NOTICE OF APPEAL

ENERGY LICENCE MODIFICATION

GD17 PRICE CONTROL

Firmus Energy (Distribution) Limited
(***Appellant***)

and

Northern Ireland Authority for Utility Regulation
(***Respondent***)

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Financial data

All financial data in this Notice of Appeal is in December 2014 prices unless stated otherwise. All figures presented by the UR within the GD17 Final Determination are in December 2014 prices.[1] In accordance with the UR RIGS, FE used December 2014 as its base year for the GD17 submission documents.[2] It should be noted, however, that the model used for the calculation of conveyance charges for FE (the "Pi Model")[3] was calculated using average 2014 prices, pursuant to FE's Licence conditions. The Pi Model is not the subject of this appeal.

[1] **NOA-1 / Tab 7 / Para. 1.9**.

[2] In accordance with the UR RIGS. See, for example, **NOA-1 / Tab 5 / Page 40**.

[3] GD17 Final Determination, Annex 10, **NOA-1 / Tab 7**.

Contents

Written evidence

Exhibit NOA-1 (***NOA-1***)
Witness Statement of Niall Martindale (***Martindale-1***)
Exhibit NM-1 to the Witness Statement of Niall Martindale, FE (***NM-1***)
Expert Witness Statement of Alan Horncastle, Oxera Consulting LLP (***Horncastle-1***)
Exhibit AH-1 to the Expert Witness Statement of Alan Horncastle (***AH-1***)
Expert Witness Statement of Jostein Kristensen, Oxera Consulting LLP (***Kristensen-1***)
Exhibit JK-1 to the Witness Statement of Jostein Kristensen (***JK-1***)
Expert Witness Statement of Nicholas Forrest, Pricewaterhouse Coopers LLP (***Forrest-1***)
Exhibit NF-1 to the Expert Witness Statement of Nicholas Forrest (***NF-1***)

Glossary

Abbreviation	Meaning
AMPR	Advertising and market development
CMA	Competition and Markets Authority
CMA Appeal Rules	CMA, *CC14: Competition Commission Energy Licence Modification Appeals Rules* (September 2012)[4]
Capital Asset Price Model	Capital Asset Price Model
Capex	Capital expenditure
CC	Competition Commission
Connection Incentive	A per connection allowance recoverable for the connections of domestic owner occupied properties intended to cover a GDN's sales-related costs.
Energy Order	Energy (Northern Ireland) Order 2003
FE	Firmus Energy (Distribution) Limited
FE Licence	The Gas Conveyance Licence originally granted to FE in March 2005 and updated from time to time
FTE	Full time equivalent
Gas Order	The Gas (Northern Ireland) Order 1996
GB	Great Britain
GB GDNs	The GDNs operating the 8 gas distribution networks in GB, namely National Grid, Northern Gas Networks, Wales & West and SGN
GD17	The price control which will apply to GDNs in Northern Ireland from 1 January 2017 until 31 December 2022
GD17 Decision	The decision of the UR dated 28 October 2016 which modifies the FE Licence under Article 14 of the Gas Order to give effect to the GD17 price control determination
GDN	Gas distribution network operator
GIS	Geographic Information System
HA	Housing Association
Housing Association	A private, not-for-profit organisation that provides low-cost social housing in Northern Ireland
Licence Area	The "Ten Towns" area outside Greater Belfast, from Londonderry in the North West to Ballymena and from Antrim down to Newry along the South North pipeline
Maintenance	The aggregate of the maintenance and metering cost lines within the GD17 Opex allowance[5]

[4] The CMA decided to use these appeal rules (exhibited at **NOA-1 / Tab 30**) to govern the procedure for any future appeals against UR energy licence modification decisions in its paper titled "CMA's response to consultation on its proposal to extend energy licence modification appeals rules to Northern Ireland appeals" (29 May 2015). **NOA-1 / Tab 31** / **Para 10**.

