculated using the formula and the revenues as determined in the price control.

Fees and Consulting

- 6.107 FE requested allowances under this heading which covered the costs of consultancy, legal and audit fees, as well as the licence fee. We have excluded the licence fee from the costs discussed in this section, and separately deal with the allowance for this in the following section.
- 6.108 The following table shows FE’s historical actual costs compared to the PCR02 price control determination (excluding licence fees).

Table 45 – FE requested allowances and PCR02 determination for fees and consulting, £k

	2009	2010	2011	2012	2013
UR’s Determined Allowances (PCR02)	112	112	140	112	112
Actual Costs (2012-13 are best available)	235	132	85	176	143

Source: FE and the Utility Regulator

- 6.109 FE has requested £223k in 2014 and £123k in 2015 and 2016 for fees and consulting. The requested allowances are broadly based on FE’s costs for PCR02 with additional costs requested in 2014 as discussed further below.
- 6.110 We believe the consultancy and legal fees and recruitment costs are reasonable and therefore we propose to grant these allowances as requested. The audit fees request, on the other hand, represents a 100% increase on the previous allowance. FE has indicated that the additional fees are needed due to increasing customer numbers and revenue. We do not accept that the expected increase in turnover and customer numbers would result in such a significant change in audit costs and therefore we have not accepted the additional allowance. We have instead granted an allowance of £16.5k based on the average of the actual costs from 2009-2011 (FE has not provided final actual costs for 2012).
- 6.111 In addition to the baseline costs, FE has requested £100k in 2014 for IME3 implementation, market opening and the safety case review. As FE already has a Distribution Network Code in place and the majority of market opening processes are now NI-wide, we do not envisage there being significant consultancy or legal costs required in relation to market opening going forward. However, we understand that FE may require additional manpower for market opening and a specific allowance was made for this as discussed in the manpower section.
- 6.112 In addition, the majority of the work in relation to IME3 is complete and compliance with the new IME3 licence obligations was mandatory from December 2012. There may be some additional licence modifications relating to IME3, however these should be minor amendments. Therefore, we do not accept that FE requires an additional allowance for IME3 in 2014.
- 6.113 Finally, we consider that FE’s review of the safety case should be covered under the base level consultancy and legal fees. Safety should be reviewed on a continuous basis and therefore we are not granting any additional one-off allowances for the safety case review.
- 6.114 Our proposed determined allowances for 2014 -2016 are shown in the table below along with FE’s requested allowances and the variance. Note that the figures exclude licence fees.

Table 46 – FE requested and determined allowances for fees and consulting, £k

	2014	2015	2016
FE requested allowances	223	123	123
UR determined allowances	110	110	110
Variance	-113	-13	-13

Source: FE and the Utility Regulator

Licence Fees

- 6.115 As we discussed in the PNGL context, licence fees are apportioned between the distribution licence holders according to their share of the total forecasted gas volumes conveyed in their respective areas for the year to which the fees relate. We treat licence fees as pass-through and therefore retrospectively adjust them to reflect the actual fees levied on FE by our office.

- 6.116 For the purposes of setting an *ex ante* allowance, we take the total cost to be apportioned to the two distribution licence holders, namely £162,715 per annum and use our determined volumes for each year of the price control to split the fee between FE and PNGL.
- 6.117 In general, FE is expected to convey about 30% of total forecasted NI volumes and therefore the determined licence fees for FE are in the order of £48k in each of the control period years which is a substantial reduction from FE's submission where they requested £280k per annum for licence fees. This will be updated for the final determination.

Insurance

- 6.118 FE has requested allowances of £232k, £270k and £305k in 2014, 2015 and 2016 respectively. For comparison, the historical actual cost of insurance from 2009 to 2011 averaged £75k.
- 6.119 FE has requested allowances for insurance costs that are considerably higher than both previous allowances and its actual costs. Since 2010, FE's actual insurance costs have exceeded the determined allowances. According to FE, this is due to increased network build with FE having been advised to increase its insurance liability cover in stages throughout the PCR02 period from approximately £5 million in 2009 to £80 million in 2012. We accept that FE's network has grown between 2009 and 2012; however, the increase in liability from £5 million to £80 million outweighs the increase in network build.
- 6.120 FE also stated that, following the unbundling of the BGE Group required by IME3, FE can no longer take advantage of the benefit of the overall insurance cover provided by the BGE Group, and since 2010 FE has been required to pay its insurance costs on a stand-alone basis.
- 6.121 FE has advised that its requested allowances for 2014 – 2016 are based on PCR02 actual costs and incorporate increases based on forecast customer numbers.
- 6.122 We have not been provided with sufficient information by FE to understand the make-up of its insurance costs (e.g. business insurance, car insurance, building insurance, etc.) and we do not accept that insurance costs will increase as significantly as FE suggests.
- 6.123 We have therefore proposed to set FE insurance allowances using an average of the 2010 – 2011 actual costs. We have excluded the actual costs from 2009 as we accept that the 2009 actuals were lower as FE was able to benefit from the insurance cover provided by the BGE Group at that stage.
- 6.124 Our determined allowances for 2014 -2016 are shown in the table below along with FE's requested allowances and the difference between the two.

Table 47 – FE insurance costs, requested and allowed, £k

	2014	2015	2016
FE requested allowances	232	270	305
UR's determined allowances	93	93	93
Variance	-138	-176	-212

Source: PNGL and Utility Regulator

6.125 It should be noted that the determined allowances shown in this table are higher than the final allowance proposed in the summary table after paragraph 6.138 as we have assumed that an element of the insurance costs relates to office and car insurance and therefore we have apportioned an element of the insurance allowance to be recovered through the connections incentive.

Smaller Items

6.126 The residual FE cost lines shown below amount to approximately less than 5% of total claimed opex allowances:

Advertising, marketing and PR	Manpower	Network maintenance
Bank charges	Office costs (including IT)	Training
Fees and consulting	Parental recharges	Travel and transport
Insurance	Professional subscriptions	

6.127 For these cost lines, we adopt a collective approach similar to that for PNLG. To recap, we initially 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 then using this trend to extrapolate forward.

6.128 We concluded that using a trend is less credible than using an average, since trending tends to exaggerate expenditure anomalies in any one particular year. Furthermore, we do not believe that these costs are rising in line with the expanding customer base.

6.129 We therefore propose setting allowances for these cost lines using an average, and for the purposes of our calculations we use the five-year timeframe of PCR02 (i.e. 2009 to 2013). Even though 2012-2013 are forecasts/budgeted spend, on the whole, we do not consider the observed trends to be unreasonable. The only exception is training where there is a significant proportionate increase between 2012 and 2013, which does not appear to be justified. We therefore adopt a 4-year average for training (i.e. excluding 2013).

6.130 The allowances are shown in the following table.

Table 48 – Small items allowances for FE, £k

Cost Item	FE submission				UR proposed allowance				Difference			
	2014	2015	2016	Total	2014	2015	2016	Total	2014	2015	2016	Total
Bank charges	9	9	9	27	4	4	4	13	-5	-5	-5	-14
Professional subs	12	12	12	36	9	9	9	26	-3	-3	-3	-10
Training	88	90	119	297	44	44	44	133	-43	-46	-75	-164
Travel and transport	229	239	242	711	196	196	196	587	-34	-44	-46	-124
Total	338	351	382	1,071	253	253	253	759	-85	-98	-129	-312

Source: FE and the Utility Regulator

6.131 We note that some of the allowances above are adjusted before setting the final overall opex allowances. This is because an element of these costs is allocated for recovery through the connections incentive mechanism, as we discussed above.

FE Supply Price Control

FE supply operating costs

- 6.132 FE is made up of a number of different businesses: Distribution, Ten Towns supply, Greater Belfast supply and Electricity. Due to the organisation of the business, the operational and managerial costs of all these businesses are inexorably linked, sharing premises, resources and systems in the daily operation of all businesses.
- 6.133 During the last FE price control we also set an allowance for supply operating costs. The purpose of setting an allowance for supply operating costs within the context of the distribution price control is to ensure that costs are allocated appropriately between supply and distribution businesses.
- 6.134 It is also appropriate to set supply costs in their own right to ensure supply costs are efficient and costs within supply are allocated appropriately between supply areas (Ten towns/Greater Belfast) and between activities (Gas/Electricity) and across all market sectors (<25,000 tpa, 25,000->75,000tpa, >75,000tpa) in line with licence requirements. Without this clarity FE could be incentivised to allocate costs from the competitive Belfast market into the Ten Towns market which does not open to competition until April 2015.
- 6.135 Finally, we will need to consider an established basis for costs which could be used in setting a maximum average supply tariff following market opening in April 2015. The FE energy supply licence grants to FE energy a period of exclusivity for supplying gas to customers using less than 75,000 therms per annum within the Ten Towns area. This period of exclusivity ended on 30 September 2012 for customers using more than 25,000 therms per annum. This meant that other supply companies could enter the market and compete with FE to supply gas to this section of the market. The period of exclusivity for all customers using less than 25,000 therms per annum will end on 31 March 2015. From 1 April 2015 the supply market in the Ten Towns area will be open to new entrants in all sectors. There will be a separate consultation in 2014 on applying a maximum average tariff, but the work undertaken through this process will determine supply costs for the Ten Towns supply area.

Approach

- 6.136 To date, supply operating costs have been treated as part of the distribution price control. Since the commencement of the previous price control, customer numbers for FE have increased steadily. The supply business itself has also changed with the supply of gas to customers in the Greater Belfast area and the supply of electricity. Therefore, for this price control we consider it prudent to carry out an in-depth analysis of the costs relating to the supply of gas in the Ten Towns area to ensure that costs are efficient, fair and transparent. We have sent information requests to FE requesting detailed information on costs and have only recently received the information we require to establish a 'minded to' position. As a result, we will publish a separate consultation on supply costs in the coming weeks.
- 6.137 Our approach to establishing an appropriate allowance for supply operating costs in the Ten Towns area is as follows:
- Conduct a bottom-up assessment of costs for major areas such as manpower, billing, IT systems, meter reading, etc. to establish if forecast costs are considered efficient.
 - Compare costs with allowances in other areas of distribution to ensure consistency of treatment of costs across the control.
 - Review costs allocated to other businesses in supply – Belfast area, electricity - to ensure that costs are fairly and reasonable allocated to separate businesses.

- Review the allocation of costs between sectors of the market (open/non open).
- Benchmark costs where appropriate against other supply companies in Northern Ireland and other jurisdictions.
- Establish a 'minded to' allowance for supply operating costs.
- Consult with stakeholders on this minded to position.

FE Opex Summary

6.138 In the table below we set out a summary of the total opex allowances we propose for 2014, 2015 and 2016.

Table 49 – FE opex Summary, £k

Cost Item	FE submission				UR proposed allowance				Difference				
	2014	2015	2016	Total	2014	2015	2016	Total	2014	2015	2016	Total	Total, %
Advertising, marketing and PR	1,555	1,505	1,405	4,465	19	19	19	57	-1,536	-1,486	-1,386	-4,408	-99%
Bank charges	9	9	9	27	4	4	4	13	-5	-5	-5	-14	-52%
Fees and consulting	503	403	403	1,309	157	158	158	473	-346	-245	-245	-836	-64%
Insurance	232	270	305	806	89	89	89	267	-142	-180	-216	-539	-67%
Manpower	2,091	2,210	2,430	6,730	1,084	1,104	1,301	3,490	-1,007	-1,105	-1,129	-3,240	-48%
Office costs (incl. IT)	456	459	459	1,374	296	296	296	888	-160	-163	-163	-486	-35%
Parental recharges	1,210	1,132	1,155	3,498	495	497	498	1,490	-715	-636	-657	-2,008	-57%
Professional subscriptions	12	12	12	36	9	9	9	26	-3	-3	-3	-10	-27%
Rates	918	1,039	1,065	3,022	918	1,039	1,065	3,022	0	0	0	0	0%
Emergency costs + Network Maintenance	1,214	1,326	1,522	4,063	649	689	731	2,069	-565	-638	-792	-1,994	-49%
Training	88	90	119	297	36	36	36	108	-52	-54	-83	-189	-64%
Travel and transport	229	239	242	711	159	159	159	477	-70	-81	-83	-234	-33%
Total	8,517	8,695	9,126	26,338	3,916	4,099	4,365	12,380	-4,600	-4,596	-4,762	-13,958	-53%
Potential £ from connections incentive mechanism					590	590	590	1,770	590	590	590	1,770	n/a
Total	8,517	8,695	9,126	26,338	4,506	4,689	4,955	14,150	-4,010	-4,006	-4,172	-12,188	-46%

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 connections incentive mechanism.

Source: FE and the Utility Regulator

7 CAPITAL EXPENDITURE, PNGL

Introduction

- 7.1 PNGL has requested allowances excluding costs associated with implementation of the Traffic Management Act (TMA), of c£12.9 million, c£13.0 million and c£12.7 million in 2014, 2015 and 2016 respectively in its submission, to deliver a forecast workload as set out in the table below. For comparison historical actual costs from 2009 to 2011 have averaged around £12.2 million per annum, delivering an average workload which is also shown in the table.

Table 50 – Workloads: PNGL GD14 forecast, 2009 to 2011 actuals

Workload	PNGL submission			
	2014	2015	2016	Average 2009-11
Pipe laid, km	67	70	73	65
Properties passed	5,678	5,928	6,128	8,205
Connections (Domestic)	8,400	8,250	8,050	9,322
Connections (I&Cs)	378	378	378	446

Source: PNGL and the Utility Regulator

- 7.2 We commissioned our engineering consultants, Rune Associates Limited (Rune), to advise on the appropriateness of PNGL’s allowance requests.
- 7.3 In undertaking this review, they examined the company’s forward capital programme, some areas of which were considered in great detail, and questioned PNGL staff on the build-up of the cost estimates. We have taken on board Rune’s findings in setting our allowances for capex.

Overview

General overview

- 7.4 PNGL’s submission for forecast capex costs generally consisted of a forecast workload multiplied by an estimated unit rate.
- 7.5 PNGL has not included any assumptions in their submission regarding changes to unit rates.
- 7.6 In analysing the allowance requests, Rune sought to make comparisons, where possible with suitable comparators, however, in most cases, PNGL’s split between the categories of work and expenditure differed from FE’s split and the splits used by GB GDNs.
- 7.7 Therefore to facilitate comparisons where the split between the categories of work and expenditure differed, Rune adopted an analysis technique which combined the areas of expenditure into a “basket of work”. The “basket of work” was then analysed and compared against benchmark values applied to the volume of each work category. This technique

builds upon principles which have been used by Ofgem in analysis for both GDPRC1 and RIIO-GD1 price controls. Further detail on this process is given in Appendix 3.

- 7.8 The following table shows the allowances requested by PNGL in their submission for each category of work. In the table, the costs under “PNGL Restated Submission” display the effect of rescaling the costs of items within the basket of work so that they are comparable to other distribution networks.
- 7.9 It is clear from the table below that the effect of applying this rescaling to enable direct comparison between the NI and GB companies involves some significant redistribution of costs between the categories of work. This is more starkly evident from the implied unit rates, which are illustrated throughout this chapter and are provided in a summary table in Appendix 3. The restated costs and implied unit rates were used in the comparative analysis. Further detail on the methodology used by Rune to determine allowances is also provided in Appendix 3.

Table 51 – Restatement of PNGL submission for ‘basket of work’ items

	<i>PNGL Submission</i>			<i>PNGL Restated Submission</i>		
	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>
4 bar & Feeder mains	132	146	157	221	247	267
Infill mains existing	2,226	2,208	2,200	2,768	2,788	2,801
Infill mains new build housing	1,505	1,656	1,780	1,388	1,553	1,685
Domestic services	4,762	4,686	4,567	4,867	4,726	4,556
Domestic meters	2,440	2,417	2,370	1,796	1,776	1,741
I&C Services	783	789	792	599	603	605
I&C meters	211	213	214	420	423	425
Totals	12,059	12,114	12,080	12,059	12,114	12,080

Source: PNGL and Rune Associates

- 7.10 Their methodology allowed them to prepare recommendations on capital allowances at total level and for each cost item. The total recommended capex allowance is consistent with the comparative efficiency analysis but, some of the recommendations at cost item level may appear to offer allowances that are greater than those requested, or that are significantly lower. This occurs as a result of the restatement of costs to enable comparison between the NI companies and the assumption that the unit costs of both of these companies should be similar.
- 7.11 Rune has considered issues which could potentially affect comparability between PNGL and FE but have concluded that there is no material impact on the analysis process and in their opinion, no issues warrant PNGL or FE being granted higher allowances than the other.
- 7.12 All unit rates are shown in £, implied unit rates from the PNGL submission used in tables are shown in italics and are shown to the nearest £. Unit rates proposed by UR as part of the allowances are not in italics and are rounded to whole £s. All costs are expressed in £k and rounded to the nearest £k. All pipe lengths are shown in km and rounded to one decimal place.

Street works legislation

- 7.13 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). Equivalent legislation has not yet been implemented in Northern Ireland, but it is anticipated that the Department for Regional Development (DRD) will proceed with implementation in due course.
- 7.14 There is uncertainty in terms of the timing of implementation of the TMA legislation, and the effect on operating costs. To address these issues PNGL has included an estimated uplift of ten per cent to those capex cost items that will be impacted. In recognition of the uncertainty 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 implementation is delayed, or that the impact is less than our assumption).
- 7.15 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.
- 7.16 In order to show a consistent assumption for likely TMA costs, we have included our assessment of a reasonable estimate of TMA costs which will be subject to the retrospective adjustment at the time of the next price control. These estimates are based upon 10% of the capex allowance excluding PRS, Meter and "other" capex costs.

Management fee

- 7.17 PNGL outsource much of its capital works to a third party contractor, currently McNicholas Construction Limited (McNicholas). 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.
- 7.18 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.
- 7.19 PNGL submitted their allowance request with the management fee as a separate item; however we asked PNGL to subsequently allocate the management fee element within each of the capex activities.

7 Bar Mains

- 7.20 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 & Feeder Mains

- 7.21 Rune is of the opinion that there is no material difference between the cost of installing 4 bar or Low Pressure feeder mains. Their analysis has concluded that both types of main should be analysed as a single category of work.
- 7.22 The following table indicates the PNGL submission, the restatement of the implied unit rates used in the comparative efficiency analysis and our determined allowance. We will need to discuss further with PNGL how these allowances can be linked to identifiable outputs.
- 7.23 The total recommended Capex allowance is consistent with the comparative efficiency analysis. However, due to the restatement of costs into a “basket of work” to enable comparison with FE, and the assumption that the unit costs of both of these companies should be similar, some of the recommendations at cost item level offer allowances that are greater than those requested or that are significantly lower. In the particular case of 4 Bar and 7 Bar Feeder Mains our allowance is greater than the PNGL submission.

Table 52 – 4 bar & feeder mains allowance, PNGL

Variable	PNGL Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Pipe laid, km	3.1	3.4	3.7	3.1	3.4	3.7
Cost per metre, £	43	42	42			
Total, £k	132	146	157			
Variable	Restated Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Cost per metre, £	71	72	72	70	70	70
Total, £k	221	247	267	217	241	260

Source: PNGL and the Utility Regulator

Pressure Reduction Stations

- 7.24 Our Consultants have reviewed the forecast activity volumes and costs associated with the construction of PRS installations, which are minimal. The levels are consistent with the historical actual performance and the intent to continue extending the opportunity for connection of properties to the network. We therefore accept the forecast costs.

Table 53 – Pressure reduction station allowances, PNGL

Variable	PNGL Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
New PRS IP:(MP/LP)	1	1	0	1	1	0
New PRS MP:LP	1	1	0	1	1	0
Cost, £k	156	155	0	156	155	0

Source: PNGL and the Utility Regulator

Infill Mains – Existing Housing Domestic and I&C

Background

- 7.25 We have merged the previous categories of infill mains (Owner Occupied, NIHE and I&C) into a single definition of mains to supply existing domestic housing and I&C.
- 7.26 In the PC03 price control we allowed PNGL an infill allowance based on the cost per metre of infill, the number of metres of infill required to pass a property and the number of properties passed. We had allowed the number of properties passed to be retrospectively adjusted although the cost per metre and number of metres of infill per property passed was fixed.
- 7.27 In the PNGL12 price control, we granted PNGL infill allowances which were calculated using the number of metres required to pass a property and the cost per metre. Varying infill allowances were set dependent on the type of property passed (i.e. Owner Occupied, NIHE, New Build or I&C). We allowed the number of properties passed to be retrospectively adjusted but the allowance per property was fixed.
- 7.28 As part of its GD14 submission PNGL set out a list of infill projects which still remained within its licence area. PNGL has completed desktop designs for just over half of these remaining properties, and they have informed us that there are over 9,000 properties which have not yet been designed.
- 7.29 PNGL raised the question of what constitutes an economic project and therefore we carried out some initial analysis on this in order to propose the number of properties passed for 2014 - 2016.

Economics of Infill

- 7.30 The main principle we have used in carrying out an economic test is that gas mains should only be laid where there is a reasonable prospect that the initial cost outlay will be paid back over the useful economic period that a typical customer will connect and burn gas.
- 7.31 This principle ensures that the overall cost of gas to all consumers is appropriate. If projects were to be allowed where associated revenues did not cover costs, the price for everyone would increase and this increase could become very significant. This is also consistent with our approach to network extensions outside licence areas.
- 7.32 We have completed an initial economic analysis which considers an infill project passing 1,000 properties, with the following assumptions made:
- 90% of properties are existing domestic housing and 10% are small industrial and commercial properties
 - A typical level of gas burn is assumed in therms per annum, to understand the revenue that is available from when a customer is connected.
 - The Service and Meter costs are the draft determined cost (post 1% efficiency) of connecting a customer from the main gas network into the property including meter replacement after 20 years;
 - Not all customers will connect in year 1 when gas is available, so a phased connection assumption is used, to reflect a typical connection profile.
 - A 40 year payback method has been selected to assume the total revenue, based on a certain number of connections

- The Incentive cost is the proposed allowance to cover the connections incentive.
- An amount has been included for opex costs.

Table 54 – Assumptions for Infill Analysis, PNGL

Assumptions for Infill Analysis - GD14	Customer Type	
	OO Domestic	SIC
Properties Passed 1,000 (Split at OO - 91%/SIC - 9%)	910	90
Average Consumption (tpa)	410	2,000
Conveyance Tariff (ppt)	40.00	36.00
Service Cost (£)	549.67	1,500.00
Meter Cost (£)	200.67	1,050.00
Incentive Cost (£)	480	0
Payback Period (yrs)	40	40
* Connection Rates for all properties passed of 2014 - 5% and 2015 onward - 2%		
** Rate of Return of 7.5% to 2016 and 4.83% post 2016		

Source: Utility Regulator

- 7.33 The result of our economic analysis, based on the assumptions, is that an average allowance of £507 per property passed would be economic. There are a number of assumptions incorporated into the analysis and we will be engaging further with stakeholders to ensure the assessment is robust.
- 7.34 Based on the latest dataset of properties which PNGL has not yet passed we are proposing that PNGL pass 3,000 properties per annum. This includes Owner Occupied, NIHE and I&C properties. This is slightly lower than PNGL's forecast of 3,400 properties per annum.
- 7.35 We consider that PNGL can source some of these properties passed from the projects which they have already completed desktop designs for, and the remaining properties passed can be sourced from the other projects which PNGL are yet to design.
- 7.36 We would note that we have yet to fully audit PNGL proposed projects. Indeed many of the properties still to be passed in the PNGL area remain to be reviewed by PNGL so there is a significant amount of uncertainty over these figures. We will use the coming months before the price control to work with PNGL on these figures before finalising allowances.
- 7.37 Based on the economic analysis of £507 per property passed, and a determined cost per metre for infill of £70, we are therefore proposing to allow 7.2 metres of infill per property passed.
- 7.38 In addition to this we are minded to introduce a mechanism to ensure PNGL are adequately incentivised to continue to extend the network. In theory PNGL could fail to build a single metre of infill and not suffer any negative consequences although we accept there is a general incentive to grow the industry. Therefore we propose that failure to achieve the targeted number of properties passed will result in a penalty of £50 for every property below the target, and passing a larger number of properties than the target will result in a reward of £20 per additional property over the target. We recognise that this is asymmetric but given that PNGL has strong control over what properties it passes the proposed penalty is not onerous.