Abbreviation	Meaning
NI	Northern Ireland
NIHE	Northern Ireland Housing Executive
NISRA	Northern Ireland Statistics & Research Agency
OO	Owner occupied
Opex	Operating expenditure
Penetration rate	Number of connections as a percentage of properties passed
PMICR	Post-Maintenance Interest Cover Ratio
PNGL	Phoenix Natural Gas Limited
Principal Objective	The principal objective of the UR under Article 14(1) of the Energy Order (see paragraph 3.18 below)
Properties passed	A property which could reasonably be expected to be able to be connected with a gas service after the installation of new gas mains
SGN	SGN Natural Gas Limited
UR	Northern Ireland Authority for Utility Regulation (also known as the Utility Regulator)
WACC	Weighted average cost of capital

[5] UR RIGS, dated 14 May 2015 defines "maintenance" as the examination and repair of plant and equipment within the network, including costs associated with operational property and IT, and "metering" as activities associated with the maintenance of a meter to record the quantity of gas consumed at a domestic or I&C premise, **NOA-1 / Tab 5 / Pages 169 - 170**.

Section 1: Introduction

A. OVERVIEW

1.1 Firmus Energy (Distribution) Limited (the ***Appellant*** or ***FE***) is a gas distribution network operator (***GDN***) for the "Ten Towns" area outside Greater Belfast, from Londonderry in the North West to Ballymena and from Antrim down to Newry along the South North pipeline (the ***Licence Area***).[6]

1.2 The Appellant holds a Gas Conveyance Licence under Article 8(1)(a) of *The Gas (Northern Ireland) Order 1996* (***Gas Order***) (the ***FE Licence***).[7]

1.3 This appeal concerns the decision made by the Northern Ireland Authority for Utility Regulation (the ***Respondent*** or ***UR***) on 28 October 2016 under Article 14 of the Gas Order to modify the conditions of the FE Licence to give effect to the GD17 price control determination which will operate from 1 January 2017 to 31 December 2022 (***GD17 Decision***).[8]

1.4 This is the first time a licence modification decision made by the UR is being appealed under Article 14B of the Gas Order.[9]

B. REQUEST FOR PERMISSION TO APPEAL

1.5 The Appellant seeks permission under Article 14B(1) and (3) of the Gas Order to bring an appeal against the GD17 Decision in its capacity as a relevant licence holder.

1.6 Article 14B(2)(a) of the Gas Order provides that a relevant licence holder (within the meaning of Article 14) may bring an appeal. The Appellant is a "relevant licence holder" as defined in Article 14(11) of the Gas Order as it is the holder of a particular licence, the conditions of which are to be modified by the GD17 Decision.

1.7 The Appellant, therefore, has standing to bring this appeal under the Gas Order.

C. CONTEXT AND SCOPE OF FE'S APPEAL

1.8 The natural gas industry in Northern Ireland is at a significantly earlier stage of development compared with Great Britain (***GB***) and its GDNs are accordingly very different to those operating in GB.

1.9 Northern Ireland has three GDNs to cover a total population of approximately 1.8 million.[10] FE is one of these GDNs, with the other two being Phoenix Natural Gas Limited (***PNGL***) and SGN Natural Gas Limited (***SGN***).

1.10 FE itself was established in March 2005 when it was awarded a licence to develop a completely new gas distribution network in ten towns across Northern Ireland (excluding Greater Belfast, which is served by PNGL). FE has since been awarded extensions for 9

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[6] Firmus Energy (Supply) Limited (***FE Supply***) is a subsidiary of Firmus Energy (Distribution) Limited. FE Supply is engaged in the supply of gas in Northern Ireland and is the holder of a separate Gas Supply Licence which is not the subject of this appeal.

[7] **NOA-1 / Tab 2**.

[8] GD17 Decision, **NOA-1 / Tab 9**.

[9] The Gas Order was amended and Article 14B inserted by *The Gas and Electricity Licence Modification and Appeals Regulations (Northern Ireland) 2015*. Articles 8, 10, 14, 14A to 14G and Schedule 3A of the Gas Order are extracted at **NOA-1 / Tab 32**.

[10] Northern Ireland Statistics & Research Agency (***NISRA***), *2015 Mid-year Population Estimates for Areas within Northern Ireland* (31 August 2016) at http://www.nisra.gov.uk/archive/demography/population/midyear/MYE15_Bulletin.pdf.

additional areas.[11] The company has to date invested approximately £130 million to develop its network, which now comprises approximately 1,100 kilometres of distribution pipeline and serves approximately 31,000 customers.