Adjusting for Actuals

- 7.39 We are mindful that the length of infill required to connect a property can vary.
- 7.40 We will continue to apply the retrospective mechanism to adjust for the actual number of properties passed. However it is important to note that in addition, to ensure that PNGL do not have inappropriate incentives to outperform by simply choosing projects with less metres per property passed we will include a retrospective adjustment to the average number of metres of infill laid per property passed up to a cap of 7.2 metres.
- 7.41 This mechanism will form part of the retrospective mechanism and will be updated for actual outturns of properties passed and number of metres of infill. This mechanism ensures PNGL will receive no benefit from cherry picking certain projects.
- 7.42 The following table shows the infill mains allowance and the properties passed target for infill mains associated with existing domestic housing and I&C properties.
- 7.43 As indicated in the PNGL/FE Performance Comparison section in the Appendix 3, although the total recommended Capex allowance is consistent with the comparative efficiency analysis, due to inconsistent cost allocation by companies and an assumption that the unit costs of both of the NI companies should be similar, some of the recommendations at cost item level offer allowances that are greater than those requested or that are significantly lower. In the particular case of Infill Mains to existing domestic housing and I&C properties, the cost per metre allowance is greater than the PNGL submission.

Table 55 – Infill Mains Allowance Existing Housing Domestic and I&C, PNGL

Variable	PNGL Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Pipe laid, km	38.9	38.9	38.9	21.6	21.6	21.6
Metre/PP passed	11.5	11.5	11.5	7.2	7.2	7.2
Cost per metre, £	57	57	57			
Properties Passed	3,378	3,378	3,378			
Total, £k	2226	2208	2200			
	Restated Submission			UR Allowance		
Cost per metre, £	71	72	72	70	70	70
Properties Passed Target				3,000	3,000	3,000
Total, £k	2,768	2,788	2,801	1,512	1,512	1,512

Source: PNGL and the Utility Regulator

Infill mains – New Build Domestic

- 7.44 PNGL has requested an infill allowances for new build based on 11 metres per property passed which is significantly higher than the 2009-11 average of 5.9 metres. PNGL has explained this on the basis that future new build is more likely to focus on houses compared to apartments. We have not seen any justification for this position and do not see why the Greater Belfast market would change so radically so quickly.

7.45 We propose to base our approach for new build domestic housing upon the average historical level of metres per property passed during 2009 to 2011 which is 5.9 metres. This results in the proposed allowances below.

Table 56 – Infill mains allowance for new build housing, PNGL

Variable	PNGL Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Pipe laid, km	25.2	28.1	30.3	13.6	15.0	16.2
Metre/PP passed	11.0	11.0	11.0	5.9	5.9	5.9
Cost per metre, £	60	59	59			
Properties Passed	2,300	2,550	2,750			
Total, £k	1,505	1,656	1,780			
	Restated Submission			UR Allowance		
Cost per metre, £	55	55	56	54	54	54
Properties Passed Target				2,300	2,550	2,750
Total, £k	1,388	1,553	1,685	733	812	876

Source: PNGL and the Utility Regulator

Domestic Services

7.46 PNGL plans to connect 8,400, 8,250 and 8,050 domestic customers in 2014, 2015 and 2016 respectively. We have applied an upwards adjustment to the forecast for domestic owner occupiers of 1400, 1800 and 2200 for 2014, 2015 and 2016 respectively.

7.47 In its submission, the average costs per service across those to existing housing and new build was £567. The outcome of our performance comparison analysis is an allowance averaging £576 per service.

Table 57 – Domestic services allowance, PNGL

Variable	PNGL Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Number of connections	8,400	8,250	8,050	9,800	10,050	10,250
Cost per service, £	567	568	567			
Total, £k	4,762	4,686	4,567			
	Restated Submission			UR Allowance		
Cost per service, £	579	573	566	582	576	571
Total, £k	4,867	4,726	4,556	5,704	5,789	5,853

Source: PNGL and the Utility Regulator

Domestic Meters

- 7.48 A meter will be required for all new connections. PNGL also included in their submission, costs for replacement meters in 2014, 2015 and 2016 without any indication of the numbers they intended to replace. Our consultants have used the difference in unit rates for new and replacement meters provided by PNGL for 2017, the earliest year that this ratio is available to calculate unit rates for replacement meters and hence numbers of replacement meters for 2014, 2015 and 2016. We estimate that some 266 meters per year will require replacement.
- 7.49 Our recommended allowance for a new meter is considerably lower than proposed by PNGL as we believe the cost split between meters and services has not previously been on a consistent basis. Also, we see no case to differentiate between the unit rates for new and replacement meters.
- 7.50 This allowance has been applied to the higher assumed level of connections, as for domestic services. The determined allowances for domestic meters are shown in the following table.

Table 58 – Domestic meters allowance, PNGL

Variable	PNGL Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Number of new meters	8,400	8,250	8,050	9,800	10,050	10,250
Cost per new meter, £	290	293	294			
Number of replacement meters	266	266	265	266	266	265
Cost/replacement meter, £	262	264	266			
Total, £k	2,510	2,487	2,441	0	0	0
	Restated Submission			UR Allowance		
Cost per new meter, £	214	215	216	211	210	210
Cost/replacement meter, £	262	264	266	211	210	210
Total, £k	1,866	1,846	1,811	2,124	2,166	2,208

Source: PNGL and the Utility Regulator

I&C Services

- 7.51 PNGL plans to connect 378 I&C customers in each year of the GD14 period. In its submission, the cost per service averaged £2,084.
- 7.52 Our allowance averages £1,558 per service.
- 7.53 As indicated previously, although the total recommended Capex allowance is consistent with the comparative efficiency analysis, due to the restatement of costs to enable comparison between the companies and the assumption that the unit costs of both of the NI companies should be similar, some of the recommendations at cost item level offer allowances that are greater than those requested or that are significantly lower. In the particular case of I&C Services, our allowance is significantly less than the PNGL submission.

Table 59 – I&C services allowance, PNGL

Variable	PNGL Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Number of connections	378	378	378	378	378	378
Cost per service, £	2,070	2,086	2,094			
Total, £k	783	789	792			
	Restated Submission			UR Allowance		
Cost per service, £	1,583	1,594	1,601	1,560	1,558	1,557
Total, £k	599	603	605	590	589	589

Source: PNGL and the Utility Regulator

I&C Meters

- 7.54 A meter will be required for all new L&C connections, and PNGL estimates that this will amount to 378 new meters per year. In addition PNGL suggests that around 149 existing meters will need replacing each year.
- 7.55 Although I&C meter costs are dependent on load size, the difference between the allowance requested by PNGL for new and replacement meters is substantial, casting doubt over the robustness of cost allocation. The restatement of costs for new I&C meters for the comparative efficiency analysis suggests a higher unit rate for new meters that is still significantly less than replacement meters.
- 7.56 As PNGL has not been able to demonstrate that they track costs to differentiate between small loads and large loads, we propose to allow the same cost per meter for replacement as for a new meter provision.

Table 60 – I&C meters allowance, PNGL

Variable	PNGL Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Number of new meters	378	378	378	378	378	378
Cost per new meter, £	559	563	565			
Number of replacement meters	145	149	153	145	149	153
Cost/replacement meter, £	2,216	2,180	2,138			
Total, £k	533	537	540			
	Restated Submission			UR Allowance		
Cost per new meter, £	1,111	1,119	1,124	1,095	1,094	1,093
Cost/replacement meter, £	2,216	2,180	2,138	1,095	1,094	1,093
Total, £k	742	747	751	573	576	580

Source: PNGL and the Utility Regulator

Other Capex Items

- 7.57 The individual cost items under “other capex” are: network code, fixtures and fittings, leasehold improvements, capex-related IT and management fee. The management fee has already been allocated across the activity costs.
- 7.58 Of the other four cost items PNLG has not provided any justification for network code and leasehold improvements and we have made no allowance for these items. Fixtures and fittings is a relatively small item and we have granted the requested allowance. In the case of capex-related IT and in the absence of any detailed justification for an increase above 2011 levels, we propose to grant allowances of £65k per annum.
- 7.59 This provides a total allowance of £90k per annum for Other Capex Items which is consistent with the actual spend in 2011.

Traffic Management Act

- 7.60 As stated previously, in our analysis we have used cost and unit rates that do not include TMA. PNLG’s TMA forecasts have been retained as a separate cost line in the Capex summary table, which will better facilitate the retrospective adjustment at the time of the next price control.

PNGL Capex Summary

7.61 In the following table we set out a summary of the total capex allowances we propose for 2014, 2015 and 2016. Note that our proposals are based on PNGL achieving an additional 1400, 1800 and 2200 domestic owner occupied connections in 2014, 2015 and 2016 respectively, however they also reflect the reduced level of infill mains that has been determined for the GD14 period.

Table 61 – Capex summary with additional connections workload, £k

Cost Item £k	PNGL Submission				UR Allowance				Difference				
	2014	2015	2016	Total	2014	2015	2016	Total	2014	2015	2016	Total	Total, %
7 bar mains	0	0	0	0	0	0	0	0	0	0	0	0	n/a
4 bar & Feeder mains	132	146	157	436	217	241	260	718	85	95	103	283	65%
Pressure reduction stations	156	155	0	311	156	155	0	311	0	0	0	0	n/a
Infill mains	3,731	3,863	3,980	11,575	2,245	2,324	2,388	6,957	-1,486	-1,539	-1,592	-4,617	-40%
Domestic services	4,762	4,686	4,567	14,015	5,704	5,789	5,853	17,345	942	1,102	1,286	3,330	24%
Domestic meters	2,510	2,487	2,441	7,438	2,124	2,166	2,208	6,498	-386	-321	-233	-940	-13%
I&C services	783	789	792	2,363	590	589	589	1,767	-193	-200	-203	-596	-25%
I&C meters	533	537	540	1,610	573	576	580	1,729	40	39	40	119	7%
Network code	75	75	75	225	0	0	0	0	-75	-75	-75	-225	-100%
Fixtures and fittings	25	25	25	75	25	25	25	75	0	0	0	0	n/a
Leasehold improvements	48	46	0	94	0	0	0	0	-48	-46	0	-94	-100%
IT	150	150	150	450	65	65	65	196	-85	-85	-85	-254	-56%
Total excluding TMA	12,904	12,961	12,727	38,591	11,698	11,931	11,968	35,597	-1,205	-1,029	-759	-2,994	-8%
Traffic Management Act	738	743	743	2,224	876	894	909	2,679	138	152	165	455	20%
Total including TMA	13,641	13,703	13,471	40,815	12,574	12,826	12,877	38,276	-1,067	-878	-594	-2,539	-6%
Pipe laid (km)	67.3	70.4	73.0	211	38.3	40.1	41.5	120	-29	-30	-31	-91	-43%
Connections (Domestic)	8,400	8,250	8,050	24,700	9,800	10,050	10,250	30,100	1,400	1,800	2,200	5,400	22%
Connections (I&Cs)	378	378	378	1,134	378	378	378	1,134	0	0	0	0	n/a

8 CAPITAL EXPENDITURE, FE

Introduction

- 8.1 FE has requested an allowance excluding costs associated with implementation of the Traffic Management Act (TMA), of c£13.9 million, c£11.9 million and c£10.3 million in 2014, 2015 and 2016 respectively in its submission, to deliver a forecast workload as set out in the table below. For comparison historical actual costs from 2009 to 2011 have averaged around £10.4million per annum, delivering an average workload which is also shown in the table.

Table 62 – Workloads: FE GD14 forecast, 2009 to 2011 actuals and UR allowance

Workload	FE Submission				UR Allowance		
	2014	2015	2016	Average 2009-11	2014	2015	2016
Pipe laid, km	87	71	63	93	87	71	63
Properties passed					7,885	7,524	6,441
Connections (Domestic)	4,000	4,000	3,800	2,371	4,000	4,000	3,800
Connections (I&Cs)	152	102	52	275	152	102	52

Source: FE and the Utility Regulator

- 8.2 We commissioned our engineering consultants, Rune Associates Limited, to advise on the appropriateness of FE’s allowance request.
- 8.3 In undertaking this review, they examined the company’s forward capital programme, some areas of which were considered in great detail, and questioned FE staff on the build-up of the cost estimates. We have taken on board Rune’s findings in setting our allowances for capex.

Overview

General overview

- 8.4 FE has chosen to include a 15% uplift on unit rates for the GD14 period.
- 8.5 In analysing the allowance requests, Rune sought to make comparisons, where possible with suitable comparators, however, in most cases, FE’s split between the categories of work and expenditure differed from PNLG’s split and the splits used by GB GDNs.
- 8.6 Therefore to facilitate comparisons where the split between the categories of work and expenditure differed, Rune adopted an analysis technique which combined the areas of expenditure into a “basket of work”. The “basket of work” was then analysed and compared against benchmark values applied to the volume of each work category. This technique builds upon principles which have been used by Ofgem in analysis for both GDPRC1 and RIIO-GD1 price controls. Further detail on this process is given in Appendix 3.
- 8.7 The following table shows the allowances requested by PNLG in their submission for each category of work. In the table, the costs under “FE Restated Submission” display the effect of

rescaling the costs of items within the basket of work so that they are comparable to other distribution networks.

- 8.8 It is clear from this table that the effect of applying this rescaling to enable direct comparison between the NI and GB companies involves some significant redistribution of costs between the categories of work. This is more starkly evident from the implied unit rates, which are illustrated throughout this chapter and are provided in a summary table in Appendix 3. The restated costs and implied unit rates were used in the comparative analysis. Further detail on the methodology used by Rune to determine allowances is also provided in Appendix 3.

Table 63 – Restatement of FE submission for ‘basket of work’ items

	<i>FE Submission</i>			<i>FE Restated Submission</i>		
	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>
4 bar & Feeder mains	3,843	2,335	2,314	3,473	2,046	2,000
Infill mains existing	3,431	3,198	2,457	3,890	3,571	2,745
Infill mains new build housing	655	665	659	1,113	1,095	1,070
Domestic services	3,736	3,790	3,566	3,362	3,306	3,054
Domestic meters	793	805	755	1,196	1,176	1,092
I&C Services	674	462	238	202	136	71
I&C meters	215	151	84	111	76	41
Totals	13,348	11,405	10,073	13,348	11,405	10,073

Source: FE and Rune Associates

- 8.9 Their methodology allowed them to prepare recommendations on capital allowances at total level and for each cost item. The total recommended capex allowance is consistent with the comparative efficiency analysis but, some of the recommendations at cost item level may appear to offer allowances that are greater than those requested, or that are significantly lower. This occurs as a result of the restatement of costs to enable comparison between the NI companies and the assumption that the unit costs of both of these companies should be similar.
- 8.10 Rune has considered issues which could potentially affect comparability between FE and PNLG but have concluded that there is no material impact on the analysis process and in their opinion; no issues warrant FE or PNLG being granted higher allowances than the other.
- 8.11 All unit rates are shown in £, implied unit rates from the PNLG submission used in tables are shown in italics and are shown to the nearest £, unit rates proposed by UR as part of the allowances are not in italics and are rounded to whole £s. All costs are expressed in £k and rounded to the nearest £k. All pipe lengths are shown in km and rounded to one decimal place.

Street works legislation

- 8.12 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). Equivalent legislation has not yet been implemented in Northern Ireland, but it is anticipated that the Department for Regional Development (DRD) will proceed with implementation in due course.

- 8.13 There is uncertainty in terms of the timing of implementation of the TMA legislation, and the effect on operating costs. To address these issues FE has included an estimated uplift of ten per cent to those capex cost items that will be impacted. In recognition of the uncertainty we have agreed with FE 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 FE (in the event actual costs turn out higher) and consumers (in the more likely event that implementation is delayed, or that the impact is less than our assumption).
- 8.14 FE 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.
- 8.15 At our Consultant's request, FE has confirmed the amount associated with TMA which should be separated out from their submission. The review of capex costs and benchmarking carried out by Rune for setting allowances was based on cost and unit rates that do not include estimates for TMA
- 8.16 In order to show a consistent assumption for likely TMA costs, we have included our assessment of a reasonable estimate of TMA costs which will be subject to the retrospective adjustment at the time of the next price control. These estimates are based upon 10% of the capex allowance excluding PRS, Meter and "other" capex costs

7 Bar Mains

- 8.17 FE 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 and Feeder Mains

- 8.18 Rune is of the opinion that there is no material difference between the cost of installing 4 bar or Low Pressure feeder mains. Their analysis has concluded that both types of main should be analysed as a single category of work.
- 8.19 The following table indicates the FE submission, the restatement of the implied unit rates used in the comparative efficiency analysis and our allowance. We will need to discuss further with FE how these allowances can be linked to identifiable outputs.
- 8.20 As indicated in the FE/PNGL Performance Comparison section in Appendix 3, although the total recommended Capex allowance is consistent with the comparative efficiency analysis, due to inconsistent cost allocation by companies and an assumption that the unit costs of both of the NI companies should be similar, some of the recommendations at cost item level offer allowances that are greater than those requested or that are significantly lower. In the particular case of 4 Bar and 7 Bar Feeder Mains our allowance is significantly less than the FE submission.

Table 64 – 4 bar & feeder mains allowance, FE

4 Bar and 7 Bar Feeder Mains	FE Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Pipe laid, km	33.4	20.0	20.0	33.4	20.0	20.0
Cost per metre, £	115	117	116			
Total, £k	3,843	2,335	2,314			
	Restated Submission			UR Allowance		
Cost per metre, £	104	102	100	74	74	75
Total, £k	3,473	2,046	2,000	2,471	1,480	1,500

Source: FE and the Utility Regulator

Pressure Reduction Stations

8.21 Our Consultants have reviewed the forecast activity volumes and costs associated with the construction of PRS installations. The levels are consistent with the historical actual performance and the intent to continue extending the opportunity for connection of domestic properties to the network. We therefore accept the forecast costs.

Table 65 – Pressure reduction station allowances, FE

Variable	FE Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
New PRS IP:(MP/LP)	0	0	0	0	0	0
New PRS MP:LP	25	15	15	25	15	15
Cost, £k	238	158	157	238	158	157

Source: FE and the Utility Regulator

Infill mains – Existing Housing Domestic and I&C

Background

8.22 We intend to apply a similar approach to FE as we have proposed for PNGL for Infill Mains. This approach combines the infill mains for Owner Occupied, NIHE and I&C into a single category.

8.23 For a number of years we have implemented an infill allowance for the PNGL licence area which has been based upon the number of properties passed. The mechanism has taken slightly different forms in the last two controls although it has always been based upon establishing the cost per metre of infill and the number of metres of infill required to pass a property. The mechanism also had a retrospective adjustment to reflect the actual number of properties passed.

8.24 In the previous control, FE was granted an allowance for infill, but it was not linked to properties passed. For this price control we propose to introduce an allowance linked to properties passed on the same basis as PNGL. For completeness we repeat the economic assessment below.

Economics of Infill

8.25 The main principle we have used in carrying out an economic test is that gas mains should only be laid where there is a reasonable prospect that the initial cost outlay will be paid back over the useful economic period that a typical customer will connect and burn gas.

8.26 This principle ensures that the overall cost of gas to all consumers is appropriate. If projects were to be allowed where associated revenues did not cover costs, the price for everyone would increase and this increase could become very significant. This is also consistent with our approach to network extensions outside licence areas.

8.27 We have completed an initial economic analysis which considers an infill project passing 1,000 properties, with the following assumptions made:

- 90% of properties are existing domestic housing and 10% are small industrial and commercial properties
- A typical level of gas burn is assumed in therms per annum, to understand the revenue that is available from when a customer is connected.
- The Service and Meter costs are the draft determined cost (post 1% efficiency) of connecting a customer from the main gas network into the property including meter replacement after 20 years;
- Not all customers will connect in year 1 when gas is available, so a phased connection assumption is used, to reflect a typical connection profile.
- A 40 year payback method has been selected to assume the total revenue, based on a certain number of connections
- The Incentive cost is the proposed allowance to cover the connections incentive.
- An amount has been included for opex costs.

Table 66 – Assumptions for Infill Analysis, FE

<i>Assumptions for Infill Analysis - GD14</i>	<i>Customer Type</i>	
	<i>OO Domestic</i>	<i>SIC</i>
Properties Passed 1,000 (Split at OO - 91%/SIC - 9%)	910	90
Average Consumption (tpa)	410	2,000
Conveyance Tariff (ppt)	40.00	36.00
Service Cost (£)	549.67	1,500.00
Meter Cost (£)	200.67	1,050.00
Incentive Cost (£)	480	0
Payback Period (yrs)	40	40
* Connection Rates for all properties passed of 2014 - 5% and 2015 onward - 2%		
** Rate of Return of 7.5% to 2016 and 4.83% post 2016		

Source: Utility Regulator

- 8.28 The result of our economic analysis, based on the assumptions, is that an average allowance of £507 per property passed would be economic. There are a number of assumptions incorporated into the analysis and we will be engaging further with stakeholders to ensure the assessment is robust.
- 8.29 We recognise that FE does not have appropriate recording processes in place at the present time to accurately record the number and type of properties passed. For this reason FE have not provided a forecast of the number of properties passed for the period 2014-2016.
- 8.30 Therefore to set target properties passed numbers for FE, we have accepted the length of mains proposed by FE in its submission and calculated the minimum number of properties to be passed using the determined allowance per property of 7.2 meters of infill. This sets properties passed minimum target of 5431, 5070 and 3987 in 2014-2016 respectively.
- 8.31 In line with the approach proposed for PNGL, we are also minded to introduce a mechanism to ensure FE is adequately incentivised to continue to extend the network. In theory FE could fail to build a single metre of infill and not suffer any negative consequences although we accept there is a general incentive to grow the industry. Therefore we propose that failure to achieve the targeted number of properties passed will result in a penalty of £50 for every property below the target, and passing a larger number of properties than the target will result in a reward of £20 per additional property over the target.
- 8.32 We would note that FE will have to review its database of properties within its area in the context of the proposed allowance. Given FE has not previously operated an allowance nature there is a significant amount of uncertainty over these figures. We will use the coming months before the price control to receive information from FE to substantiate these figures before finalising.
- 8.33 We would also highlight that FE will be required to put in place robust processes for recording and reporting properties passed numbers to ensure that they can accurately record the numbers of properties they pass when they laid infill, and to ensure that they can differentiate between the property type (ie. Owner Occupied, NIHE and I&C).

Adjusting for Actuals

- 8.34 We are aware that the length of infill required to connect a property can vary from project to project.
- 8.35 As with the approach proposed for PNGL, we will apply a retrospective mechanism to adjust for the actual number of properties passed. However, we also propose to include a retrospective adjustment to the average number of metres of infill laid per property passed up to a cap of 7.2 metres.
- 8.36 This mechanism will form part of the retrospective mechanism and will be updated for actual outturns. This mechanism ensures FE will receive no benefit from cherry picking certain projects.
- 8.37 The following table shows the infill mains allowance and the properties passed target for infill mains associated with existing domestic housing and I&C properties.

Table 67 – Infill mains allowance for existing domestic housing and I&C, FE

Variable	FE Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Pipe laid, km	39.1	36.5	28.7	39.1	36.5	28.7
Metre/PP passed				7.2	7.2	7.2
Cost per metre, £	88	88	86			
Properties Passed						
Total, £k	3,431	3,198	2,457			
	Restated Submission			UR Allowance		
Cost per metre, £	99	98	96	70	71	72
Properties Passed Target				5,431	5,070	3,987
Total, £k	3,890	3,571	2,745	2,737	2,592	2,067

Source: FE and the Utility Regulator

Infill mains – New Build Domestic

- 8.38 As FE have no historical data on the number of metres per New Build property passed, we are therefore proposing to base our approach for new build domestic housing upon the PNGL historical level of metres per property passed.
- 8.39 Therefore we propose to allow 5.9 metres per property passed, which is the PNGL average during 2009 – 2011 by PNGL. We have accepted the length of mains proposed by FE in their submission and calculated the minimum number of properties to be passed using the determined allowance per property of 5.9 meters of infill. This sets a properties passed minimum target of 2454 in each year from 2014 – 2016.
- 8.40 The proposed allowances are detailed in the following table.

Table 68 – Infill mains allowance for new build housing, FE

Variable	FE Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Pipe laid, km	14.5	14.5	14.5	14.5	14.5	14.5
Metre/PP passed				5.9	5.9	5.9
Cost per metre, £	45	46	46			
Properties Passed						
Total, £k	655	665	659			
	Restated Submission			UR Allowance		
Cost per metre, £	77	76	74	54	55	55
Properties Passed Target				2,454	2,454	2,454
Total, £k	1,113	1,095	1,070	782	796	796

Source: FE and the Utility Regulator

Domestic Services

- 8.41 FE plans to connect 4,000 domestic customers in 2014 and 2015 and 3,800 in 2016, we have not applied any adjustment to the forecasts.
- 8.42 In the FE submission the cost per service averaged £940, although when restated as part of the comparative efficiency analysis, this reduced to an average of £824.
- 8.43 As indicated previously, although the total recommended Capex allowance is consistent with the comparative efficiency analysis, due to the restatement of costs to enable comparison between the NI companies and the assumption that the unit costs of both of these companies should be similar, some of the recommendations at cost item level offer allowances that are greater than those requested or that are significantly lower. In the particular case of Domestic Services, the cost per service allowance is significantly lower than the FE submission at an average of £599 per service.

Table 69 – Domestic services allowance, FE

Variable	FE Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Number of connections	4,000	4,000	3,800	4,000	4,000	3,800
Cost per service, £	934	947	938			
Total, £k	3,736	3,790	3,566			
	Restated Submission			UR Allowance		
Cost per service, £	840	826	804	595	600	602
Total, £k	3,362	3,306	3,054	2,380	2,400	2,288

Source: FE and the Utility Regulator

Domestic Meters

- 8.44 A meter will be required for all new connections, and FE indicate that no meters will be replaced during the GD14 period.
- 8.45 Our recommended allowances are shown in the following table. As indicated previously, although the total recommended Capex allowance is consistent with the comparative efficiency analysis, due to the restatement of costs to enable comparison between the NI companies and the assumption that the unit costs of both of these companies should be similar, some of the recommendations at cost item level offer allowances that are greater than those requested or that are significantly lower. In the particular case of Domestic Meters, the cost per meter allowance is greater than the FE submission.

Table 70 – Domestic meters allowance, FE

Variable	FE Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Number of new meters	4,000	4,000	3,800	4,000	4,000	3,800
Cost per new meter, £	198	201	199			
Number of replacement meters	0	0	0	0	0	0
Cost/replacement meter, £						
Total, £k	793	805	755			
	Restated Submission			UR Allowance		
Cost per new meter, £	299	294	287	212	214	215
Cost/replacement meter, £				212	214	215
Total, £k	1,196	1,176	1,092	848	856	817

Source: FE and the Utility Regulator

I&C services

- 8.46 FE plans to connect 152, 102 and 52 I&C customers in 2014, 2015 and 2016 respectively, of these, 2 in each year are large loads and the remainder small. This variation in mix of large and small I&C connections shows an increasing trend of the cost per service over the 3 years in both the submission and our allowances.
- 8.47 In the FE submission the cost per service averaged £4,512, although when restated as part of the comparative efficiency analysis, this reduced to an average of £1,346.
- 8.48 As indicated in 2.13 above, although the total recommended Capex allowance is consistent with the comparative efficiency analysis, due to the restatement of costs to enable comparison between the NI companies and the assumption that the unit costs of both of these companies should be similar, some of the recommendations at cost item level offer allowances that are greater than those requested or that are significantly lower. In the particular case of I&C Services, the cost per service allowance is significantly lower than the FE submission at £980.

Table 71 – I&C services allowance, FE

Variable	FE Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Number of connections	152	102	52	152	102	52
Cost per service, £	4,433	4,527	4,576			
Total, £k	674	462	238			
	Restated Submission			UR Allowance		
Cost per service, £	1,332	1,334	1,374	942	969	1,029
Total, £k	202	136	71	143	99	54

Source: FE and the Utility Regulator

I&C Meters

- 8.49 A meter will be required for all new connections, and FE indicate that no meters will be replaced during the GD14 period.
- 8.50 The variation in the numbers and mix of large and small I&C meters mirrors that of I&C services and results in an increasing trend of the cost per meter over the 3 years in both the submission and our allowances. In the FE submission the cost per meter averaged £1,500, although when restated as part of the comparative efficiency analysis, this reduced to an average of £754
- 8.51 As stated previously, although the total recommended Capex allowance is consistent with the comparative efficiency analysis, due to the restatement of costs to enable comparison between the NI companies and the assumption that the unit costs of both of these companies should be similar, some of the recommendations at cost item level offer allowances that are greater than those requested or that are significantly lower. In the particular case of I&C Meters, the cost per meter allowance is significantly lower than the FE submission at £549.

Table 72 – I&C meters allowance, FE

Variable	FE Submission			UR Allowance		
	2014	2015	2016	2014	2015	2016
Number of new meters	152	102	52	152	102	52
Cost per new meter, £	1,413	1,481	1,606			
Number of replacement meters	0	0	0	0	0	0
Cost/replacement meter, £						
Total, £k	215	151	84			
	Restated Submission			UR Allowance		
Cost per new meter, £	731	741	789	517	538	591
Cost/replacement meter, £				517	538	591
Total, £k	111	76	41	79	55	31

Source: FE and the Utility Regulator

Other Capex Items

- 8.52 The individual cost items under “other capex” are: telemetry and IT and Office.
- 8.53 FE has requested £239k, £239k and £40k as allowances for for 2014 – 2016 for IT and Office. They have explained £100k as costs relating to the development of an automated switching system to manage market opening, however no justification has been provided for the remaining £418k which has been requested over the 3 year control period.
- 8.54 We are therefore minded to grant £100k in 2014 as a ring-fenced allowance for the automated IT switching system. FE will be required to provide a business plan to provide detail on the proposed system and justifying the costs required. We have removed all other requested costs for IT and Office.
- 8.55 FE has also requested £38k, £37k and £25k in 2014 - 2016 to undertake an extension and upgrade of their current telemetry system. We accept that the accuracy of telemetry

equipment may have a greater importance to FE since market opening, however we need to understand the detail of the extensions and upgrades that FE are proposing to implement for the requested allowances. As this information has not been provided, we are proposing to grant allowances of £10k per annum, in line with the 2009-2011 actual spend on telemetry.

Traffic Management Act

- 8.56 As stated previously, in our analysis we have used cost and unit rates that do not include TMA. FE's TMA forecasts have been retained as a separate cost line in the Capex summary table, which will better facilitate the retrospective adjustment at the time of the next price control.

FE Capex Summary

8.57 In the table below we set out a summary of the total capex allowances for 2014, 2015 and 2016.

Table 73 – Capex summary, £k – FE

Cost Item	FE Submission				UR Allowance				Difference				
	2014	2015	2016	Total	2014	2015	2016	Total	2014	2015	2016	Total	Total, %
7 bar mains	0	0	0	0	0	0	0	0	0	0	0	0	n/a
4 bar & Feeder mains	3843	2335	2314	8493	2471	1480	1500	5451	-1373	-855	-814	-3042	-36%
Pressure reduction stations	238	158	157	553	238	158	157	553	0	0	0	0	n/a
Infill mains	4086	3862	3116	11064	3519	3388	2863	9770	-567	-474	-253	-1294	-12%
Domestic services	3736	3790	3566	11092	2380	2400	2288	7068	-1356	-1390	-1278	-4024	-36%
Domestic meters	793	805	755	2354	848	856	817	2521	55	51	62	167	7%
I&C services	674	462	238	1374	143	99	54	296	-531	-363	-184	-1078	-78%
I&C meters	215	151	84	449	79	55	31	164	-136	-96	-53	-285	-63%
Telemetry	38	37	24	99	10	10	10	30	-28	-27	-14	-69	-70%
IT & Office	300	300	50	650	100	0	0	100	-200	-300	-50	-550	-85%
Total excluding TMA	13924	11900	10304	36128	9788	8446	7719	25953	-4136	-3454	-2585	-10175	-28%
Traffic Management Act	1147	958	854	2959	851	737	670	2258	-296	-221	-184	-701	-24%
Total including TMA	15072	12858	11158	39087	10639	9183	8389	28211	-4432	-3675	-2769	-10876	-28%
Pipe laid (km)	87.0	71.0	63.2	221.1	87.0	71.0	63.2	221.1	0.0	0.0	0.0	0.0	n/a
Connections (Domestic)	4000	4000	3800	11,800	4000	4000	3800	11,800	0	0	0	0	n/a
Connections (I&Cs)	152	102	52	306	152	102	52	306	0	0	0	0	n/a

Source: FE and the Utility Regulator

9 ASSESSMENT OF FE VOLUMES FOR GD14

Introduction

9.1 FE volumes are of significant importance in setting determined allowances and FE is incentivised to outperform on volumes.

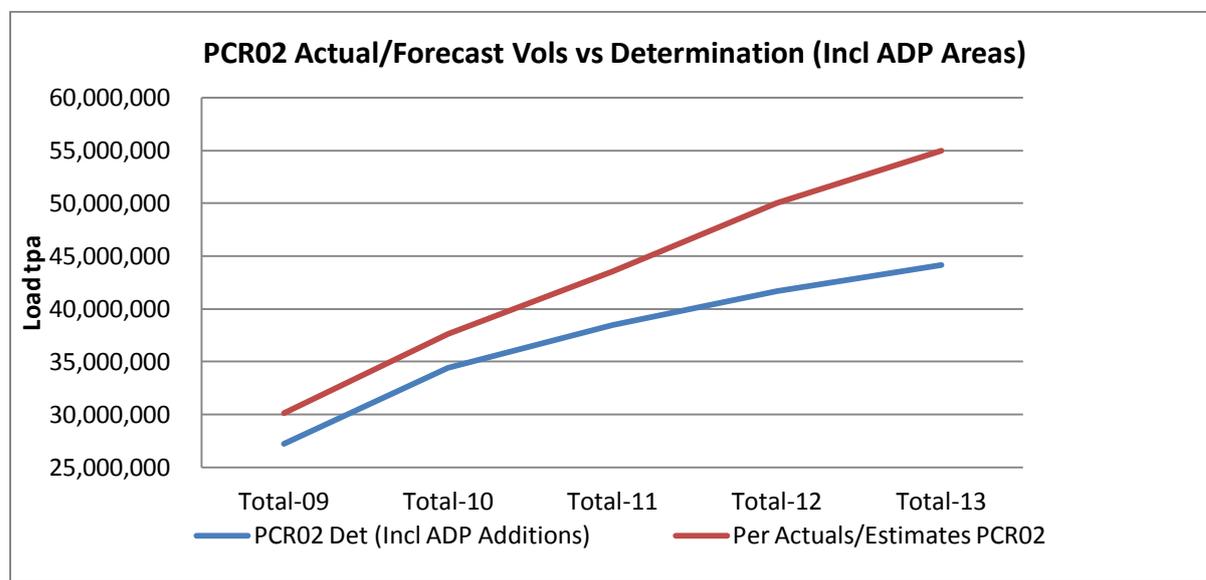
PCR02 Performance

Table 74 - PCR02 Performance vs Determination (inc. ADP Areas)

therms	2009	2010	2011	2012	2013	Total
PCR02 Actual/Forecast Volumes	30,101,379	37,616,386	43,574,450	50,045,987	54,980,347	216,318,549
PCR02 Determined Values (incl ADP Areas)	27,234,488	34,426,400	38,495,629	41,648,926	44,170,225	185,975,669
Variance Outperformance / (Underperformance)	2,866,890	3,189,986	5,078,821	8,397,061	10,810,122	30,342,880
Variance %	11%	9%	13%	20%	24%	16%

Source: FE & the Utility Regulator

Figure 9 - PCR02 Performance vs Determination (inc. ADP Areas)



Source: FE & the Utility Regulator

9.2 The above table and graph shows, that FE significantly outperformed against its volumes determination (2012/13 includes ADP volumes) in all years of PCR02. This outperformance is very welcome and will flow through to customers in GD17 in the form of lower tariffs as we apply updated volumes.

Customer additions assumptions

Table 75 – Customer Addition Assumptions

GD14 Request	2014	2015	2016
P1 (Domestic Customer)	4,000	4,000	3,800
P2 (I&C Tariff Customer)	150	100	50
P3 (I&C Medium, Customer >25k therms, but < 75k therms)	2	2	2
UR Assessment	2014	2015	2016
P1	4,000	4,000	4,000
P2	150	100	50
P3	2	2	2
Increase / (Decrease) vs Request	2014	2015	2016
P1	0	0	200
P2	0	0	0
P3	0	0	0

Source: FE & the Utility Regulator

- 9.3 The assessment of customer additions submitted by FE in the P1 to P3 categories (incorporating all Domestic, I&C tariff customers and Medium I&C customers) in the above table show additions to P1 of 4,000 per annum (2016 was 3,800 in the GD14 submission, we have accepted these as submitted, P2 shows a constant reduction, which can only be assumed as the result of a shift in focus of targeted connections and P3 is constant at 2 per annum from 2014.
- 9.4 The customer additions made by UR compared to submission in relation to P4 to P6 categories are in respect of the a number of new extension areas where firmus GD14 submission differed from its own Additional Development Plan for those areas. We have used the numbers as previously submitted by FE and allowed by UR. Other than that we have assumed no new net additional connections at this level.

Average customer burn assumptions (Domestic and Small I&C)

- 9.5 In general, FE has assumed a steady decline in customer burns year on year from 2013. The UR's view is that this is not justified and burns assumed should not differ significantly over the short to medium term.
- 9.6 For these reasons, UR is 'minded to' set the burn for categories P1 to P3 at the rate forecast for 2013.

Table 76 – Average customer burn assumptions (P1 – P3)

GD14 Request	2013	2014	2015	2016
P1	394	391	395	395
P2	5,051	4,862	4,782	4,713
P3	42,207	41,194	41,136	41,056
UR Assessment	2013	2014	2015	2016
P1	394	394	394	394
P2	5,051	5,051	5,051	5,051
P3	42,207	42,207	42,207	42,207
Increase / (Decrease) vs Request	2013	2014	2015	2016
P1	0	3	-1	-1
P2	0	188	269	337
P3	0	1,014	1,071	1,152

Source: FE & the Utility Regulator

Average customer burn assumptions (Large Contract) and 'general' closure

Table 77 – Average customer burn assumptions (P4 – P6) and 'general' closure

'General' Reduction of Volumes GD14 Submitted	2014	2015	2016
P3 (I&C Medium, Customer >25k therms, but < 75k therms)	-92,950	-188,020	-285,102
P4 (Large I&C Customer, Combined Heat & Power (CHP))	-83,425	-164,764	-244,070
P5 (Large I&C Customer, Firm)	-275,475	-544,063	-805,937
P6 (Large I&C Customer, Interruptible)	-606,400	-1,271,703	-1,883,810
Total Submitted Volumes (Incl Reduction)			
P3	3,718,000	3,808,000	3,898,000
P4	3,337,000	3,337,000	3,337,000
P5	11,019,000	11,019,000	11,019,000
P6 (excl 22.5 Int)	24,256,000	25,756,000	25,756,000
Reduction as a % of Total			
P3	2.5%	4.9%	7.3%
P4	2.5%	4.9%	7.3%
P5	2.5%	4.9%	7.3%
P6	2.5%	4.9%	7.3%

Source: FE & the Utility Regulator

- 9.7 The above table shows that FE have a 'general' reduction provision within its GD14 submission which relates to closures They have assumed a blanket percentage which compounds every year and reduces volumes significantly.
- 9.8 UR are 'minded to' exclude any 'general' reduction due to closures as applied by FE. The exclusion of any closures is matched by our assumption of no new large connections.

Interruption of Service

- 9.9 FE has assumed a reduction in volumes to reflect an average number of interruptions for interruptible customers of 22.5 days per annum.
- 9.10 UR is not aware of any customers during PCR02 that experienced interruption to their supply. We see no reason why this pattern should change.
- 9.11 Therefore, in respect of the reduction for interruption assumed by FE as part of their GD14 request of 22.5 days per annum, UR are 'minded to' exclude any interruption allowance and set this at 0 days per annum.

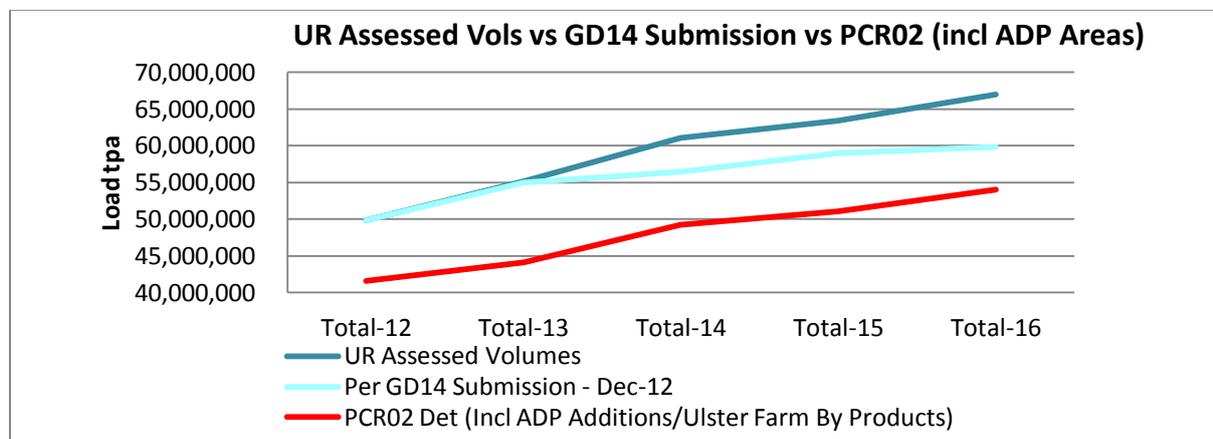
'Minded to' Determination of Volumes

Table 78 – 'Minded to' Determination of Volumes

therms	PCR02 Rebase	GD14			Total GD14
	2013	2014	2015	2016	
GD14 Requested Volumes	54,980,347	56,442,606	58,998,752	59,876,549	175,317,907
UR Assessed Volumes	55,203,263	61,070,387	63,409,453	66,992,238	191,472,077
Variance Determination Increase / (Decrease)	222,916	4,627,781	4,410,700	7,115,689	16,154,170
Variance %	0.4%	8.2%	7.5%	11.9%	9.2%

Source: FE & the Utility Regulator

Figure 10 – UR Assessed Volumes vs GD14 Submission vs PCR02 (incl. ADP Areas)



- 9.12 Given the 'minded to' positions on all of the aforementioned areas, the results are outlined in the table, and graphically, above.
- 9.13 The main areas being impacted in GD14 are P4 to P6 with an additional c13.8m therms added for GD14 (c11.7m therms of which relate to P6). The P1 to P3 categories were increased by an aggregate of c2.4m therms.
- 9.14 The trending from the graph above shows that UR estimate rises as per the FE GD14 request, however, at a steeper rate, the majority of which is due to the volume increases in new extension areas.
- 9.15 The volumes proposed here have a key role in explaining the reduction in FE tariffs compared to PCR02.

10 ADJUSTMENTS FROM THE PREVIOUS PRICE CONTROLS, PNG12 AND PCR02

Introduction

- 10.1 This section sets out the adjustments that result from the risk and uncertainty mechanisms that formed part of the price controls preceding GD14 for both PNG1 (PNG12) and FE (PCR02). This is necessary so that we suitably adjust allowed revenues in the current price control consistent with these mechanisms.
- 10.2 More specifically, the adjustments considered in this section relate to the following:
- Retrospective mechanism
 - The Total Regulatory Value (TRV)
 - FE under-recoveries
 - FE volume outperformance.
- 10.3 These are discussed in turn in the sections that follow.

Retrospective adjustments

- 10.4 For both PNG1 and FE a retrospective mechanism is in place which adjusts the previous price control determination based on outputs achieved (or in some cases allows some expenditure items to be treated as “pass through” costs).
- 10.5 The numbers provided below for TRVs at the start of the next price control period are after application of this retrospective mechanism.

Total Regulatory Value, PNG1

Background

- 10.6 We set out in our February 2013 consultation on the PNG1 licence modifications that we would carry out a full review of the treatment of the PNG1 TRV as part of GD 14. To recap, the TRV was created in 2007 as part of a new licence regime. This licence for the first time contained a standard ‘building block’ regulatory model, including a price control mechanism based explicitly on a regulated asset value. The determination of an opening asset value (OAV) was incorporated in the licence, which led to the foundation of the TRV.
- 10.7 In 2007, the agreed value of the TRV was £312.8m (2006 prices). The CC considered the TRV components in its determination regarding PNG12 and made a decision on what was appropriate for each element of the TRV. The CC’s conclusions result in the TRV being set as £437.1m from 1 January 2012 (in 2010 prices). The TRV at this date consisted of the following components:

Table 79 – Composition of PNGL’s TRV

Components	£ m
Net investment, less depreciation plus working capital	213.3
Historical under-recoveries of revenue (1996-2006)	73.0
Unspent allowances: including deferred capex and historical outperformance (1996 - 2006)	65.6
Profile adjustment	85.2
Total TRV	437.1

Source: PNGL and Utility Regulator

10.8 Each of the components of the TRV is explained below.

- **Net investment, less depreciation plus working capital**

This is the past investment that PNGL has undertaken from its inception in 1996 to 2011 in developing the network, which had not yet been paid for by customers. This component therefore represents actual costs incurred by PNGL, including working capital adjustments.

- **Under-recoveries of revenue**

Revenue that PNGL was entitled to collect from customers between 1996 and 2006 was deferred and carried forward to later years because PNGL priced below the price cap (then applying) in an effort to encourage customers to switch to natural gas.

- **Unspent allowances**

When we calculated the OAV in 2007 we rolled forward and capitalised the net present value of unspent opex, capex and working capital allowances (WCA) from 1996 to 2006. The main areas of unspent allowances can be broken down into two elements:

- **Deferred capex** – specific, bulk capex projects that were deferred from 1999/2000 to later years. The CC’s decision in relation to this was as follows: (i) PNGL was allowed to retain all of the financial benefit of deferring projects that were subsequently completed by the end of PC03 (i.e. 2007); (ii) projects that were not completed by the end of PC03 were to be removed from the TRV. The CC also decided that the TRV be adjusted downwards to remove the capitalised financing benefit that accrued to PNGL since 2007.
- **Historical outperformance** - the CC decided that PNGL should be allowed to keep all of its other under-spending in the TRV during PNGL12, apart from the allowances for business rates, which were to be removed as PNGL had been funded twice for the same expense.

- **Profile adjustment**

This is revenue carried forward to future years to maintain an even price profile over time. This element of the TRV ensures that conveyance charges are not unduly high in the early phases of the gas market’s development. In practice, PNGL currently defers an element of its revenue entitlement into the future. The recovery of this deferred revenue is secured for PNGL by way of an addition to the regulatory asset base, via a mechanism enshrined in its licence known as the ‘profile adjustment’. The profile adjustment builds up over the course of each respective price control period, and then forms part of the asset base at the beginning of successive reviews.

10.9 The breakdown of the TRV shown above provides clarity regarding the components that constitute the TRV as we think it is helpful to all stakeholders to be transparent about the origins of PNGL’s regulated asset base.