1.11 Approximately 17% of total households in FE's Licence Area are currently connected to the natural gas network. FE's focus since its inception and for the forthcoming GD17 price control period has been on expanding the reach of its network (increasing the number of "properties passed" by its pipelines) and increasing awareness of gas to encourage initially industrial customers, and more recently residential customers, in the Ten Towns area to switch to gas as an alternative energy source. The GD17 Final Determination anticipates that by the end of the GD17 period, FE will have invested a further £91.2 million (in 2014 prices)[12] so as to enable its network to pass an additional 71,617 properties, resulting in a 65% increase in the size of its network (by network kilometres) and a 100% increase in the overall number of connections.

1.12 In 2015, FE only earned revenues of £26.5 million.[13] As at November 2016, FE had 61 employees.[14]

1.13 The following table summarises some key characteristics about FE's business and Licence Area:

FE characteristic	Estimate
Customer base	31,000
Properties passed	99,000
Households in FE Licence Area	180,000
Population of FE Licence Area	466,000
Network length (km)	1,100
FTE employees[15]	61
Average gross disposable income per head in FE Licence Area[16]	£14,300

1.14 Accordingly, FE is unique compared with both PNGL (its closest comparator in Northern Ireland) and the GB GDNs in a number of respects.

(a) FE is much smaller than PNGL and the GB GDNs and a more recent entrant to the market. In this regard, the UR has acknowledged that "*FE is a clear outlier in terms of scale compared to PNGL and the GB GDNs*";[17]

(b) FE's current customer base is approximately 16% of the customers served by PNGL and "*approximately a hundredth of the GB GDNs' customer base*";[18] and

[11] Business Plan Submission, **NOA-1 / Tab 19 / Para 1.1**.

[12] GD17 Final Determination, **NOA-1 / Tab 7 / Para 1.42**.

[13] FE Annual Report (2015) (Companies House).

[14] FE's employees are apportioned between FE and FE Supply. FE is part of a small group with less than 100,000 customers in its Licence Area and therefore has an exemption under licence condition 1.16.1(b) from ensuring complete separation of operations.

[15] See footnote 14.

[16] See **Martindale-1 / Footnote 4.**

[17] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.46**.

[18] Based on 191,792 connections listed in PNGL's Annual Report (2015). See also GD17 Final Determination, Annex 5, **NOA-1 / Tab 7 / Para 2.4**.

(c) FE has a Licence Area that is about:

(i) 10 times larger than PNGL, but a customer base that is more than 6 times smaller than PNGL (as at December 2015);[19] and

(ii) 4 times sparser than the average GB GDN, but a customer base that is around 100 times smaller.[20]

1.15 A particularly significant characteristic of FE's Licence Area relevant to the assessment of the efficiency of its cost base is that FE operates in a largely rural and very sparsely populated area where average gross disposable incomes are lower than both the Greater Belfast area and the GB average. The table below illustrates the rural nature of the main towns where the FE network is currently installed.

NI GDN[21]	**Properties passed**
PNGL (as at Dec 2015)	**313,109**
Greater Belfast	313,109
FE (as at Sept 2016)	**c. 99,000**
Londonderry	23,335
Craigavon	16,500
Ballymena	8,396
Newry	6,362
Antrim	6,177
Coleraine	5,167
Banbridge	3,324
Armagh	3,044
Limavady	2,489
Ballymoney	2,025

Source: FE business records and PNGL Annual Report (2015), page 9.

1.16 The context of this appeal is therefore wholly different to previous price control appeals (including both the ED1 and PNGL price control appeals),[22] which concerned more established GDNs operating on a much greater scale and in more densely populated areas. The characteristics of the FE business and the FE's Licence Area, described in this Section 1C, require the UR to adopt a bespoke approach which properly takes these characteristics into account when setting the price control that will apply to FE for the next six years. The issues raised in this appeal arise from the UR's failure to properly take these characteristics into account.

[19] **Martindale-1 / Paras 5.3** and **9.7**; PNGL Annual Report (2015)

[20] **NH-1 / Tab 1 / Para 1.11**.

[21] The total for FE includes properties passed in the nine additional areas.

[22] See CMA, *Northern Powergrid (Northeast) Limited and Northern Powergrid (Yorkshire) plc v the Gas and Electricity Markets Authority* (September 2015) (https://assets.publishing.service.gov.uk/media/5609534de5274a036c000012/NPg_final_determination.pdf) (***CMA NPg ED1 Determination***) and *British Gas Trading Limited v The Gas and Electricity Markets Authority* (September 2015) (https://assets.publishing.service.gov.uk/media/5609588440f0b6036a00001f/BGT_final_determination.pdf) (***CMA BGT ED1 Determination***) (together, the ***ED1 Determinations***).
See also Competition Commission, *Phoenix Natural Gas Limited price determination* (November 2012) (https://assets.publishing.service.gov.uk/media/551948b8e5274a142b000186/phoenix_natural_gas_limited_price_determination.pdf) (***PNGL Case***).