- 10.10 The CC was clear that its decision in the recent inquiry only applies to 2012 and 2013 and that further decisions on how to treat all these matters beyond 2013 will be made by UR in accordance with its statutory duties. Below is a relevant extract from the CC’s final determination.

Competition Commission (PNGL12 price determination, paragraph 9.109)

“We should observe, however, that our decision covers only two years and we do not wish to trespass on to the territory of future regulatory reviews (where other issues or evidence may be relevant). This is especially the case in a decision such as this where the specific context has been highly important to our reasoning.”

- 10.11 This section considers the appropriate value of PNGL’s TRV from 1 January 2014.
- 10.12 The net investment amount is what is recognisable as a standard GB RAB and does not require explanation, as there are no specific issues around how it is treated.
- 10.13 The profile adjustment is a mechanism that provides for levelised tariffs in a growing market. There are also no issues in our view regarding how this is handled.
- 10.14 Historical under-recoveries of revenue are an unusual feature of the PNGL TRV and represent revenue which PNGL was allowed to recover between 1996 and 2006. These have been allowed in the TRV despite the original licence requiring them to be fully recovered by 2016. We are also aware that other regulators have not allowed such under-recoveries to be recovered e.g. the Civil and Aviation Authority in the BAA Stansted 2007/08 review. However, we view this matter as having been fully dealt with in 2007 and we do not see any issues that need to be further considered now.
- 10.15 Historical unspent allowances are one area of the TRV that requires clarity as to how it will be treated in future. This was the main area of the CC inquiry in 2012, which as mentioned above, determined how this should be treated for the PNGL12 control period (i.e. 2012 and 2013); below, we set out our views on the options for dealing with it for the GD14 period and beyond. The issue of deferred capex is considered separately further below (from paragraph 10.30).

Historical unspent allowances

- 10.16 The full amount of unspent allowances was allowed in the TRV in 2007. Our original intention was that this component would later be removed from the TRV, so that historical outperformance could be shared with customers based on regulatory practice elsewhere. However our intentions in this regard were not well signalled. When we proposed to adjust the TRV in PNGL12 i.e. after PNGL had obtained five years of benefit from its outperformance, PNGL objected and sought a reference to the CC.
- 10.17 The CC’s findings on this issue are set out in section 9 of the final determination issued by the CC. It is important that we take this reasoning into account in making any decision.

Removing historical outperformance from the TRV

- 10.18 The reasons for the CC conclusion were summarised in section 9.108 of its final determination which states *“where we differ from UR is where, within the overall view of the public interest, we strike the necessary balance between prices that customers pay, network development and the appropriate reward for the development of the network in the context of a still maturing industry”*.

- 10.19 Formally the CC's decision relates to the value of the TRV in 2012 and 2013 only. It was not within the CC's terms of reference to determine the value of the TRV from 2014 onwards. We have nevertheless considered the appropriate approach for GD14 against CC's criteria.

Risk and Reward

- 10.20 The CC determined that "the risks of PNGL's undertaking should be sufficiently rewarded" (paragraph 9.81 of the final determination).
- 10.21 We recognise that the CC considered this as part of its inquiry and determined that it was fair reward for PNGL to collect the full outperformance amount from its customers.

Network development

- 10.22 It is clear in its conclusions that the context of network development played an important role in the CC's final determination. The CC thought that it was possible that investors could refuse to invest in gas extensions. We have now had an opportunity to observe evidence in this regard since our 2011 proposals on the TRV. If anything, levels of interest in gas development have never been higher. Since 2011 we have received requests for six additional development areas or licence extensions. These include extensions of the network in Coleraine, Bushmills, Glenavy, Bessbrook and Camlough.
- 10.23 We have also witnessed gas connections increasing significantly in the PNGL and FE areas with over 14,000 connections. As well as this, we have had extensive discussions with multiple investors in relation to the 'Gas to the West' project and the sale of PNGL and FE. While this demonstrates the high level of interest in gas continues, the level is not significantly different from when the CC made its decision.

Consumer impact

- 10.24 The duty to protect consumers is an important issue for UR and this is incorporated in our principle objective through the IME3 changes to legislation. The CC noted in its final determination that its proposals would increase costs by c.2% and that this would have a negative impact on consumers and industry.
- 10.25 The CC also looked at the potential impact of regulatory instability on the WACC and thus on consumer bills over the longer run. The CC concluded in 9.120 that there was an element of regulatory instability and that this has material consequences that should not be disregarded. However, the CC could not quantify this effect.
- 10.26 The magnitude of any potential consumer impact has not changed significantly since the CC made its decision.

Conclusion on removing historical outperformance

- 10.27 In assessing the options regarding the treatment of historical outperformance, we have placed significant weight on the reasoning in the CC's decision on PNGL12.
- 10.28 We conclude that it is the best interests of the industry and consumers to draw a line under the debate about the value of the PNGL TRV. This means that we will roll forward the TRV without modification in GD14. It is also our intention to allow PNGL to collect the full value of the TRV through subsequent price controls.
- 10.29 Retaining such an unusual TRV has implications for the appropriate WACC, as we discuss later in paragraphs 12.10 to 12.2522.

Deferred capex

- 10.30 As mentioned above, in November 2012 the CC reported its conclusions on its investigation of the 2012 price determination for PNGL: 1999/2000 capex deferrals completed in PC03

were left unadjusted in the TRV, but 1999/2000 capex deferrals not completed in PC03 were removed from the TRV, including the capitalised financing adjustment from 2007.

- 10.31 PNGL has requested that a number of the excluded deferred projects be included within the capex allowances in future years. It is not clear from the CC decision how this should be dealt with.
- 10.32 At this point we are not minded to make any adjustments to future capex to reflect those deferred projects for which PNGL has already received some reward. This will mean that, to some extent, PNGL will be receiving payments again for the same project. The total amount of reward PNGL has already received for such projects is quite considerable. We would be interested in understanding respondents' views on this position.

Current Total Regulatory Value, PNGL

- 10.33 The opening TRV in relation to 2014 is £503.9m (2012 prices).

Total Regulatory Value, FE

- 10.34 FE's PCR02 set out the intent to implement a "retrospective mechanism" to adjust TRV based on the difference between allowances and outturn for some items. A number of documents and letters, including the PCR02 final determination, the supplemental market development review and letters approving extensions have clarified how the retrospective mechanism will be applied.
- 10.35 We have calculated the impact of the retrospective mechanism and as a result the opening TRV in 2014 is £121.6m (2012 prices).
- 10.36 It should be noted that we are still in the process of reviewing the depreciation allowed in PCR02 against the depreciation include in the TRV given above and we anticipate a downward revision to the TRV and this will be updated in the final determination.

FE under-recoveries

- 10.37 FE is set a determined tariff in each year but has some discretion in setting actual tariffs. In advance of market opening, FE distribution tariffs are calculated on a netback calculation which equals total revenue from customers minus transmission, gas and supply costs.
- 10.38 FE has been setting tariffs below allowance. FE had a cumulative under-recovery of £16.5m at the end of 2011 (2011 prices) based on actual revenues and determined costs.
- 10.39 The reasoning behind the inclusion of underrecoveries in the licence was to allow FE flexibility to ensure gas was competitive versus oil as it built its customer base. However the period during which FE has built up this large under recovery was one where gas prices were largely cheaper than oil and at times over 30% cheaper. This raises question as to the motive of building up such large under recoveries.
- 10.40 FE receives a 7.5% return on under-recoveries and is entitled to recover total under-recoveries by future increases in tariffs above determined tariffs. We believe the 7.5% return is providing a perverse incentive for FE to under-recover revenues.
- 10.41 One way of addressing this issue is to reduce the return allowed on under-recoveries in GD17. This could reflect the fact that there is no risk associated with these under-recoveries

and hence it is against customers' interests to retain a full return on them. Furthermore, the impact of large under-recoveries is that today's gas customers are underpaying and are effectively subsidising future customers, which is inappropriate.

- 10.42 The FE licence contains a designated parameter which can be used to adjust the return allowed on under-recoveries below the allowed cost of capital. The licence has this set to zero until 2035 and it would require a licence change to enable us to set a value above zero which would have the effect of reducing the return on under-recoveries below the allowed cost of capital.
- 10.43 We recognise that FE has adopted a policy of building up under-recoveries in the expectation of achieving a return on these under-recoveries and consequently our current intent is not to alter the return on under-recoveries in GD14 and therefore we do not regard the licence change as being reasonable in advance of 2017.
- 10.44 However, we will consider future licence modifications to reduce the return on under-recoveries and we will also carefully review FE actions in reducing the under recovery amount before 2017. We believe that the proposals contained herein which provide a reduction in determined tariffs from 2014 will provide considerable flexibility for FE to considerably reduce or even to eliminate the under-recovery by 2017.
- 10.45 We would be interested in understanding respondents' views on this matter.

11 RECOMMENDATIONS OF COMPETITION COMMISSION DETERMINATION ON PNG12

Background

- 11.1 This section considers the recommendations arising from the CC's report which was set out in section 10 of its determination¹⁵.

Timing of cash flows

- 11.2 The CC noted that the Phoenix licence assumes that all income and expenditure is at the year end. In practice, according to Phoenix, capex and opex are fairly evenly spread across the year and revenue is weighted towards quarters 1 and 4 when the weather is colder. The CC notes that this means that PNG12 receives revenues slightly higher than necessary. The CC suggests that UR considers changing its modelling to assume midyear revenues and shifting from the assumption of end year cash flows.
- 11.3 We have noted the CC's suggestion and the fact that we apply a mid-year calculation for firmus. Our initial view is to accept the CC's proposal and make appropriate adjustments in the final determination. We would welcome the views of respondents.

Connections incentive

- 11.4 The CC notes that under the original price cap, PNG12 had strong incentives to connect customers; this incentive was lost when a revenue cap was introduced. The CC believes that the current connections incentive is lower. The CC recommended that UR analyse whether the incentives for connections have reduced and consider whether changes should be made to the connections incentive or to any other part of the regulatory framework.
- 11.5 We have addressed this issue by developing a connections incentive which is described in section 5.

Capex 2007 to 2011

- 11.6 The CC commented that the financial model did not include 2007-11 capex in DAV but noted that the impact on charges was immaterial in the current period but suggested that UR review this treatment.
- 11.7 The treatment beyond 2011 is correct as capex is added to the DAV.

¹⁵ Competition Commission's Phoenix Natural Gas Limited price determination, 28 November 2012: http://www.uregni.gov.uk/publications/competition_commission_final_png12_price_determination

Capex overspend

- 11.8 The CC stated that 2009 capex overspend should be added to DAV in 2014, consistent with the rolling incentive mechanism. This is included in the retrospective mechanism and has been incorporated into the TRV figure set out in section 10.

TRV adjustment for prepayment meters

- 11.9 The CC noted an error of £147k in 2006 prices in the TRV because UR calculated the prepayment meter allowance based on actual P1 connections rather than forecast P1 connections as it had stated – a difference of 9,294 meters.
- 11.10 We have not adjusted for prepayment allowances in the Draft Determination modelling but our intention is to review the modelling of prepayment meters and adjust accordingly in the Final Determination.

12 FINANCIAL ISSUES

Introduction

- 12.1 The proposed opex and capex allowances, as set out in earlier sections, feed into a regulatory model which calculates the allowed revenues over the control period. As well as capital and operating expenditure, vital elements of determining the reasonable cost of service (and hence allowed revenues) are:
- The return *on* capital – this is the return required by debt and equity holders to finance the investment in capital assets. This return applies both to the existing asset base and new capital expenditure (as determined in the earlier sections); and
 - The return *of* capital – this is broadly the cost of replacing existing assets when they reach the end of their useful life and is generally measured by a depreciation charge that records the reduction in value of the assets over time.
- 12.2 Accordingly, this section of the paper focuses on these key components of the regulatory model for both PNGL and FE, namely:
- Weighted average cost of capital (WACC); and
 - Depreciation.
- 12.3 Following our review of capital cost issues, we turn our attention to assessing the financeability of PNGL and FE, consistent with our duty to secure that licence holders are able to finance their licence obligations.

Weighted average cost of capital, PNGL & FE

Allowed rate of return

- 12.4 In section 10, we established that the value of the PNGL TRV to 2014 is £503.9m (2012 prices) and the value of the FE TRV in 2014 is £121.6m (2012 prices). These amounts can be thought of as the equivalent of ‘I.O.U.s’ from customers to the companies – i.e. a regulatory entitlement to collect a certain amount of revenue via future price controls.
- 12.5 Payment by customers will be over a number of years. This profiling requires us to provide both PNGL and FE with an annual rate of return, the value of which should make the companies broadly indifferent to the long payment period.

GD14

- 12.6 Both GDNs have licence conditions that set the rate of return until the end of 2016 at 7.5% (in real, pre-tax terms). This pre-announced rate has been an important reference point for PNGL and FE in their recent investment decisions and hence we are not proposing to adjust this level of return in GD14.
- 12.7 However, we note that this rate is substantially higher than the return allowed for comparable GB network utilities. Consequently, our position for GD14 should not be seen as setting a precedent for future price controls and we would welcome consultation responses on the appropriateness of the 7.5% rate of return for the GD14 period.

GD17

- 12.8 Although the UR does not need to make a final decision on the rate of return at GD17 as part of this review, it may be helpful to all stakeholders for us to provide a brief overview of the issues that the regulator expects to have to deal with.
- 12.9 Our expectation is that we will set an allowed cost of capital in GD17 commensurate with the risks that we believe PNGL and FE face going forwards. This will use the Capital Asset Pricing Model (CAPM) and will take into account best GB regulatory practice. As PNGL and FE are now much more mature and stable businesses, we anticipate that the allowed rate of return will be set more in line with the rates set for comparable GB utilities.

Cost of capital

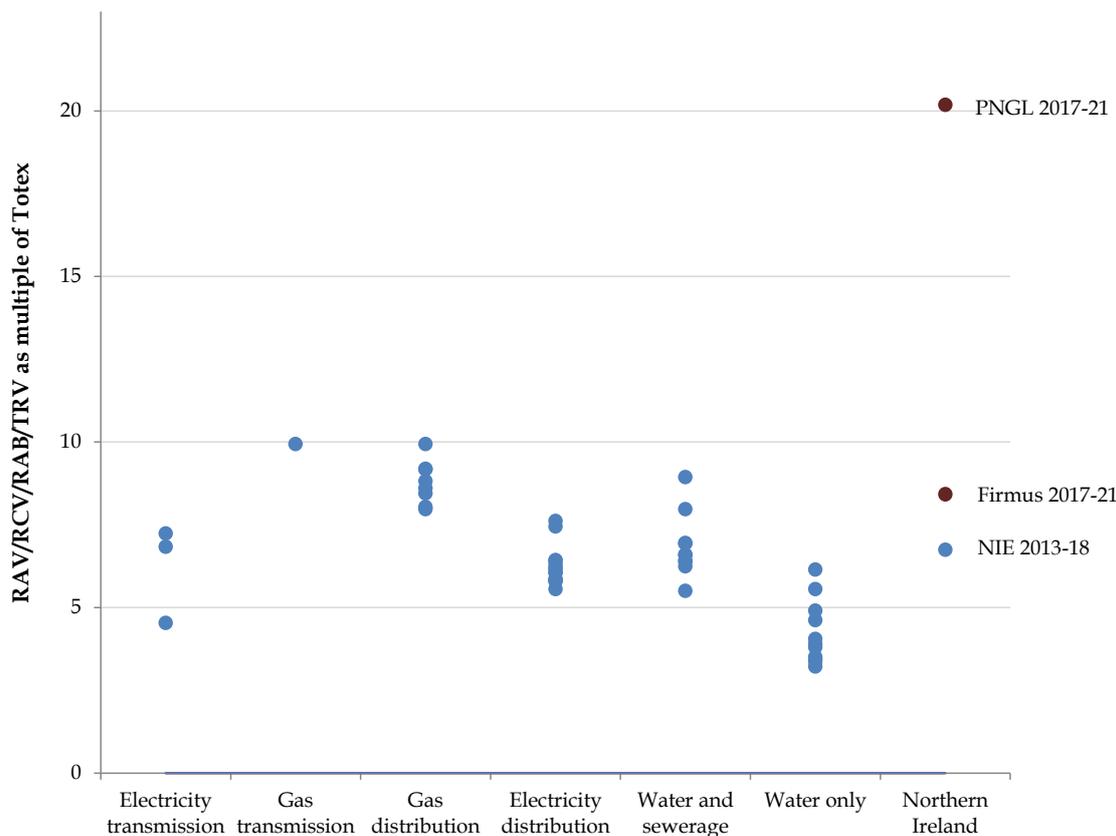
- 12.10 We note that in its GDN price control announced in December 2012, Ofgem set an allowed cost of capital of 4.2% post-tax, equivalent to 4.83% pre-tax. We do not believe that the risks facing NI GDNs are substantially different to those facing GB GDNs. For GD17, we propose to assess the risks that PNGL and FE face to set an appropriate cost of capital. For now, we have set out some initial thoughts.
- 12.11 As we discuss in paragraph 10.8 onwards, it is of note that the TRV for PNGL is composed of four separate elements:
- investment in physical assets;
 - deferred revenue (the profile adjustment);
 - revenue under-recovery (from pre-2007); and
 - unspent allowances (including deferred capex and historical outperformance).
- 12.12 FE's TRV includes the first two of these elements. For GD17 we will undertake a detailed risk assessment to determine the appropriate rate of return taking into account the risk profile of the separate elements of TRV.
- 12.13 The first category is consistent with GB GDN's RAVs which are comprised almost exclusively of the value attributable to historical financial investment by shareholders/lenders. Consequently, for this category of TRV the risk of NI GDNs can be compared to the risk of GB GDNs to determine the relative risk and hence an appropriate return. However, the other three categories would not appear in a standard GB GDN RAV and would appear to be lower risk.. We will need to consider the impact on the WACC.
- 12.14 In PNGL's case there is a substantial outperformance amount. This does not represent actual monies that shareholders/lenders have put into PNGL and which need at some point to be recouped from customers. Rather, it is an artificial creation; a regulatory entitlement to a monetary reward, the value of which is known with certainty but which shareholders cannot claim in full until 2046.
- 12.15 This makes PNGL's TRV look very different from normal RABs. As an illustration of this, we can compare the size of the PNGL TRV relative to ongoing opex/capex to ratios that exist in other sectors. One measure is the size of capex relative to TRV. The ratio 'capex : RAV' has been important in Ofgem's setting of the equity beta in recent price controls. For example, Ofgem in its recent GDN price control (RIIO:GD1) stated in relation to comparative risk assessment across network businesses that:

"In particular, we noted that GDNs had a lower capex : RAV ratio than Transmission Owners (TOs), which supported a lower allowed return"¹⁶.

¹⁶ Ofgem, "RIIO-GD1: Final Proposals – Overview", 17 December 2012, pp. 34-35.

12.16 Regulators, again such as Ofgem in RIIO-GD1, frequently look at asset values as a multiple of total capex and opex (totex) to determine the risk of network utilities – broadly the higher the ratio the lower the risk. The chart below compares PNLG’s and FE’s asset value as a multiple of totex with that of a number of UK utilities.

Figure 8 – Regulated asset values as multiples of totex across UK regulated sectors



Source: Utility Regulator

12.17 It is noteworthy that the ratio is far higher for PNLG than other utilities, suggesting that the risk it faces is lower. FE is at an earlier stage in the development of its network and consequently the proportion of its value represented by deferred revenue is smaller. Hence the cost of capital in GD17 will take into account this reduced risk compared to other networks.

12.18 This approach could in theory lead to a position where the WACC is lower than for GB GDNs. This could give rise to a presentational issue whereby the risks of new investment is similar to that in GB, but the WACC is lower – as a result of the lower risk in the overall TRV.

12.19 An alternative to this approach is to recognise explicitly that the current TRV is made up of very different components which have different opportunity costs of capital.

12.20 Given these different characteristics, we consider that there is merit in exploring whether the TRV should be divided into a conventional RAB and a separate “pot” with regulatory commitment to be recoverable from consumers. The values of these two pots would sum to the current TRV to ensure no loss of value. The RAB would then attract a normal regulated company rate of return and the remainder of the TRV would roll up at a lower rate to reflect relevant risk. However we would also recognise that investors are more used to a single WACC and so may prefer the traditional approach.

- 12.21 There is some regulatory precedent for an approach which involves separating RAV into more than one pot. For example, Ofcom consulted on and concluded that BT's copper access business was lower risk than the remaining BT business and assessed that the group beta of 1.1 should be split as an equity beta of 0.9 for the copper access business and 1.23 for the rest of BT. Today, BT Openreach has a lower WACC than the remainder of BT.
- 12.22 The two alternatives set out above would point to a very similar amount of profit for NI GDNs in £m. The key difference is the presentation of this amount. We would welcome early views on this subject as part of the current GD14 consultation. A final decision will not be required until GD17.

Risks within GDNs

- 12.23 In discussions with investors, the question of the level of maturity of PNGL and FE has arisen and we have analysed this further. For the purposes of understanding risk, one measure of an immature gas distribution company is one with high levels of capex relative to TRV and/or one which is dependent on future connections for its economic viability.
- 12.24 We have already set out above the level of totex relative to TRV which does not suggest companies with particularly high levels of capex. In relation to future connections, both PNGL and FE currently have their tariffs set on the basis of increasing connections and volumes. Certainly in the early years of development there is a real risk that these connections and volumes will fail to materialise and put at risk the recovery of allowed revenues.
- 12.25 We have analysed the risks for both companies from connection and volumes falling below forecast. However any fall in connections would also be associated with a fall in both capex and opex. The vast majority of connections remaining are for domestic properties and these are very marginal connections i.e. the revenues from the connection just about cover the costs of the connection. If we take an extreme case and assume no more connections from 2014 onwards, our initial analysis indicates that this would result in an increase on final bills to consumers of c.2%. This compares to the volatility in final bills from the commodity cost of gas, where UR approved increases of up to 39% have been allowed in recent years.
- 12.26 This shows that tariffs are not very sensitive to the fall off in forecast connections and there is no real risk of a large spike in charges risking recovery of revenues. We can conclude that now that all large industrial loads are connected, the maturity of PNGL and FE, in terms of failing to make future connections putting revenues at risk, is very similar to the GB GDNs.
- 12.27 FE currently faces additional volume risk under its licence and this would have to be taken into account in GD17. However, we note in section 15 that we will be undertaking a high level review of licences as part of GD17 and one issue will be whether a price cap is still appropriate for FE or whether, like PNGL and GDNs, it should move to a revenue cap.
- 12.28 We have also noted the PNGL submission to the CC in relation to the Northern Ireland Electricity (NIE) reference¹⁷ which included a detailed review of PNGL's cost of capital and views on how default risk should be incorporated into any overall cost of capital. It also raised the issue of the risk around deferral of income. This is something which we will give consideration to along with all other comments we receive in advance of making a final decision in 2016.

¹⁷ PNGL submission in relation to CC's inquiry into NIE's RP5 price control: http://www.competition-commission.org.uk/assets/competitioncommission/docs/2013/northern-ireland-electricity-price-determination/130604_phoenix_natural_gas.pdf

Cost of Equity

- 12.29 We note that in its GDN price control announced in December 2012, Ofgem set an allowed cost of equity of 6.7% post-tax, equivalent to 8.38% pre-tax. We do not believe that the risks facing NI GDNs are substantially different to those facing GB GDNs. For GD17, we propose to assess the risks that PNGL and FE face to set an appropriate cost of equity. For now, we have set out some initial thoughts.
- 12.30 As neither PNGL nor FE are publicly traded entities we do not have a market based cost of equity on which to rely and will follow standard regulatory practice in assessing the risks of the companies discussed above in setting an allowed cost of equity.

Cost of debt

- 12.31 We note that Ofgem has indexed the cost of debt for GB GDNs to enable GDNs to recover efficiently incurred debt costs based on an index of comparable companies' debt costs. In accordance with Ofgem's methodology, the allowed cost of debt for 2013/14 was 2.92% pre-tax giving GDNs a 'vanilla' WACC of 4.17% (based on 65% gearing), equivalent to a pre-tax WACC of 4.83%.
- 12.32 For PNGL and FE there are a number of options we will consider in relation to setting the cost of debt.
- 12.33 One option is to use CAPM to set an ex-ante allowance for debt for the whole of GD17. This option could be seen to be in line with the discussions on risk above where the cost of debt is built up based on the risk assessment of the GDN. This option would leave more of the debt risk with GDNs and less with consumers.
- 12.34 A second option would be to use an indexed methodology in line with what Ofgem has introduced in RIIO. This would have the benefit of being consistent with other GDNs in the UK. However we would have to take into account the size of the GDNs and the number of bond issues they are likely to have and if this has a bearing on the appropriateness of using a benchmark.
- 12.35 A third alternative is to use a specific company-related cost of debt. However, FE does not currently have its own debt and the PNGL debt is due to mature in 2017, which would not make it a useful marker for the cost of debt for the 2017-2021 price control period. We would be able to use the PNGL market cost of debt in 2016 at the time the decision for GD17 is made. However, if PNGL were to subsequently raise debt in 2017 this option would give rise to the risk that these values could be very different and we would need to give some thought to how this could be managed. This option has the benefit of simplicity but we would need to be assured it would produce an accurate reflection of the risks of the GDN and not reflect other risks inherent in the particular debt instrument the GDN's choose to use.
- 12.36 We expect to consult on our methodology for setting the cost of debt, and hence the allowed cost of capital, during 2016 but we welcome any comments now from stakeholders.

Assumed return for profiling revenues

- 12.37 In GD14, and for modelling purposes alone, we have used a cost of capital in the financial model of 7.5% through to 2016 and 4.83% from 2017. This latter rate, consistent with the rate Ofgem set in RIIO-GD1, is an estimate to provide a more realistic assessment of the revenues for PNGL and FE beyond 2016 but should not be seen as a precedent for our decision in GD17. This approach follows our setting of the figure in 2007 at 5.83% which, at the time, was also the GDN rate allowed by Ofgem.

Depreciation

- 12.38 For PNGL, 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;
 - Meters – depreciated over 15 years; and
 - All other capex – depreciated over 40 years.
- 12.39 For the existing asset base, in its submission PNGL proposes a straight-line methodology over 32 years i.e. the number of years left of its licence recovery period from 2014.
- 12.40 For FE, 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 and services – depreciated over 40 years;
 - Meters, pressure reduction stations and telemetry – depreciated over 15 years; and
 - All other capex – depreciated over 5 years.
- 12.41 We note the differences above between PNGL and FE. For GD14 we see no reason why we should not apply a consistent depreciation approach for both GDNs and will discuss this in more detail with the GDNs before we finalise our model for the final determination.

Financeability

Introduction

- 12.42 Article 14 of the Energy (Northern Ireland) Order 2003 requires us to carry out our functions in the manner we consider is best calculated to further the principal objective, referred to in section 3, having regard to the need to secure that licence holders are able to finance their licence obligations¹⁸ (among other things).
- 12.43 This duty is framed similarly to financing duties of other UK regulators and, as described in a recent Joint Regulatory Group statement (JRG statement)¹⁹, can broadly be taken to mean that the price control will be set at a level which would allow an efficient company to finance its licensed activities. It is therefore necessary for us to consider financeability as an integral part of a price review.
- 12.44 We would note that a company needs to be able to finance its functions as a stand-alone business and hence the group structure should not be an issue in assessing financeability.
- 12.45 We have not undertaken a detailed financeability review in preparing this draft determination and we intend to provide a more detailed financeability analysis when we publish our final determination to confirm that PNGL and FE are financeable. However, we note that the allowed cost of capital for both PNGL and FE is 7.5% which is substantially more than the 4.83% that Ofgem allowed GDNs in their recent RIIO-GD1 price control;

¹⁸ Activities which are the subject of obligations imposed by or under Part II of the Gas (Northern Ireland) Order 1996 or the Energy (Northern Ireland) Order 2003.

¹⁹ See paragraph 2.2 of 'Cost of Capital and Financeability', a statement of the Joint Regulators Group (JRG), Ofgem, March 2013.

Ofgem’s objective to secure that licence holders can finance their licence obligations is similar to ours.

12.46 To assess financeability we consider a range of indicators but the principle indicators are:

- Gearing (defined as net debt: TRV); and
- PMICR, post maintenance interest coverage ratio, defined as EBITDA (adjusted for issues such as under recoveries, deferred revenue and cash taxes) less regulatory depreciation all divided by cash interest.

12.47 PNGL has a licence condition to maintain an investment grade rating. Although FE does not have such a licence condition we would nevertheless target a similar credit rating.

12.48 The rating agencies’ assessment of these key metrics is shown below.

Table 80 – 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

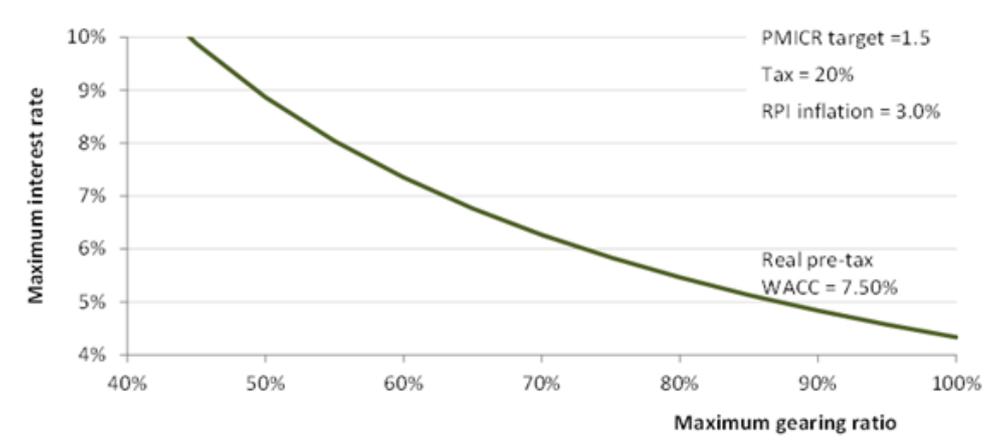
Source: Ofgem consultation on strategy for the RIIO T1 and GD1, specifically the annex discussing financial issues.

12.49 We are aware that targets used for the PMICR were specified by rating agencies in the context of an understanding of risk and an outlook for inflation prevailing at the time and that it may be appropriate from time to time for rating agencies to re-calibrate.

12.50 However, it is worth noting that financial metrics typically account for around a third of the assessment carried out by rating agencies, and our financeability assessment will consider the broader context. Specifically, the low business risk associated with being a monopolistic network company, and the stable and transparent regulatory framework within which they operate, provide substantial support to companies’ credit ratings beyond what might be implied if only financial metrics were considered.

12.51 The graph below shows that at 65% gearing, the level used by Ofgem to determine its allowed cost of capital in RIIO-GD1, an interest rate below 6.8% would result in a PMICR of above 1.5 and hence suggest a BBB or higher credit rating.

Figure 12 – Maximum interest rates consistent with a PMICR target level



Source: Utility Regulator

PNGL

- 12.52 We last considered financeability of gas distribution businesses in the last review of PNGL, PNGL12, and it was also an issue considered in the subsequent CC inquiry. The CC concurred with our assessment that PNGL was financeable.
- 12.53 The CC stated that “We found that the analysis that UR performed at the time of its PNGL12 decision sufficiently demonstrates that PNGL is financeable for the duration of the PNGL12 charge control even if UR’s 2012 TRV adjustment is made in full. It follows that, as the adjustment to the 2012 opening TRV in our redetermination is less than the adjustment that UR made to the 2012 opening TRV, PNGL is also financeable for the duration of the PNGL12 charge control in our decision.”
- 12.54 PNGL’s debt funding at present is dominated by its £275 million bond which has a coupon of 5.5%. This bond will need to be refinanced in 2017 and the state of the bond markets nearer that time will also be a key factor in our assessment for GD17.
- 12.55 We note that both PNGL and FE may be sold in the near to medium term and this may result in debt issuance for either or both companies. In this event, we will take into account the debt coupon when assessing financeability for the final determination.
- 12.56 We also note that PNGL was able to pay a £90m dividend in June 2013 to its shareholders.

FE

- 12.57 The position for FE is complicated by the fact that it has no external debt. It is currently funded through intra-group equity and debt and its debt is provided at lower than commercial cost. For a financeability assessment it would seem logical to infer a notional opening gearing level for the company and a notional cost of that debt consistent with interest rates the company would reasonably expect to pay were it to issue debt on commercial terms.
- 12.58 However, we would also consider the maturity of the business and it may be appropriate to consider the direction of financial metrics and not just the value in any one year.

Conclusion

- 12.59 Our view is that the capital structure for both companies can and should be managed to remain consistent with acceptable credit metrics such as the PMICR.
- 12.60 We expect to carry out more detailed analysis of the financial position of each company including downside risk scenarios prior to developing our final proposals.

13 DRAFT GD14 OUTPUTS

Introduction

- 13.1 The previous chapters have provided our determination of the revenue “building blocks” for GD14, namely:
- opex;
 - capex;
 - volumes
 - opening asset values
 - allowed return on assets; and
 - depreciation.
- 13.2 This chapter provides the outputs from our review, the allowed revenues. It commences with the definitions of specific parameters defined in the licence and our determination of annual efficiency targets.

Designated parameters

- 13.3 Both PNGL and FE have a list of “designated parameters” defined in their licences that are set at each review period. This section sets out our views on the values of these designated parameters to apply from 1 January 2014 and the rationale behind our views.

PNGL

- 13.4 PNGL has five designated parameters and the values for these for GD14 are shown below.

Table 81 – Designated parameters, PNGL

<i>Designated parameter</i>	<i>Description</i>	<i>2012-13 value</i>	<i>Discussion</i>	<i>Proposal 2014-16</i>
r_t	Allowed pre-tax rate of return	0.075	The licence specifies that this parameter should remain at 7.5% until the end of 2016	0.075
n	Formula year preceding first determination year	2011		2013
m	The formula year that was n for the preceding review year	2006		2011
q	Final year for licensee to provide best available values	2046	As set in the licence	2046
RPI	Indexation base		Prices expressed as September 2012 prices	

Source: Utility Regulator

FE

13.5 FE has 15 designated parameters defined in its licence, which UR is required to set as part of the price control.

13.6 The table below provides our views of appropriate values for FE designated parameters. Two particular issues worthy of further discussion are rolling incentive mechanisms and the return on under-recoveries.

Rolling incentive mechanisms

13.7 Rolling incentive mechanisms enable licensees to retain efficiency savings for a period of years and then pass the benefits through to customers. The benefits are two-fold. Firstly a rolling mechanism can provide stronger incentives on licensees, for example we are minded to allow licensees to retain any capex efficiency savings for five years rather than, say, remove all efficiencies in GD17. Secondly, the benefits will be passed to customers after five years; a five year period approximately equalises the benefits between licensees and customers. Our current view is that we will “switch on” the capex rolling incentive mechanism for FE. This would remove over or underspends after five years compared to the allowance as adjusted by the retrospective mechanism.

13.8 At this stage, we do not intend to switch on the opex rolling incentive mechanism; we would note that a large proportion of opex is subject to the retrospective mechanism. We plan to consider opex rollers as part of GD17. We would invite respondents’ views on the rolling incentives that should apply in GD14.

Return on under-recoveries

13.9 FE currently receives the full 7.5% cost of capital return on under-recoveries. We believe that this is providing an inappropriate incentive on FE to set tariffs below allowed tariffs and hence increase under-recoveries.

13.10 Consequently, we have considered options to address this in section 10. As part of dealing with under recoveries we have proposed to set α_t below at 0.4 which will allow firmus to significantly reduce this amount before GD17.

13.11 We would welcome consultation responses on the appropriateness of under-recoveries receiving the full cost of capital at 7.5%.

Table 82 – Designated parameters, FE

<i>Designated parameter</i>	<i>Description</i>	<i>2009-13 value</i>	<i>Discussion</i>	<i>Proposal 2014-16</i>
r_t	Allowed pre-tax rate of return	0.075	The licence specifies that this parameter should remain at 7.5% until the end of 2016	0.075
N	Formula year preceding first determination year	2008		2013
f_t	A parameter used to adjust the return to compensate for rate of return applied at end of year	0.5	Reasonable for Firmus to be allowed half year recovery as on average cash flows are mid-year	0.5
Q	Final year for licensee to provide best available values	2035		2035
RPI	Indexation base		Prices expressed as average 2012 prices	
w	The number of years for which the operator can retain opex and capex savings under the opex and capex rolling mechanisms	0	UR is minded to establish a capex roller for this review to incentivise capex savings. A 5 year roller approximately equalises benefits between licensee and customers	5
g	A switch for the opex rolling incentive	0	We are minded not to switch on the opex rolling incentive (see above)	0
h	A switch for the capex rolling incentive	0	We are minded to switch on the capex rolling incentive (see above)	1
d	A switch for the depreciation component of the capex rolling incentive	0		1
l	The average asset life of the capex savings	0	The average regulatory life of capex in PCRO2 through to 2035 was 33	33
δ_t	A factor that can be used to reduce the extent that an over-recovery of revenue in one conveyance category can offset an under-recovery of revenue in another conveyance category	0	We have not proposed any change in this parameter.	0
$x_{u,t}$	A factor that can be used to adjust the rate of return allowed on under-recoveries	0	The licence sets this to zero until 2034. As noted above we are considering increasing this factor but not until 2017	0
$x_{o,t}$	A factor that can be used to adjust the rate of return allowed on over-recoveries	0	We will consider setting this with $x_{u,t}$ in GD17	0
α_t	The maximum amount that actual revenue (sum of volume times tariff for each conveyance category) can exceed allowed revenue	0.1	To enable Firmus to reduce its under-recoveries we are increasing the value of this parameter.	0.4

Source: Utility Regulator

Indexation and Efficiency target

Efficiency Target

- 13.12 Recent regulatory precedent for efficiency targets is in the range of 0.7% to 1.4% based on ongoing productivity growth in opex activities in the wider UK economy.
- 13.13 We intend to set an efficiency target for both opex and capex of 1% per annum, broadly in line with ongoing UK productivity growth.
- 13.14 Our efficiency target for GD14 compares to other reviews as follows:
- For RIIO-GD1, Ofgem set an annual efficiency target averaged across opex and capex of 0.8% per annum but then allowed 0.5% RPEs to leave a net 0.3% per year target.
 - For NI water there was a 38% opex efficiency gap against GB water companies. UR has set a target opex efficiency of 5% per year. No efficiency target was set for capex.
 - For NIE, RP5 set a 7% “catch up target” for opex efficiency and in addition an annual 1% efficiency target.
- 13.15 We do not intend to allow anything for Real Price Effects (RPEs) – the difference between RPI and changes in specific costs such as materials and labours. This is because we believe that the economy will continue to be relatively low growth which will dampen inflationary pressure on labour and materials relative to other goods and services.

Indexation

- 13.16 The standard regulatory RPI-X framework inflates the price control year-on-year by an appropriate index (usually the Retail Price Index, or RPI).
- 13.17 The RPI is a broad measure of inflation for the economy. There are some instances where it can 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.
- 13.18 We will therefore implement the efficiency target detailed above by escalating opex and capex by an overall RPI minus one per cent per annum for GD14.

Allowed revenues, PNGL

- 13.19 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 calculated²⁰.

²⁰ This table sets out allowances for the control period only i.e. 2014, 2015 and 2016. However, it should be noted that as part of every price control we do model costs and revenues right through to 2046 (the end of 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 (known as the Profile Adjustment). This helps keep conveyance charges lower now which in turn encourages the continued growth of the gas market.

Table 83 – Regulatory Model Inputs and Resulting Allowed Revenues for PNGL, £m

Component	PNGL Submission				UR Proposal				Difference	Difference, %
	2014	2015	2016	Total	2014	2015	2016	Total	Total	Total
Opex allowance	16.5	17.0	16.8	50.3	12.7	13.1	13.2	39.0	-11.3	-22%
Capex allowance	13.6	13.7	13.5	40.8	12.6	12.8	12.9	38.3	-2.5	-6%
Total	30.1	30.7	30.3	91.1	25.3	25.9	26.1	77.3	-13.8	-15%
Cost of capital	7.5% (7.5% post 2016)				7.5% (4.83% Post 2016)					
Depreciation	See discussion above.				For consultation.					
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	58.1	60.0	61.8	179.9	43.9	45.4	46.8	136.1	-43.8	

Source: PNGL and the Utility Regulator

Impact on customer bills, PNGL

- 13.20 The resulting tariffs from our decisions will see prices fall from the 2013 CC determined tariff levels. This is mainly a result of a c.2% increase in targeted volumes compared to the CC determined model from 2014 to 2046 and the reduction in the rate of return within the modelling of tariffs post 2016.
- 13.21 The minded to tariff in relation to a domestic consumer equates to 37.18 pence per therm, when compared to the 2013 domestic tariff determined by the competition commission of 43.37²¹ pence per therm (2012 prices), this gives a saving of 6.19 pence per therm.
- 13.22 The average consumption of a domestic consumer is assessed as 410 therms per annum for the purposes of this price control, a total annual bill of £574²², in turn, this gives an average domestic consumer a saving of around £25 (or 4.4% of total bill) per annum.
- 13.23 For I&C customers, in particular larger burning consumers, the difference would be even higher.

Allowed revenues, FE

- 13.24 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.

²¹ This figure was determined by the competition commission based on a post 2016 rate of return of 5.87%.

²² Based on the current Airtricity home energy tariff (Ex VAT) – Effective 1st April 2013.

Table 84 – Regulatory Model Inputs and Resulting Allowed Revenues for FE, £m

Component	FE Submission				UR Proposal				Difference	Difference, %
	2014	2015	2016	Total	2014	2015	2016	Total	Total	Total
Opex allowance	8.5	8.7	9.1	26.3	4.5	4.7	5.0	14.2	-12.1	-45%
Capex allowance	15.1	12.9	11.2	39.2	10.6	9.2	8.4	28.2	-11.0	-28%
Total	23.6	21.6	20.3	65.5	15.1	13.9	13.4	42.4	-23.1	-35%
Cost of capital	7.5% (7.5% post 2016)				7.5% (4.83% Post 2016)					
Depreciation	See discussion above.				As per FE submission.					
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	21.6	22.9	23.6	68.1	15.8	16.6	17.7	50.1	-18.0	

Source: FE and the Utility Regulator

Impact on customer bills, FE

- 13.25 The resulting tariffs from our decisions will see prices fall from the previously determined tariff levels. This is as a result of a significant increase in the assessed volumes compared to those submitted and the reduction in the rate of return within the modelling of tariffs post 2016.
- 13.26 The minded to tariff in relation to a domestic consumer equates to 38.91 pence per therm, when compared to the URs previously determined cost of 51.33²³ pence per therm (£2012 as adjusted for RPI), this gives a saving of 12.42 pence per therm.
- 13.27 The average consumption of a domestic consumer is assessed as 410 therms per annum for the purposes of this price control, a total annual bill of £511²⁴, in turn, this gives an average domestic consumer a saving of around £51 (or 10.0% of total bill) per annum.
- 13.28 For I&C customers, in particular larger burning consumers, the difference would be even higher.

²³ This figure was determined previously based on a post 2016 rate of return of 7.5%

²⁴ Based on the current firmus energy supply standard credit tariff (Ex VAT) – Effective 1st October 2011

14 GD14 UNCERTAINTY MECHANISMS

Introduction

- 14.1 We have included a number of mechanisms within this Determination to reduce the risk to GDNs or to incentivise them to deliver UR's statutory duties as described at the start of chapter 3.
- 14.2 This chapter summarises these mechanisms and, where appropriate, references the sections of this document where the rationale and operation of the mechanisms are described in more detail.
- 14.3 The primary mechanism that we use is termed the "retrospective mechanism" as it will be effected in GD17 by retrospectively adjusting allowances based by differences between actual and allowed costs or outputs (such as connection activity. In addition, GD14 includes retrospective adjustments for previous price controls based on actuals up to 2011 and projections for 2012. Our final determination for GD14 for PNGL and FE will update to reflect the actual figures for 2012 and GD17 will include retrospective adjustments for 2013 (based on the formulae agreed at the previous price control).
- 14.4 Retrospective adjustments fall into one of three categories as set out in our determination, namely:
- Output based – UR determines a unit price (Capex) or unit allowance (Opex). The value included in the cost base is the determined unit price/unit allowance x the forecast driver for that item e.g. connections/properties passed (Opex) or m per connection (Capex). Any difference in outputs (e.g. higher connections) between the determination and outturn will result in a retrospective adjustment at the time of GD17 (i.e. determined unit rate/unit allowance x actual driver output less determined unit rate/unit allowance x forecast driver output).
 - Pass through – Any difference between the allowance in the determination and the actual costs incurred will result in a retrospective adjustment at the time of GD17.
 - Ring fenced – Similar to pass through items but UR will require a justification from the licence holder that the costs were necessarily and efficiently incurred otherwise the full amount may not be allowed.
- 14.5 The retrospective adjustments will also include the impact of the allowed cost of capital from the date of the difference in expenditure to the date that the retrospective adjustment is made.
- 14.6 We also discuss below the rolling incentive mechanism which we intend will apply to GD14 for capex.

Uncertainty mechanism, PNGL

- 14.7 In PCR03, UR determined the scope of the retrospective adjustments necessary to account for actual output performance versus determined values. The determination formed then was used in PNGL12 and remains similar for GD14.

14.8 For **Capex**, the items subject to retrospective adjustment are those shown in the table below.

Table 745 – PNGL Capex Uncertainty mechanism

Capex Item	Determination Basis
Traffic Management Act	Ring fenced
Feeder Mains (4 bar)	Output based – to be clarified with PNGL.
Pressure Reduction Stations	Output based on actual numbers installed
Infill Mains: Existing Domestic and I&C	Output based on actual number of properties passed, average number of metres of infill laid per property passed up to a cap of 7.2 metres and determined unit rate. Additional incentive and penalty apply as outlined in section 7.
Infill Mains: New Build Domestic	Output based on actual number of properties passed, average number of metres of infill laid per property passed up to a cap of 5.9 metres and determined unit rate. Additional incentive and penalty apply as outlined in section 7.
Meters	Output based on connections and determined unit rates.
Services	Output based on connections and determined unit rates.
Capex over and under spend	Additional projects submitted by PNGL and approved by UR will retrospectively be allowed into the cost base at the time of the next review. Similarly any projects within the price control which do not go ahead will be removed from the cost base.

Source: Utility Regulator

14.9 For **Opex**, the items subject to retrospective adjustment are those shown in the table below.

Table 86 – PNGL Opex Uncertainty mechanism

Opex Item	Determination Basis
Rates	Output based on turnover as set out in section 5
Licence Fees	Pass through.
Connections Incentive Mechanism (inclusive of sales/support staff and related overheads)	Output based on Owner Occupier connections (excluding assessed non-additional connections) and determined unit rates (as adjusted for over/under performance with respect to target owner occupier connections. This is outlined in section 5.
Working Capital and Capital Creditors	Pass through based on current licence conditions.

Source: Utility Regulator

Uncertainty mechanism, FE

14.10 PCR02 included a retrospective mechanism for FE and a similar mechanism has been applied in this price control. We recognise that FE also has a volume incentive and we will give further thought to whether any adjustments are appropriate because of this.

14.11 For **Capex**, the items subject to retrospective adjustment are those shown in the table below.

Table 87 – FE Capex Uncertainty mechanism

Capex Item	Determination Basis
Traffic Management Act	Ring fenced
Feeder Mains (4 bar)	Output based – to be clarified with FE
Pressure Reduction Stations	Output based on actual numbers installed
Infill Mains: Existing Domestic and I&C	Output based on actual number of properties passed, average number of metres of infill laid per property passed up to a cap of 7.2 metres and determined unit rate. Additional incentive and penalty apply as outlined in section 8.
Infill Mains: New Build Domestic	Output based on actual number of properties passed, average number of metres of infill laid per property passed up to a cap of 5.9 metres and determined unit rate. Additional incentive and penalty apply as outlined in section 8.
Meters	Output based on connections and determined unit rates.
Services	Output based on connections and determined unit rates.
Service and Meter costs (med I&C and smaller)	Output based on connections and determined unit rates by category.
Capex over and under spend	Additional Development Area (ADA) projects submitted by FE and approved by UR will retrospectively be allowed into the cost base at the time of the next review. Similarly any projects within the price control which do not go ahead will be removed from the cost base.
Volumes in relation to Additional Development Areas (ADAs)	Output based on additional volumes times the determined Pi rate. Volume determination updated to reflect actual burn of ADAs.
IT	Ringfenced allowance for 2014.

Source: Utility Regulator

14.12 For **Opex**, the items subject to retrospective adjustment are those shown in the table below.

Table 88 – FE Opex Uncertainty mechanism

Opex Item	Determination Basis
Rates	Pass through.
Licence Fees	Pass through.
Connections Incentive Mechanism (inclusive of sales/support staff and related overheads)	Output based on Owner Occupier connections (excluding assessed non-additional connections) and determined unit rates (as adjusted for over/under performance with respect to target owner occupier connections. This is outlined in section 6.

Source: Utility Regulator

Rolling incentive mechanism

14.13 Rolling incentive mechanisms enable licensees to retain efficiency savings for a period of years and then pass the benefits through to customers. The benefits are three-fold. Firstly a rolling mechanism can provide stronger incentives on licensees as they retain benefits in full (depreciation and rate of return) for a fixed number of years. Secondly, licensees are protected to a certain extent from unforeseen costs as the impact will only be felt for the first few years. Thirdly, customers benefit by receiving the value of the capex (after deducting the depreciation to date) for the remainder of the asset life (although customers

will bear some of the cost for overspends). A five year rolling mechanism approximately equalises the benefits between licence holders and customers.

- 14.14 PNGL has a rolling incentive mechanism for capex applying for five years which has been effective since 2007.
- 14.15 The FE licence has an option to “switch on” a rolling incentive mechanism for both capex and opex.
- 14.16 Our “minded to” position is to have a five year capex rolling incentive for FE as for PNGL but not at this stage to include an opex rolling incentive mechanism.
- 14.17 We are inviting respondents to this consultation to say whether a rolling incentive mechanism should be implemented for GD14 for either opex or capex and, if so, whether five years is the appropriate time for such a mechanism before benefits are passed to customers.

Materiality thresholds

- 14.18 GDNs can request approval from UR for costs that were not foreseen at the time of the price control. Sometimes the requests for additional allowances for costs incurred can be very small, around £1,000.
- 14.19 It is not appropriate for UR to be investigating the case for such low amounts of cost and to be revising the determination as a result.
- 14.20 Consequently, we are going to maintain a materiality threshold for requests for additional costs. Our intention is to set this materiality threshold at £100,000.

15 FURTHER ISSUES

Introduction

- 15.1 Some key elements of the price control that will be considered as part of the GD17 process (primarily, the cost of capital) have been addressed in previous sections of this consultation paper. The present section briefly reviews additional matters that will impact on GD14 or that we are minded to consider as part of the GD17 price control. We would welcome consultation responses on the proposed policies outlined below.

Connections incentive and connections policy

- 15.2 The connections incentive we have outlined for GD14 provides strong incentives for PNGL and FE to increase their connections activity and hence enables us to deliver our principal objective to promote the development of the NI gas market.
- 15.3 As the market matures, our intention is to reduce the value of this incentive. Our current thoughts are to halve the incentive in GD17 and give further consideration for reductions in 2022.
- 15.4 PNGL and FE both have connection policies to provide free connections to any customer who is within a defined proximity of a mains gas pipe.
- 15.5 This policy has been helpful in increasing connections to gas. However, the impact is that new customers are subsidised by existing customers. The existence of such cross-subsidies provides inappropriate cost signals to potential connecting customers. As the market matures we intend to reconsider this policy and may revise it for GD17. In GB, new customers pay for connections.
- 15.6 We will also need to determine how any energy efficiency obligation, arising out of the Energy Efficiency Directive 2012/27/EU might impact on the connections incentive.

Cost reporting

- 15.7 The quality of the submissions for this price control has been mixed. We began to introduce a cost reporting framework last year but we had insufficient time to fully implement this.
- 15.8 In 2014 we intend to recommence our cost reporting project. The intent is to evolve robust and consistent reporting templates that will enable us to have a better insight into costs and to more effectively compare costs across the two GDNs.
- 15.9 We include a comment on annual cost reporting from PNGL's response to our December 2012 consultation on the approach to the price controls that we fully support:

"PNGL must be able to communicate its cost forecasts to UR in a clear and effective manner which accurately reflects the operation of its business. This will facilitate transparent

discussion with UR and its consultants throughout the GD14 review and ultimately facilitate its timely completion.”

- 15.10 We expect to have a comprehensive annual cost reporting system in place that will provide us with the information that we need to undertake an effective price control in GD17. We will also consider if any licence modifications are needed to ensure price control submissions are made to provide enough time to complete a robust price control process.

Price cap vs. revenue cap for FE

- 15.11 When PNGL commenced operations it had an annual price cap in place which provided strong incentives to outperform on volumes (as it kept the resulting revenue from outperformance). As the network matured, the strong volume incentive was no longer needed and indeed exposure to volume variation increases the costs of the business. Consequently, PNGL’s control was changed to a cap on revenues in 2007.
- 15.12 FE currently has a price cap in place. As the business matures we are minded to change this to a revenue cap. The price control for FE will remain as a price cap in GD14 but we will be consulting on whether to change this to a revenue cap as part of GD17.

Profiling of revenues

- 15.13 PNGL and FE currently defer some allowed revenue to be recovered from customers in future price controls. This reduces the tariff for current customers but increases the tariffs for future customers from what they otherwise would be.
- 15.14 This deferred revenue, the profiling adjustment, is scheduled to be unwound (i.e., reduce to zero) by 2046 for PNGL and 2035 for FE.
- 15.15 We believe that both FE and PNGL now have a solid base of customers. Consequently, we intend to review the profile adjustment as part of GD17 to assess whether the profile adjustment is still required or whether moving to a model more in line with GB GDNs would provide benefits.

Consumer and stakeholder engagement

- 15.16 We see the engagement of consumers and wider stakeholders (such as special interest groups, consumer bodies, current and prospective investors, banks and credit rating agencies) as an important part of the process of determining outputs and prices.
- 15.17 During GD14 we have involved the Consumer Council of Northern Ireland (CCNI). CCNI has been kept informed of policy developments and has been invited to meetings with GDNs. CCNI is currently undertaking a survey of consumers to understand the issues of importance to them as regards gas networks.

- 15.18 We intend to hold a workshop for a range of stakeholders in August to present a summary of this consultation and to provide an opportunity for their views to be heard and for questions to be answered before the deadline for responses to this consultation.
- 15.19 For GD17 we will be encouraging GDNs to consult more widely with consumers and other stakeholders to better inform their business plans.

Energy efficiency and Shrinkage Gas

- 15.20 Directive 2012/27/EU on Energy Efficiency was introduced on 25 October 2012²⁵. This Directive amends Directives 2009/125/EC and 2010/30/EU and repeals Directives 2004/8/EC and 2006/32/EC.
- 15.21 This Directive establishes a common framework of measures for the promotion of energy efficiency within the European Union in order to ensure the achievement of the 20% headline target on energy efficiency by 2020 and to pave the way for further energy efficiency improvements beyond that date.
- 15.22 Energy efficiency is relevant for networks and one aspect of this is the treatment of shrinkage gas. We plan to review this further before 2017. While this does not have a large impact on GDN allowances given that it is mainly the responsibility of suppliers to supply shrinkage gas in NI the review will fully involve the GDNs.

Meter reading

- 15.23 Gas suppliers are responsible for meter reading in both gas networks in NI. This responsibility currently falls on gas suppliers through licence obligations.
- 15.24 We will consider further in GD17 if this is still appropriate or whether responsibility for meter readings should be moved to GDNs.

Change in ownership structure

- 15.25 We are aware that one or both of FE and PNGL may be sold in the near term. It is possible that FE and PNGL will end up under common ownership.
- 15.26 Under the terms of their licences, any change of ownership must be approved by UR.
- 15.27 Our expectation, in particular if FE and PNGL come under common ownership, is that there may be synergies and other cost savings that can be achieved.
- 15.28 As a consequence, it may be appropriate to re-open this price control for any change of ownership depending on the exact timing. If the businesses come under common ownership we would seek to ensure that the resulting synergy cost savings are shared between the GDNs and consumers.

²⁵ Directive 2012/27/EU: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:315:0001:0056:EN:PDF>

16 NEXT STEPS

Call for responses

- 16.1 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 20 September 2013 and should be addressed to:

Paul Harland

Gas Directorate
Queens House
14 Queen Street
Belfast
BT1 6ED
Tel: 028 9031 6641

E-mail: paul.harland@uregni.gov.uk

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

Stakeholder engagement

- 16.3 We will be holding a workshop for stakeholders on either 6th or 7th August to provide an opportunity for stakeholders to understand the decisions outlined in this consultation and to give an opportunity for questions. If anyone wishes to attend the workshop, please contact:

Karen McConnell
Tel: 028 9031 6343
Email: Karen.mcconnell@uregni.gov.uk

Implementation of the price control

- 16.4 Following the conclusion of this consultation, we will duly consider all responses and then formulate our final decision.
- 16.5 We will also provide an opportunity for licence holders to discuss any issues with us.
- 16.6 We intend to issue our final determination during December 2013.
- 16.7 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

PNGL Emergency & Network Maintenance Costs

Overview

- 1.1 This Appendix provides additional information on how the allowances have been determined for PNLG's Emergency and Network Maintenance Costs. This appendix should be read in conjunction with the PNLG Emergency & Maintenance section within section 5.
- 1.2 As outlined in the paper, both PNLG & FE have to date reported costs and forecasts for emergencies and maintenance in terms of the account headings used within their businesses. However, to undertake the review for the GD14 price control for both PNLG and FE, we asked Rune to develop a reporting template that would attempt to get both companies to move to a common reporting format and would provide an element of comparability to GB networks.
- 1.3 The emergency and maintenance costs will be reported under the following headings:
 - Call centre costs
 - Emergencies (First Call Costs)
 - Repair activities
 - Maintenance activities
- 1.4 In this Appendix we provide additional detail on the models developed for call centre costs, emergencies and maintenance activities.

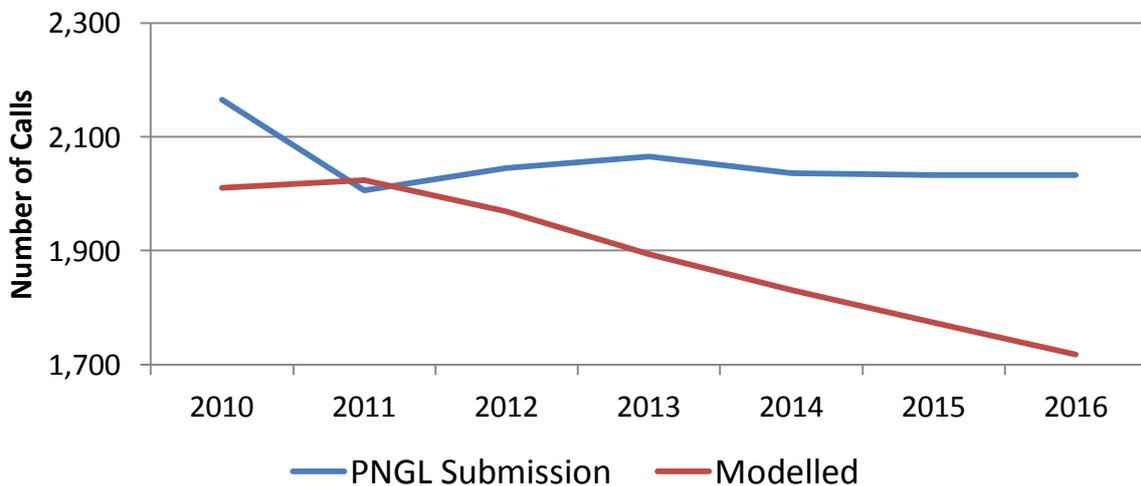
Call Centre Costs

- 1.5 Rune developed a model in order to determine allowances for call centre costs for GD14 based on appropriate call numbers and call centre costs. This section provides details on the model including the principals and assumptions of the model and the outputs from the model.
- 1.6 The principal driver for the call centre activity is the total number of customers connected to the network. Rune believe that the trend for number of calls per 10,000 customers should indicate a reduction. This view is based on the increasing scale of the established customer base relative to the level of new customer connections that initially may generate a higher emergency call rate.
- 1.7 The model incorporates a higher number of calls from new customers compared to existing customer calls which should be reducing, highlighted in Figure 1 below. Also, the trend forward does not reflect high levels of calls resulting from the cold winter conditions in 2010 and 2011 as the forecast should be based on mid-point estimates and not exceptional peaks in activity.
- 1.8 The model developed is based on the following principles and assumptions:
 - Actual call volumes for 2010 and 2011 provide the basis for the model.

- The total number of calls is made up of three components; gas emergencies (including escapes), meter problems (particularly electronic prepaid meters) and incorrect calls.
- Based on Rune experience and the level of installation problems, calls from new customers in year are higher than existing customers. The model assumes 1,900 calls/10,000 existing customers and 3,800/10,000 new customers for the years 2010 & 2011.
- Based on the total historical actual calls (2010 & 2011) for PNGL & FE 50% of calls are general enquiry calls.
- 3%/year target reduction in calls from existing customers from 2012, resulting in 1,632 calls/10,000 customers in 2016.
- 1%/year target reduction in calls from new customers from 2012, resulting in 3,614 calls/10,000 customers in 2016.
- Forecast call numbers are derived from the number of customers
- Cost estimates for calls handled are based on the reported numbers for the years 2010 & 2011 and standard figures are used for both companies - £85k/year fixed costs, £20 per emergency call, £5 per incorrect call.

1.9 GD14 forecast activity generated by the model is at a higher level compared to the levels typically seen by gas distribution networks in GB, even allowing for a large number of prepaid meter problems which are not directly comparable between NI installed volumes and GB. We therefore consider the target reductions in numbers are set at an achievable level.

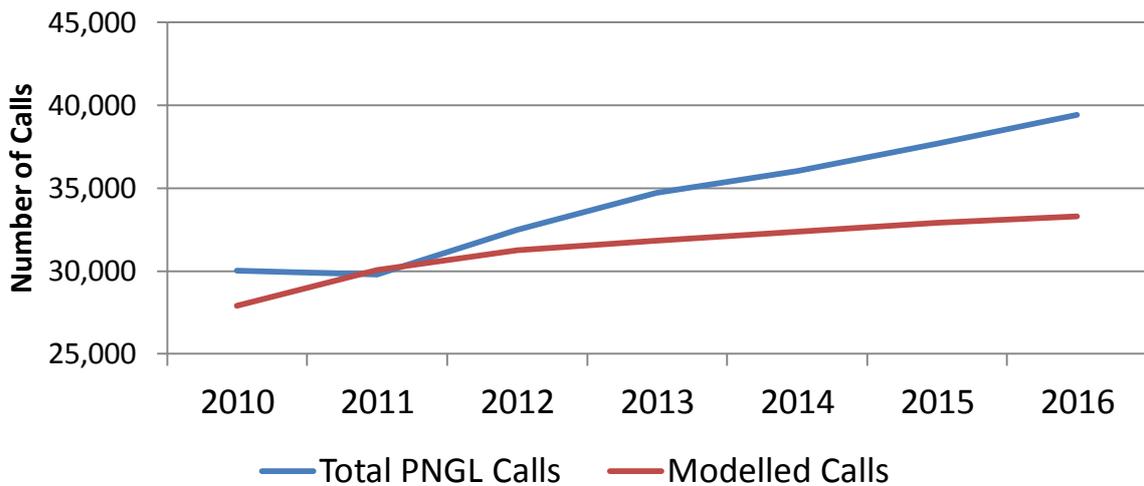
Figure 1 – PNGL Emergency Call Rate Information per 10,000 Consumers



Source: PNGL and the Utility Regulator

1.10 The model assumes an increasing call rate trend, albeit at a lower level than the PNGL forecast submission, for the total number of calls. The model incorporates efficiency improvements of between 1% and 3% as outlined in the principals and assumptions above. The comparison with PNGL’s forecast is shown in the figure below.

Figure 2 – PNGL Total Emergency Calls

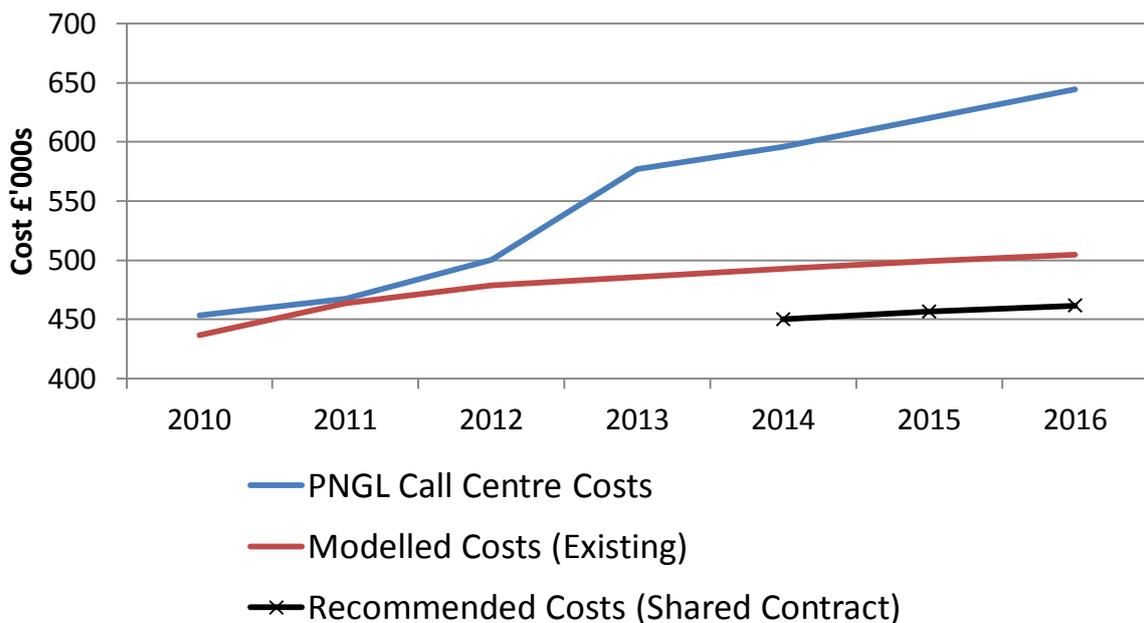


Source: PNGL and the Utility Regulator

Call Centre Contract

- 1.11 Rune's opinion is that savings could be made in the fixed provision costs of this service by PNGL & FE working more closely together and placing a single contract. We have therefore recommended that a 50% saving of the fixed modelled call centre costs is incorporated into the proposed allowances. Over the three years of the control this would be a reduction of £127,500. The resulting recommendation is shown in Figure 3.
- 1.12 The combination of call volumes and the cost/call generated by the model results in an increasing trend in total call centre costs compared to PNGL's forecast trend which indicates a significantly greater increase as shown in Figure 3 below.

Figure 3 – PNGL Emergency Call Centre Costs



Source: PNGL and the Utility Regulator

1.13 The recommended allowances for call handling are detailed in the table below.

Table 1 – PNGL Emergency Call centre Allowances

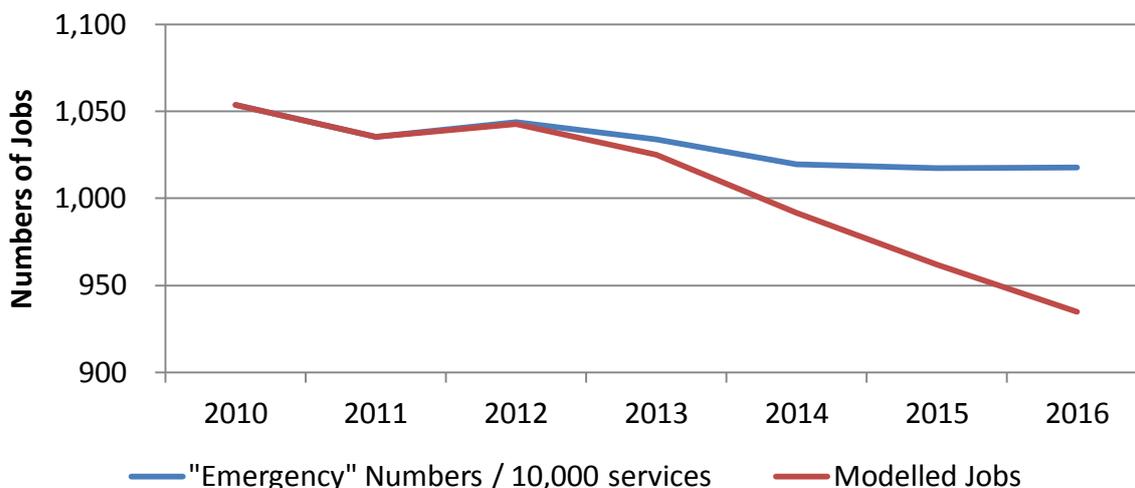
Costs £'000s	Average 2010-2011	PNGL Submission			UR Recommendation		
		2014	2015	2016	2014	2015	2016
Emergency Calls	29,914	36,020	37,698	39,420	32,383	32,898	33,309
Cost per Emergency Call	15	17	16	16	14	14	14
Total Emergency Call Centre Cost £'000s	460	596	620	644	450	457	462

Source: PNGL and the Utility Regulator

Emergencies (First Call Costs)

- 1.14 Rune has developed a model to determine allowances for first call costs. This section provides details on the model including the principals and assumptions of the model and the outputs from the model.
- 1.15 The principal driver for emergency activity is the total number of customers connected to the network.
- 1.16 The model generates a declining trend in activity, as shown in Figure 4 below. Also, the trend forward does not reflect high levels of calls resulting from the cold winter conditions in 2010 and 2011 as the forecast should be based on mid-point estimates and not exceptional peaks in activity.
- 1.17 The model is based on the following principals and assumptions:
- Workload projections are based on the 2011 calls to jobs ratio and the call model described earlier.
 - Forecast Costs for 2012 are modelled, based on £150k fixed cost and a variable cost of £76.28/ emergency job, and rolled forward.
- 1.18 PNGL forecast a slight falling trend in the number of emergency jobs/10,000 customers whereas the model generates a larger reduction, as shown in Figure 4 below. This view is based on the increasing scale of the established customer base relative to the level of new customer connections that initially is likely to generate a higher emergency workload.

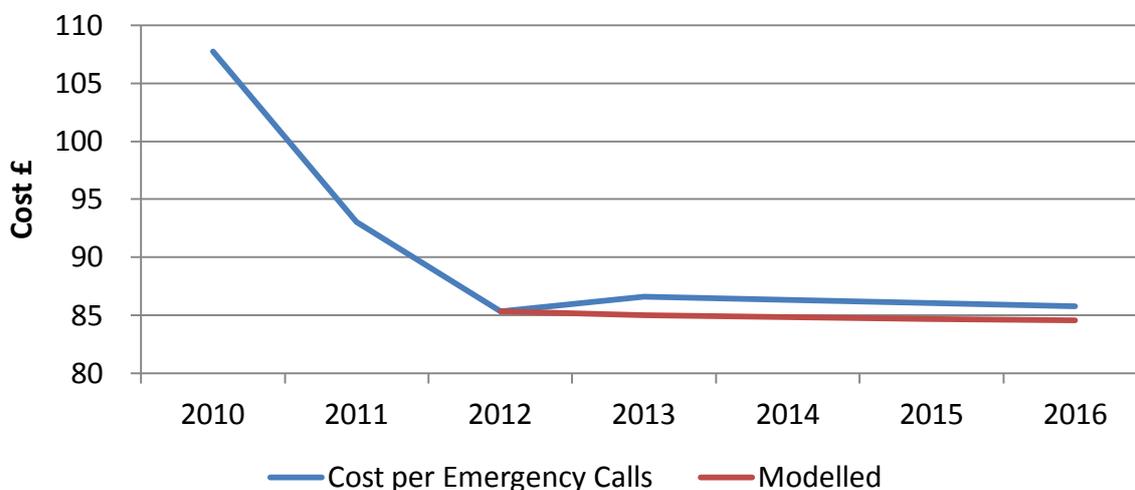
Figure 4 – PNGL First Call Emergency Workload Rate Information per 10,000 Consumers



Source: PNGL and the Utility Regulator

1.19 PNGLs' actual costs per emergency show a reducing trend over the period 2010 – 2011 and a forecast flat ongoing trend. Figure 5 below indicates the comparison between the PNGL forecast cost and the model output cost per emergency.

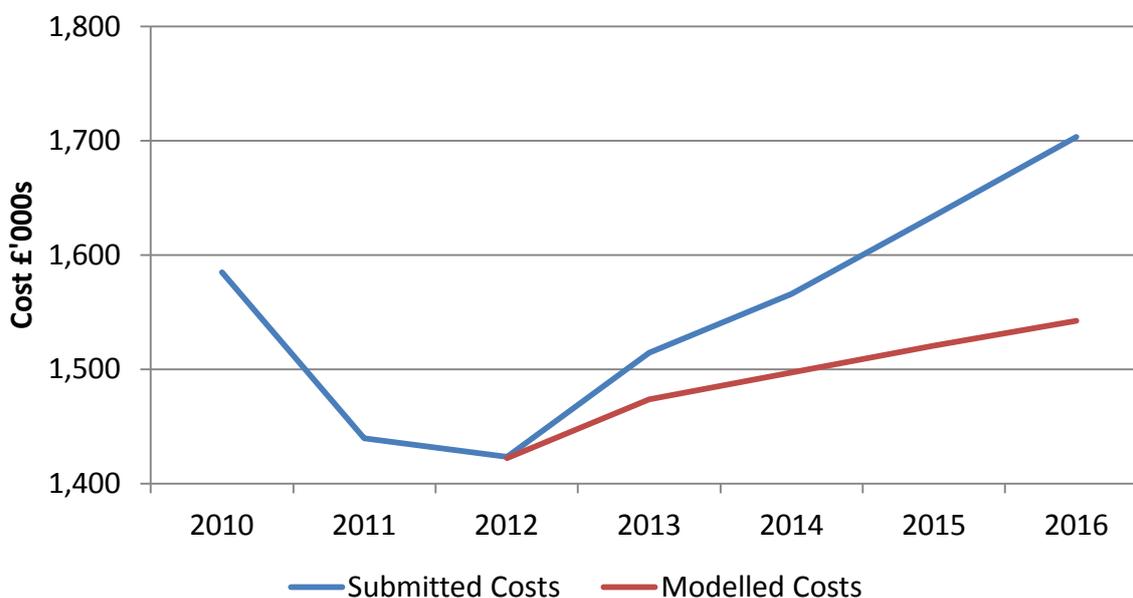
Figure 5 – PNGL First Call Emergency Workload Unit Costs



Source: PNGL and the Utility Regulator

1.20 PNGL's total first call emergency actual costs show a reducing trend over the period 2010 – 2011 and a substantial rising trend in the forecast period. Figure 6 below indicates the comparison between the forecast cost and the model output total cost for first call emergency activity.

Figure 6 – PNGL Total First Call Emergency Costs



Source: PNGL and the Utility Regulator

1.21 The recommended allowances for first call emergency costs are detailed in the following table.

Table 2 – PNGL First Call Emergency Allowances

Costs £'000s	Average 2010-2011	PNGL Submission			UR Recommendation		
		2014	2015	2016	2014	2015	2016
Emergency Numbers	14,997	18,034	18,874	19,736	17,542	17,844	18,128
Cost per Emergency Job	101	87	87	86	85	85	85
Assessed Emergency Cost	1,515	1,566	1,634	1,703	1,497	1,520	1,542
PES Profit Element (14%) ²⁶					210	213	216
Total Emergency Cost	1,515	1,566	1,634	1,703	1,288	1,308	1,326

Source: PNGL and the Utility Regulator

Maintenance Activities

1.22 As outlined in the PNGL Emergency & Maintenance section of section 5, we have taken the approach of reviewing the detailed actual expenditures reported by both companies and setting to one side items considered exceptional (i.e. not a regular and consistent item of expenditure). This expenditure has then been rolled forward from the levels at 2011 through 2012 & 2013 to provide a base level of expenditure in 2014-2016.

²⁶ The Utility Regulator estimates the net profit margin relating to PES rates to be 14%. This has been removed from all PES related emergency activity.

- 1.23 We then looked at adding to this base level of expenditure items which have been identified by the PNGL as being a justified extra expenditure required in the years 2014-2016. Rune was not convinced that certain items have been sufficiently justified as expenditure required in the GD14 period; therefore some items have been excluded from the recommended allowances.
- 1.24 This section will provide additional information on Rune's model, including the principals and assumptions upon which it is based. This section also provides detail on the costs which have been excluded to create the baseline costs and the analysis of the costs which are to be added back for 2014-2016

Analysis model

- 1.25 The historical maintenance reported costs have been reviewed and PNGL forecasts and have separated out items they consider to be exceptional in order to create the baseline maintenance costs.
- 1.26 The model then uses customer numbers as a primary driver to roll forward the base level expenditure into the forecast years.
- 1.27 The model is based on the following principles and assumptions:
- Actual Maintenance costs for 2011 provide the basis for the model (assessed in conjunction with the costs reported in 2009 2010 & 2011).
 - Using detailed information provided by PNGL the model has been developed to allocate a cost of maintenance for each I&C customer. A further cost for every customer (I&C & Domestic) has been included within the model set at a rate of 6% of the rate set for I&C customers. These rates are set such that the model produces the same actuals for 2010 & 2011 that have been reported by PNGL (excluding exceptional costs).
 - A reduction of 10% has been made to the baseline costs to reflect the level of efficiency savings which can be expected each year of the forecast period.

Actual Costs Excluded for Baseline

- 1.28 The actual costs incurred in 2010 & 2011 were reviewed and an assessment made of which costs were considered exceptional items and would not be rolled forward into the baseline maintenance. These costs are listed in the table below.

Table 3 – Establishing the Base Maintenance Costs for PNGL

Item (Costs £'000s)	PNGL Actuals	
	2010	2011
Actual Maintenance Costs	1,736,549	1,736,549
Exceptional Items	860,145	945,524
DSEAR	125,394	160,236
SWR Domestic	398,047	427,225
SWR I&C	19,448	9,364
Battery Changes	252,111	306,872
Energy Care Equipment	14,344	16,596
>U6 meter stock provision	50,801	25,232
Established Base Cost	876,404	791,025

Source: PNGL and the Utility Regulator

Assessment of Exceptional Items in Forecast

- 1.29 Following the establishment of the base maintenance costs using the model described above we have then considered which forecast exceptional items they consider justified to be added on top of the base costs. Rune was not convinced that certain items have been sufficiently justified and have therefore been excluded from the recommended allowance.
- 1.30 The adjustments to the added back costs have been developed on the following basis:
- Replacement Telemetry Cost estimates have been allowed.

- SWR Domestic

PNGL have substantially increased the forecast number of SWR jobs from their forecasts in PNGL12. They have provided no explanation for this, and we consider that the new forecasts are unreasonably high. We are also aware that PNGL do in fact charge domestic customers directly for some SWR jobs that are carried out, and in accordance with their connection policy many other SWR jobs will be charged to the relevant Supplier who can pass on the charge to the customer. We have therefore determined new SWR Domestic job numbers based on the ratio of jobs to customers forecast in PNGL12 and rolled forward.

PNGL state that meter exchanges make up 65% of the total Domestic SWR jobs and we accept this. We have then calculated the number of meter exchanges for credit to prepay and vice-versa based on the PNGL12 forecast breakdowns.

In accordance with the proposed change of policy outlined in the Maintenance section of section 5, we are granting allowances for meter exchanges from credit to prepay and additional SWR jobs including meter box repairs, quality inspections etc. Full allowances for meter exchanges from prepay to credit will not be allowed, with the exception for a small allowance for vulnerable customers, 125 @ £52.32 per year.
- PAYG Switches

The allowance have been set to zero for this category as PNGL state that they are not in a position to distinguish the reason for a meter exchange and therefore any meter exchanges requested due to the customer changing supplier will be included in the SWRs.
- SWR I&C

The allowance have been set to zero for this category as we consider that a customer should be charged for the costs of a meter exchange where requested
- Battery Changes

Rune believe as more experience is gained regarding the operation of the batteries, assessments can be made to extend the planned life of the installed batteries. Therefore a 15% reduction in this activity has been proposed.

- RCM Upgrades Cost estimates have not been allowed for these upgrades as Rune are of the opinion they are upgrades identified by the data gathering process. We believe these upgrades would not have been required if installation had been built to appropriate standards. We consider that implementing an Asset Management System such as RCM will in fact be beneficial to PNGL and we therefore are not granting an allowance towards the costs.
- Energy Care Equipment PNGL have not given sufficient explanation as to why costs are not responsibility of the Supplier
- >U6 Meter Stock Provision PNGL have not given sufficient information as to why the provision grows year on year and we are not aware of any reason why PNGL would need to increase their existing meter stock year on year.

1.31 The resulting costs for the assessment of exceptional items are given in the following table

Table 4 – PNGL Maintenance Added Back Costs

Item (Costs £'000s)	PNGL Submission			Recommended		
	2014	2015	2016	2014	2015	2016
PNGL Submitted Base Costs	1,241,699	1,463,409	1,228,860			
Modelled Base Costs				1,194,000	1,250,667	1,306,083
Exceptional Items Added Back	1,159,626	1,167,839	1,107,072	663,730	686,586	679,812
PAYG switchers	86,086	113,003	118,268	0	0	0
Replacement Telemetry	33,915	33,915	0	33,915	33,915	0
SWR Domestic	436,703	451,785	456,077	277,647	290,064	302,481
SWR I&C	25,885	26,598	27,312	0	0	0
Battery Changes	414,315	426,597	443,918	352,167	362,607	377,330
RCM Upgrades	103,345	55,493	0	0	0	0
Energy Care Equipment	20,486	21,557	22,605	0	0	0
>U6 meter stock provision	38,892	38,892	38,892	0	0	0
Total Before Efficiency Assessment	2,401,325	2,631,248	2,335,931	1,857,730	1,937,254	1,985,894
Efficiency 10% (on Base Costs)				-119,400	-125,067	-130,608
Total Maintenance				1,738,330	1,812,187	1,855,286

Source: PNGL and the Utility Regulator

- 1.32 As outlined in the Maintenance section of section 5, a 10% efficiency has been applied to the baseline maintenance costs each year from 2014 – 2016. This is shown in the table above.
- 1.33 The UR has also disallowed the profit margin on all PES activity and we have therefore removed the 14% profit element from the maintenance activities which are carried out by first call operatives. This is also explained in section 5 of the paper, and the effect is shown in the following table. This table shows that the allowances proposed by UR for maintenance.

Table 5 – PNGL Maintenance Allowances

Costs £'000s	Average 2010- 2011	PNGL Submission			UR Recommendation		
		2014	2015	2016	2014	2015	2016
Total Assessed Maintenance Cost	1,879	2,401	2,631	2,336	1,738	1,812	1,855
Assessed Maintenance Cost (PES Related)	1,323	1,686	1,778	1,724	1,354	1,325	1,439
Assessed Maintenance Cost (other)	556	716	853	612	384	487	416
PES Profit Element (14%)					190	186	201
Recommended Allowance	1,879	2,401	2,631	2,336	1,549	1,627	1,654

Source: PNGL and the Utility Regulator

1 APPENDIX 2

2 FE Emergency & Network Maintenance Costs

Overview

- 1.34 This Appendix provides additional information on how the allowances have been determined for FE's Emergency and Network Maintenance Costs. This appendix should be read in conjunction with the PNLG Emergency & Maintenance section within Chapter 6.
- 1.35 As outlined in the paper, both FE & FE have to date reported costs and forecasts for emergencies and maintenance in terms of the account headings used within their businesses. However, to undertake the review for the GD14 price control for both companies, we asked Rune to develop a reporting template that would attempt to get both companies to move to a common reporting format and would provide an element of comparability to GB networks.
- 1.36 The emergency and maintenance costs will be reported under the following headings:
- Call centre costs
 - Emergencies (First Call Costs)
 - Repair activities
 - Maintenance activities
- 1.37 In this Appendix we provide additional detail on the models developed for call centre costs, emergencies and maintenance activities.

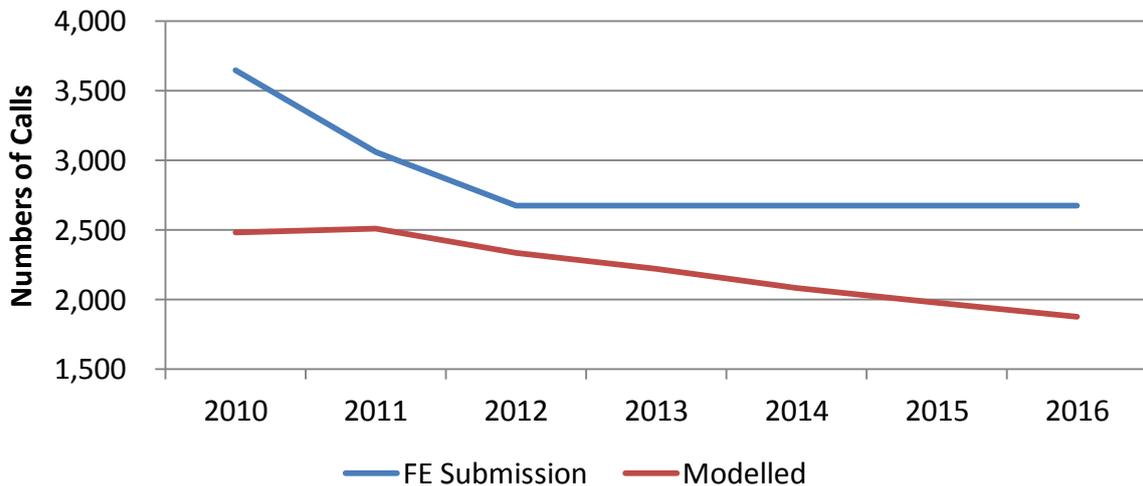
Call Centre Costs

- 1.38 Rune developed a model in order to determine allowances for call centre costs for GD14 based on appropriate call numbers and call centre costs. This section provides details on the model including the principals and assumptions and the outputs from the model.
- 1.39 The principal driver for the call centre activity is the total number of customers connected to the network. FE forecast a flat trend in the number of calls per 10,000 customers, whereas Rune believe that the trend should indicate a reduction. This is shown in Figure 1 below. This view is based on the increasing scale of the established customer base relative to the level of new customer connections that initially may generate a higher emergency call rate.
- Analysis model**
- 1.40 The model incorporates a higher number of calls from new customers compared to calls from existing customer as these should be reducing. Also, the trend forward does not reflect high levels of calls resulting from the cold winter conditions in 2010 and 2011 as the forecast should be based on mid-point estimates and not exceptional peaks in activity.
- 1.41 The model is based on the following principles and assumptions:
- Actual call volumes for 2010 and 2011 provide the basis for the model.

- The total number of calls is made up of three components; gas emergencies (including escapes), meter problems (particularly electronic prepaid meters) and incorrect calls.
- Based on Rune experience and the level of installation problems, calls from new customers in year are higher than existing customers. The model assumes 1,900 calls/10,000 existing customers and 3,800/10,000 new customers for the years 2010 & 2011.
- Based on the total historical actual, calls (2010 & 2011) for FE and PNG, 50% of calls are general enquiry calls.
- 3%/year target reduction in calls from existing customers from 2012, resulting in 1,632 calls/10,000 customers in 2016.
- 1%/year target reduction in calls from new customers from 2012, resulting in 3,614 calls/10,000 customers in 2016.
- Forecast call numbers are derived from the number of customers.
- Cost estimates for calls handled are based on the reported numbers for the years 2010 & 2011 and standard figures are used for both companies - £85k/year fixed costs, £20 per emergency call, £5 per enquiry call.

1.42 The model generates a higher level of calls per 10,000 consumers for 2014-2016 compared to the levels typically seen by gas distribution network in GB, despite allowing for a large number of prepaid meter problems which are not directly comparable between NI installed volumes and GB. Rune therefore considers the target reductions in call numbers are set at an achievable level.

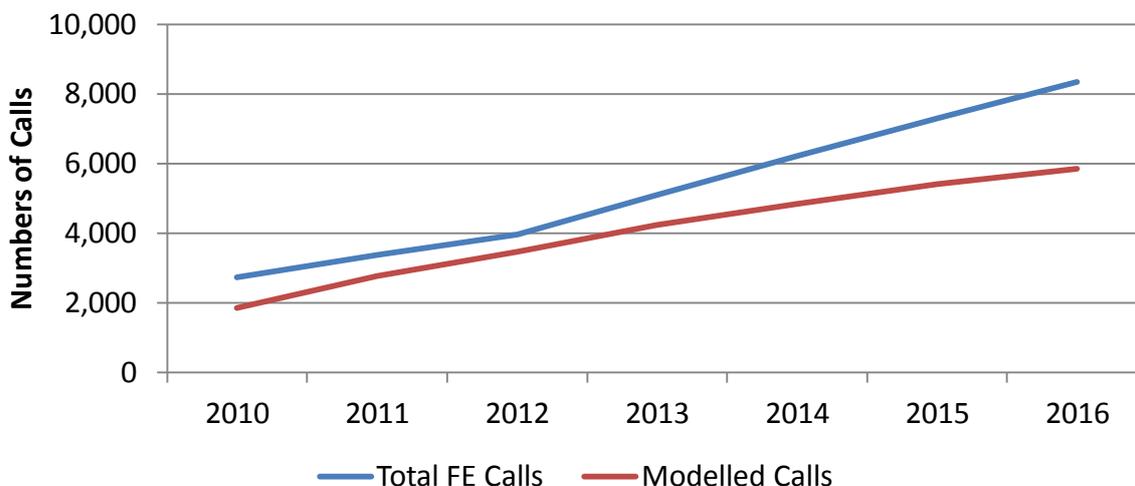
Figure 1 – FE Emergency Call Rate Information per 10,000 Consumers



Source: FE and the Utility Regulator

1.43 The model assumed a trend for the total number of calls which incorporates the efficiency improvement between 1% and 3% outlined above. Figure 2 displays a comparison with FE’s forecast for the total number of calls and the modelled number of calls. Given that FE are forecasting increased numbers of customers from a lower base level than PNGL, the model is forecasting a lower level to that proposed by FE in the years 2014, 2015 & 2016.

Figure 2 – FE Total Emergency Calls

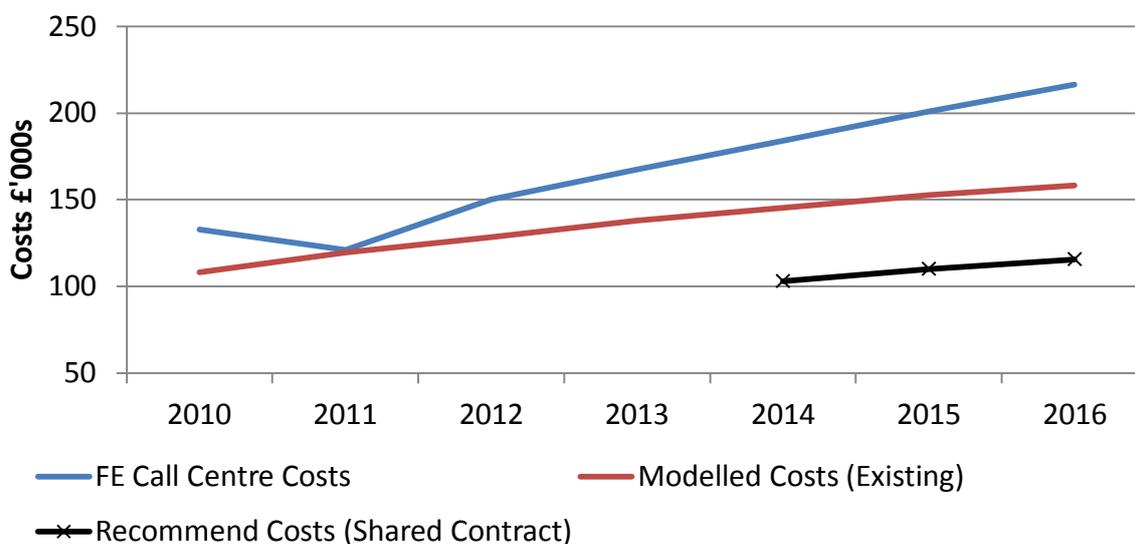


Source: FE and the Utility Regulator

Call Centre Contract

- 1.44 As explained in section 6 of the paper, whilst FE & PNGL use the same provider for the call centre each places its own contract for the provision of emergency call handling and dispatch. Rune believe that savings could be made in the fixed provision costs of this service by FE & PNGL working more closely together and placing a single contract. Therefore we have recommended that a 50% saving of the fixed modelled call centre costs is incorporated into the proposed allowances. Over the three years of the control this would be a reduction of £127,500. The model therefore forecasts a lower unit rate for handling calls than was submitted by FE.
- 1.45 The combination of call volumes and the cost/call generated by the model results in an increasing trend in total call centre costs, but at a lower level than the FE submission. This is shown in Figure 3 below.

Figure 3 – FE Emergency Call Centre Costs



Source: FE and the Utility Regulator

1.46 The recommended allowances for call handling are detailed in the table below.

Table 1 – FE Emergency Call centre Allowances

Costs £'000s	Average 2010-2011	FE Submission			UR Recommendation		
		2014	2015	2016	2014	2015	2016
Emergency Calls	3,051	6,213	7,310	8,339	4,841	5,406	5,853
Cost per Emergency Call	42	30	27	26	21	20	20
Total Emergency Call Centre Cost	127	184	201	216	103	110	116

Source: FE and the Utility Regulator

Emergencies (First Call Costs)

1.47 Rune has developed a model to determine allowances for first call costs. This section provides details on the model including the principals and assumptions of the model and the outputs from the model.

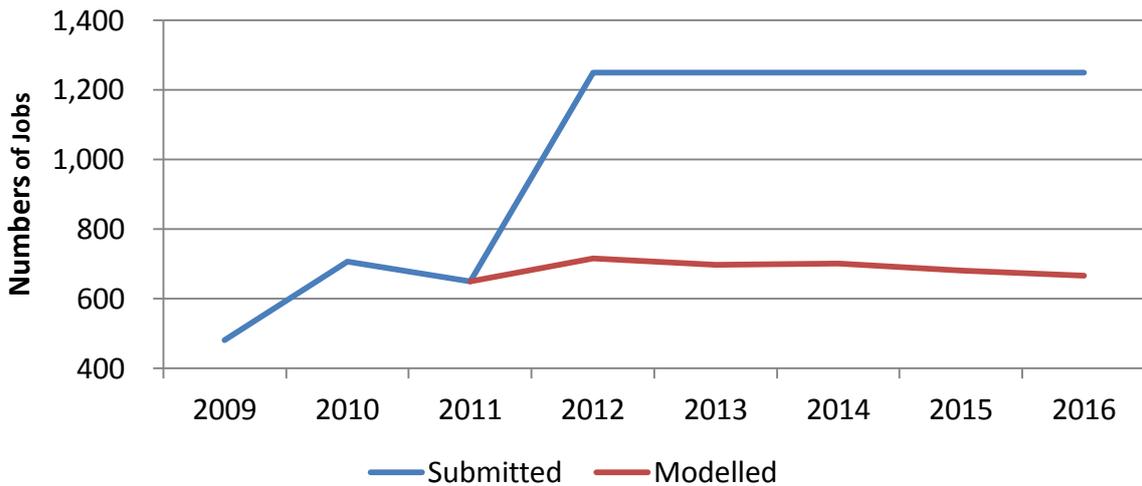
1.48 The principal driver for emergency activity is the total number of customers connected to the network. FE forecast an on-going increase in the number of emergency jobs per 10,000 customers, whereas Rune believe that the trend should indicate a moderate reduction. This view is based on the increasing scale of the established customer base relative to the level of new customer connections that initially is likely to generate a higher emergency workload. Also, the trend forward does not reflect high levels of calls resulting from the cold winter conditions in 2010 and 2011 as the forecast should be based on mid-point estimates and not exceptional peaks in activity. This trend is shown in Figure 4 below.

1.49 The model is based on the following principals and assumptions:

- Workload projections are based on the 2011 calls to jobs ratio.
- Forecast Costs for 2012 are modelled, based on £78k fixed cost and a variable cost of £78.25/ emergency job, and rolled forward.

1.50 FE forecast a step change in the number of emergency jobs/10,000 customers in 2012 compared to the actual levels reported. There is no evidence for any increase in the number of calls per 10,000 customers and taking account of the expected fall towards GB levels as the gas market matures their model generates a reduction, as shown in Figure 4 below.

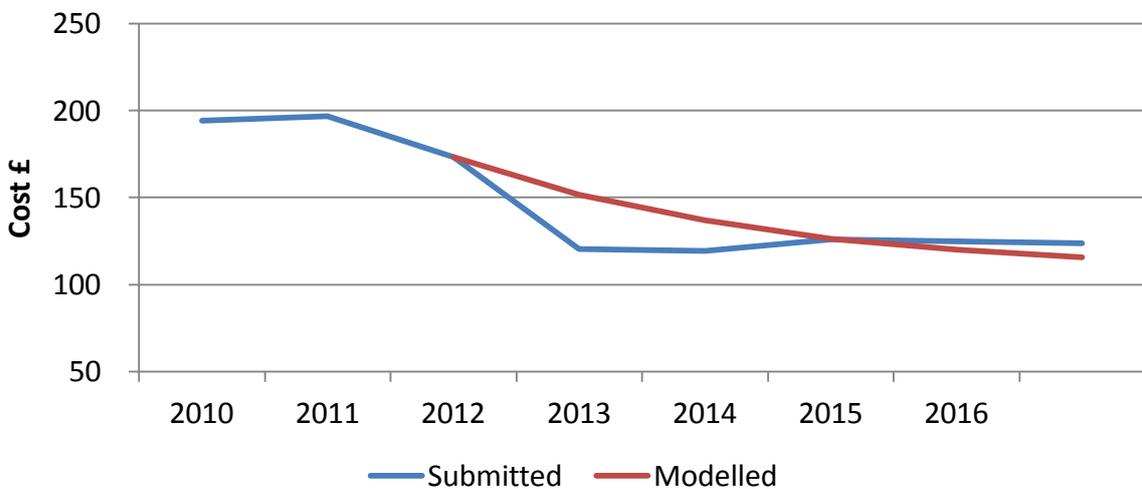
Figure 4 – FE First Call Emergency Workload Rate Information per 10,000 Consumers



Source: FE and the Utility Regulator

1.51 FEs' actual costs per emergency job show a substantial reducing trend over the period 2009 – 2013 and a forecast flat ongoing trend. The model does not project such a rapid fall in 2012 which they believe is accounted for in a change to the assumed number of calls. Figure 5 below indicates the comparison between the FE forecast cost and the model output cost per emergency job.

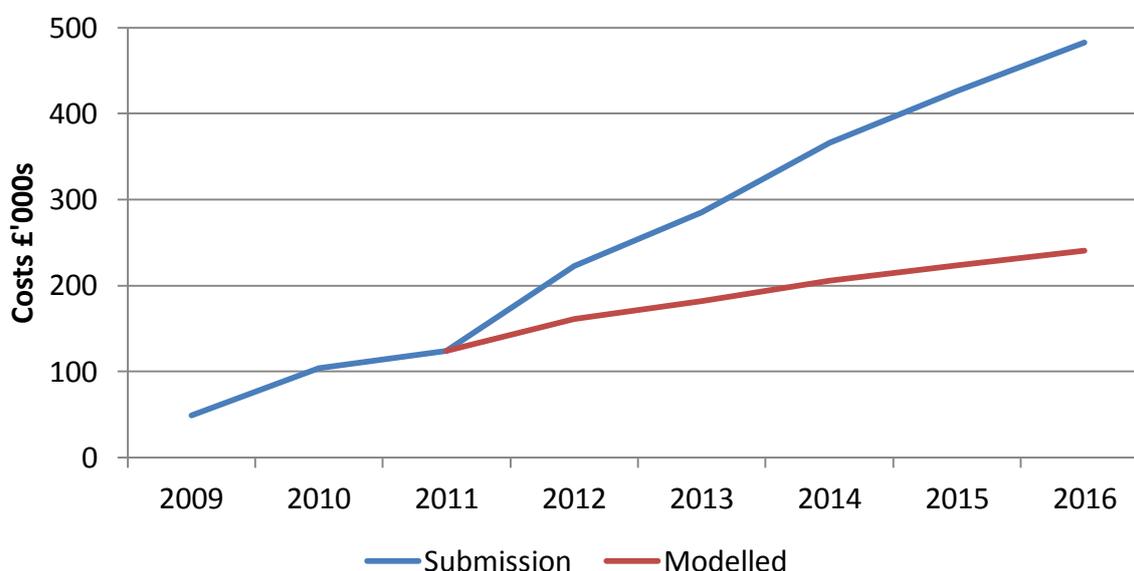
Figure 5 – FE First Call Emergency Workload Unit Costs



Source: FE and the Utility Regulator

1.52 FE's total first call emergency costs show an increasing trend over the period 2009 – 2016. The combination of workload and unit cost results in the model also generating an increasing trend but at a lower level than FE's forecast. Figure 6 below indicates the comparison between the forecast cost and the model output total cost for first call emergency activity.

Figure 6 – FE Total First Call Emergency Costs



Source: FE and the Utility Regulator

1.53 The recommended allowances for event driven emergency work are detailed in the following table.

Table 2 – FE Emergency Workload Allowances

Costs £'000s	Average 2010-2011	FE Submission			UR Recommendation		
		2014	2015	2016	2014	2015	2016
Emergency Numbers	622	2,905	3,418	3,899	1,628	1,861	2,078
Cost per Emergency Job	185	126	125	124	126	120	116
Total Emergency Cost	115	366	426	483	205	224	241

Source: FE and the Utility Regulator

Maintenance Activities

1.54 The FE Emergency & Maintenance section of section 6 outlines that we have taken the approach of reviewing the detailed actual expenditures reported by both companies and setting to one side items considered exceptional (i.e. not a regular and consistent item of expenditure). This expenditure has then been rolled forward from the levels at 2011 through 2012 & 2013 to provide a base level of expenditure in 2014-2016.

- 1.55 We then looked at adding to this base level of expenditure items which have been identified by FE as being a justified extra expenditure required in the years 2014-2016. Rune was not convinced by the justification for expenditure in some areas and therefore some items have been excluded from the recommended allowances.
- 1.56 This section will provide additional information on Rune's model, including the principals and assumptions upon which it is based. This section also provides detail on the costs which have been excluded to create the baseline costs and the analysis of the costs which are to be added back for 2014-2016

Analysis model

- 1.57 FE's reported maintenance costs and forecasts have been reviewed and items have been separated out that are considered to be exceptional. This creates baseline maintenance costs.
- 1.58 The model then uses customer numbers as a primary driver to roll forward the base level expenditure into the forecast years.
- 1.59 The model is based on the following principals and assumptions:
- Actual Maintenance costs for 2011 provide the basis for the model (assessed in conjunction with the costs reported in 2009, 2010 & 2011).
 - Using detailed information provided by PNGL²⁷ the model has been developed to allocate a cost of maintenance for each I&C customer. A further cost for every domestic customer has been included within the model set at a rate of 47% of the rate set for I&C customers. These rates are set such that the model produces the same actuals for 2009, 2010 & 2011 that have been reported by FE (excluding exceptional costs).
 - A reduction of 10% has been made to the baseline costs to reflect the level of efficiency savings which can be expected each year of the forecast period.

Actual Costs Excluded for Baseline

- 1.60 Rune reviewed the actual costs incurred in 2009, 2010 & 2011 and made an assessment of which costs were considered exceptional items and would not be rolled forward into the baseline maintenance. These costs are listed in the table below.

²⁷ PNGL Data was used due to the lack of detailed information provided by FE

Table 3 – Establishing the Base Maintenance Costs for FE

Item (costs £)	FE Actuals		
	2009	2010	2011
Actual Maintenance Costs	248,048	315,139	393,170
Excluded from Base Costs	31,255	11,692	111,713
Meter Fault Software	1,420	0	0
DRD Works	1,346	817	16,269
Meter Keys	0	4,456	0
Third Party Investigations	8,875	0	7,522
Consultancy	0	0	37,619
firmuscare Pilot	0	0	20,638
LPG Site Prep	8,616	0	5,386
Boiler Service	4,179	2,802	17,109
Meter Reading	2,463	2,018	1,416
Provision for firmuscare	4,357	0	2,449
Other Site Works	0	1,599	2,366
Bridge Survey & Inspections	0	0	939
B6 Reg. Replacement	0	0	0
Established Base Costs	216,792	303,447	281,457

Source: FE and the Utility Regulator

Assessment of Exception Items in Forecast

1.61 Following the establishment of the base maintenance costs using the model described above we then considered which forecast exceptional items should be added back on top of the base costs. Rune considered that sufficient justification was not provided for some items and therefore they have been excluded from the recommended allowance.

1.62 The adjustments to the added back costs have been developed on the following basis

- Boiler Servicing
 - Meter Reading
 - Provision for firmuscare customers
- } We believe these items are not appropriate for the gas distribution licence holder and have therefore been removed. We believe these items should be funded by the supplier.
- Other Site Works
- } firmus have not provided any explanation for these costs and therefore they have been excluded from the determined allowances
- Bridge Survey and Inspections
- } The justification for an increase from low level historical costs is limited. Cost forecasts have been reduced by 50% therefore.

- B6 Regulator replacement
In the case of the this replacement Rune was not convinced this item has been sufficiently justified particularly in the light of the manufacturers guidance forwarded to the UR which would suggest a longer period of operation is now appropriate.
- Leakage survey and Valve Inspection
Forecast annual costs for valve inspections and maintenance comprise £15K fixed cost plus £1k/valve. No justification for the fixed cost has been provided and the unit cost is considered high for the operations involved. Costs have been reduced by £15k and £500/valve resulting in an allowance of £10k per year. Leakage survey costs at £12k per year are accepted.
- PAYG Battery Replacement
The unit cost at £100/battery change is considered excessive has been reduced to £50 and the volume has been reduced to 100 units (installed in 2006 as previously advised to UR by FE)

1.63 FE included an additional level of expenditure of £19k for PPE Clothing & Equipment in 2014. Having reviewed the case made by FE we are not convinced that special provision should be made for this expenditure and therefore this line of expenditure has been included within the base costs.

1.64 The resulting costs for the assessment of exceptional items is given in the following table.

Table 4 – FE Maintenance Added Back Costs

Item (costs £)	FE Submission			Recommended		
	2014	2015	2016	2014	2015	2016
FE Submitted Base Cost	533,839	559,353	601,154			
Modelled Base Cost				336,625	352,601	368,225
Exceptional Items Added Back	116,720	124,684	204,535	30,000	30,000	35,000
Boiler Service	38,190	44,835	51,147	0	0	0
Meter Reading	8,030	9,349	10,587	0	0	0
Provision for firmuscare	3,000	3,000	3,000	0	0	0
Other Site Works	4,500	4,500	4,500	0	0	0
Bridge Survey & Inspections	16,000	16,000	16,000	8,000	8,000	8,000
B6 Reg. Replacement	0	0	40,000	0	0	0
Leakage Survey & Valve Inspection	47,000	47,000	47,000	22,000	22,000	22,000
PAYG Battery Replacement	0	0	32,300	0	0	5,000
Total Before Efficiency Assessment	650,560	684,037	805,689	366,625	382,601	403,225
Efficiency 10%				33,663	35,260	36,822
Total Maintenance				332,963	347,341	366,402

Source: FE and the Utility Regulator

1.65 The 10% efficiency has been applied to the baseline maintenance costs in each year from 2014-2016 in this table. This results in total allowances for maintenance as shown in the table below.

Table 5 – FE Maintenance Allowances

<i>Costs £'000s</i>	<i>Average 2010- 2011</i>	<i>FE Submission</i>			<i>UR Recommendation</i>		
		<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>
Total Maintenance Cost £'000s	354	651	684	806	333	347	366

Source: FE and the Utility Regulator

APPENDIX 3

Capital expenditure analysis for PNGL and FE

As stated in the main body of this report, we commissioned Rune Associates (Rune) to examine the capital expenditure programme of PNGL and FE and provide advice on efficient allowances that we should grant over this price control period. The text below contains extracts from the Rune report explaining how they completed this analysis.

Basket of Work Approach

- 4.1 In its submission PNGL and FE provided a build-up of its estimated capex costs, which included breakdowns for the following items:
- Feeder mains;
 - Infill mains;
 - Pressure Reduction;
 - Services;
 - Meters; and
 - Other Capex.
- 4.2 To facilitate comparison between PNGL, FE and similar gas distribution networks in Great Britain where the split between these categories of work and expenditure differs, Rune has adopted an analysis technique which combines the areas of expenditure into a “basket of work”. The basket of work can then be analysed and compared between benchmarks according to the volume of each work category. This technique builds upon principles which have been used for Ofgem analysis for both GDPRC1 and RIIO-GD1 price controls. The key steps in the process are:
- Identify the items of work contained within the basket
 - Select a standard set of unit rates to be used for each of these items
 - Identify the workloads and associated costs submitted by the companies for these items
 - Calculate the product of the company workload and the standard unit rate for each work item
 - Rescale these for each work item so that the total cost equals the company’s submission
 - Establish an efficient level of performance for the basket of items in the most recent year for which actual information is available
 - Calculate the efficient level of performance for each of the work items in that year
 - Select assumptions for expected efficiency savings and price effects
 - Roll the efficient level of performance forward up to and across the GD 14 period using the efficiency and price effect assumptions
- 4.3 Within the basket of work the costs and workloads for the following items of work have been included:
- Feeder mains (excluding 7 bar);

- Infill mains;
 - Services; and
 - Meters;
- 4.4 The following items have been excluded from the basket and considered separately:
- 7 Bar Mains
 - Pressure Reduction Installations
 - Meter Replacements
- 4.5 The technique involved assigning a typical cost value for each unit of work and using these to compare the companies' performance on a consistent basis. These units have been used by Ofgem for both GDPRC1 and RIIO-GD1. Whilst these are appropriate for comparison with GB gas distribution networks (GDNs), for the purposes of GD14, values have also been included to reflect the additional activities of providing and installing meters and associated regulators which are undertaken by the Northern Ireland networks.
- 4.6 In carrying out their analysis Rune has made an assumption regarding the element of cost which is fixed, i.e. not dependent on the level of workload carried out. They have explored the sensitivity of their analysis to this assumption and have concluded that the level of fixed costs assumed do not have a material impact on the assessment given the relatively close match between the workload levels between PNGL & FE. The analysis has been carried out using a level of 5% of the average costs of the two companies in 2011 which equates to £599k.
- 4.7 A set of standard unit rates have been used in the analysis. These rates have been set to reflect the typical costs reported by the NI gas distribution companies whilst keeping the ratios used to by Ofgem in previous prices controls to compare GB networks. Rune has had to add to this list rates for meter costs which are not part of the GB networks workloads.

PNGL/FE Performance Comparison

- 4.8 The major comparison which has been used to form the basis of the Rune recommendations is a direct comparison of PNGL & FE actual reported costs in 2011.
- 4.9 The principal assumption used in this comparison and resulting recommendation is that the unit rates for both NI companies should be approximately the same unless specific evidence is available to demonstrate material underlying cost differences.
- 4.10 The reported unit costs would suggest significant differences in some cases, for example on the provision and installation of domestic meters. We have attempted to understand this difference although we believe the primary cause is the allocation of costs between meter and service installation, a view endorsed by the companies. Our analysis has therefore attempted to minimise the impact such reporting inconsistencies can introduce.
- 4.11 Our recommendations are based upon an assessment of efficiency in 2011 (The last actual reported performance) and rolling forward this performance to the years 2014-2016 using the forecasts workloads.
- 4.12 The above methodology has been used to prepare recommendations on capital allowances at total level and for each cost item. The total recommended capex allowance is consistent

with the comparative efficiency analysis but, some of the recommendations at cost item level may appear to offer allowances that are greater than those requested or that are significantly lower. This occurs as a result of the restatement of costs to enable comparison between the NI companies and the assumption that the unit costs of both of these companies should be similar.

4.13 The application of the fixed cost assumption does result in some differences in unit rates between the companies for the same activity; this is due to differences between the companies in the levels of workload across which the fixed costs are apportioned.

4.14 The following tables relate to PNGL and show:

- Table 1: Comparison of workload forecasts as submitted by PNGL with the determined workload;
- Table 2: Comparison of unit rates per activity as submitted by PNGL, the Restated unit rates to enable direct comparison and the UR's determined unit rates;
- Table 3: Comparison of PNGL's requested allowances based on the unit rates, the Restated allowances to enable direct comparison and the UR's determined allowances.

Table 1 – PNGL Workload for Basket of Work Items

	PNGL Submission				UR Allowance		
	2009-2011	2014	2015	2016	2014	2015	2016
4 bar & Feeder mains	9,144	3,105	3,443	3,713	3,105	3,443	3,713
Infill mains existing	44,163	38,907	38,920	38,930	21,600	21,600	21,600
Infill mains new build housing	11,878	25,244	28,056	30,311	13,570	15,045	16,225
Domestic services	9,322	8,400	8,250	8,050	9,800	10,050	10,250
Domestic meters	8,193	8,400	8,250	8,050	9,800	10,050	10,250
I&C Services	446	378	378	378	378	378	378
I&C meters	446	378	378	378	378	378	378

Source: PNGL & Rune Associates

Table 2 – PNGL Unit Rates for Basket of Work Items

	PNGL Submission				PNGL Restated Submission				UR Allowance		
	2009 - 2011	2014	2015	2016	2009- 2011	2014	2015	2016	2014	2015	2016
4 bar & Feeder mains	87	43	42	42	68	71	72	72	70	70	70
Infill mains existing	56	57	57	57	68	71	72	72	70	70	70
Infill mains new build housing	55	60	59	59	52	55	55	56	54	54	54
Domestic services	523	567	568	567	561	579	573	566	582	576	571
Domestic meters	288	290	293	294	204	214	215	216	211	210	210
I&C Services	1,599	2,070	2,086	2,094	1,643	1,583	1,594	1,601	1,560	1,558	1,557
I&C meters	660	559	563	565	701	1,111	1,119	1,124	1,095	1,094	1,093

Source: PNGL & Rune Associates

Table 3 – PNLG Recommended Allowances for Basket of Work Items – Based on Unit Rates

	PNLG Submission				PNLG Restated Submission				UR Allowance		
	2009 - 2011	2014	2015	2016	2009-11	2014	2015	2016	2014	2015	2016
4 bar & Feeder mains	798	132	146	157	619	221	247	267	217	241	260
Infill mains existing	2,469	2,226	2,208	2,200	2,993	2,768	2,788	2,801	1,512	1,512	1,512
Infill mains new build housing	658	1,505	1,656	1,780	615	1,388	1,553	1,685	733	812	876
Domestic services	4,878	4,762	4,686	4,567	5,226	4,867	4,726	4,556	5,705	5,788	5,858
Domestic meters	2,358	2,440	2,417	2,370	1,670	1,796	1,776	1,741	2,068	2,111	2,153
I&C Services	714	783	789	792	733	599	603	605	590	589	588
I&C meters	294	211	213	214	313	420	423	425	414	414	413
Totals	12,168	12,059	12,114	12,080	12,168	12,059	12,114	12,080	11,239	11,467	11,660

4.15 The following tables relate to FE and show:

- Table 4: Comparison of workload forecasts as submitted by FE with the determined workload;
- Table 5: Comparison of unit rates per activity as submitted by FE, the Restated unit rates to enable direct comparison and the UR’s determined unit rates;
- Table 6: Comparison of FE’s requested allowances based on the unit rates, the Restated allowances to enable direct comparison and the UR’s determined allowances.

Table 4 – FE Workload for Basket of Work Items

	FE Submission				UR Allowance		
	2009-2011	2014	2015	2016	2014	2015	2016
4 bar & Feeder mains	42,586	33,390	20,000	20,000	33,390	20,000	20,000
Infill mains existing	39,391	39,104	36,504	28,704	39,104	36,504	28,704
Infill mains new build housing	10,812	14,480	14,480	14,480	14,480	14,480	14,480
Domestic services	2,371	4,000	4,000	3,800	4,000	4,000	3,800
Domestic meters	2,407	4,000	4,000	3,800	4,000	4,000	3,800
I&C Services	275	152	102	52	152	102	52
I&C meters	271	152	102	52	152	102	52

Source: FE & Rune Associates

Table 5 – FE Unit Rates for Basket of Work Items

	FE Submission				FE Restated Submission				UR Allowance		
	2009-2011	2014	2015	2016	2009-11	2014	2015	2016	2014	2015	2016
4 bar & Feeder mains	90	115	117	116	87	104	102	100	74	74	75
Infill mains existing	67	88	88	86	80	99	98	96	70	71	72
Infill mains new build housing	50	45	46	46	62	77	76	74	54	55	55
Domestic services	759	934	947	938	658	840	826	804	595	600	602
Domestic meters	180	198	201	199	238	299	294	287	212	214	215
I&C Services	2,315	4,433	4,527	4,576	1,724	1,332	1,334	1,374	942	969	1,029
I&C meters	1,985	1,413	1,481	1,606	1,159	731	741	789	517	538	591

Source: FE & Rune Associates

Table 6 – FE Recommended Allowances for Basket of Work Items – Based on Unit Rates

	FE Submission				FE Restated Submission				UR Allowance		
	2009-2011	2014	2015	2016	2009-11	2014	2015	2016	2014	2015	2016
4 bar & Feeder mains	3,822	3,843	2,335	2,314	3,685	3,473	2,046	2,000	2,447	1,486	1,504
Infill mains existing	2,643	3,431	3,198	2,457	3,140	3,890	3,571	2,745	2,737	2,592	2,067
Infill mains new build housing	544	655	665	659	667	1,113	1,095	1,070	782	796	796
Domestic services	1,799	3,736	3,790	3,566	1,561	3,362	3,306	3,054	2,380	2,402	2,287
Domestic meters	432	793	805	755	574	1,196	1,176	1,092	848	856	817
I&C Services	636	674	462	238	473	202	136	71	143	99	53
I&C meters	538	215	151	84	314	111	76	41	78	55	31
Totals	10,414	13,348	11,405	10,073	10,414	13,348	11,405	10,073	9,416	8,285	7,555

Source: FE & Rune Associates