1.17 FE has carefully considered the GD17 Decision and the objective of the Competition and Markets Authority (***CMA***) to dispose of appeals fairly and efficiently within the time periods prescribed by the Gas Order.[23] Accordingly, FE has confined its appeal to four discrete issues where the GD17 Decision is wrong and has a material impact on FE's business. The grounds of appeal in respect of these four issues are summarised in Section 2 below.

1.18 The total cost of the UR's errors is **£12.97 million** in 2014 prices.

1.19 This amount may appear, at first sight, to be lower than the sums the CMA is used to considering in the context of previous price control appeals. However, the sums at issue are significant in the context of a business the size of FE which is still in the development phase of its network rollout and only earned revenues of £26.5 million in the previous financial year. FE considers that the issues raised in this appeal are fundamental to its ability to deliver its GD17 Business Plan objectives.

D. THE GD17 PRICE CONTROL PROCESS

1.20 The UR commenced its process for setting the GD17 price control on 19 December 2014 with the publication of the GD17 Approach Discussion Paper and concluded this process on 28 October 2016 with the publication of the GD17 Decision.

1.21 The GD17 price control will take effect from 1 January 2017 and will apply until 31 December 2022.

1.22 The GD17 price control is based on a RPI-X framework where the UR assesses the inputs required by FE to carry on and finance its activities (e.g. operating expenditure, capital expenditure, asset value, cost of capital) in order to determine the revenue that FE is permitted to recover.[24] Within the RPI-X framework, there are several aspects of the GD17 price control that differ from the RIIO-GD1 control in GB, as the form of the control has been adapted to the NI gas industry. For example, FE's recovery of revenues from the current price control is partially deferred as a consequence of the "profile adjustment" mechanism such that revenues can be smoothed over time, in anticipation of future connections growth.

1.23 FE was required to produce a detailed Business Plan in an Annual/Cost Reporting Template (based on the Ofgem RIIO template) which it submitted to the UR on 30 September 2015.[25] FE's Business Plan was supported by its Business Plan Submission, the FE June 2015 GD17 Supplementary Papers,[26] and the FE September 2015 GD17 Supplementary Papers.[27] This was assessed by the UR in its determination of FE's proposed expenditure and outputs for GD17.

1.24 On 16 March 2016, the UR published its GD17 Draft Determination to which FE provided a comprehensive response on 31 May 2016.[28]

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[23] CMA Appeal Rules, **NOA-1 / Tab 30** / **Rules 4.1 and 4.2.**

[24] GD17 Final Determination, **NOA-1 / Tab 7** / **Para 3.24**.

[25] FE GD17 Business Plan, **NOA-1 / Tab 18**.

[26] FE GD17 Business Plan Submission, **NOA-1 / Tab 19**. The FE June 2015 GD17 Supplementary Papers are exhibited at **NOA-1 / Tabs 17A** to **17L**.

[27] The FE September 2015 GD17 Supplementary Papers are exhibited at **NOA-1 / Tabs 20A** to **20L**.

[28] GD17 Draft Determination, **NOA-1 / Tab 6**. FE Response to GD17 Draft Determination, **NOA-1 / Tab 21**.

1.25 On 15 September 2016, the UR published the GD17 Final Determination together with a consultation paper on its proposed modifications to the FE Licence.[29]

1.26 On 28 October 2016, the UR published its decision to modify the conditions of the FE Licence to give effect to its GD17 price control determination and gave FE notice of the licence modifications under Article 14(8) of the Gas Order.[30]

E. KEY DOCUMENTS

1.27 The grounds of this appeal, reasons and supporting evidence are contained in this Notice of Appeal, in Exhibit NOA-1 and in the Witness Statements and Exhibits to those Witness Statements.

1.28 FE has provided written evidence in support of its appeal in the form of:

(a) Witness Statement of Mr Niall Martindale, Director of Regulation and Pricing, Firmus Energy;

(b) Expert Witness Statement of Mr Nicholas Forrest, Director – Economics and Policy, Pricewaterhouse Coopers LLP;

(c) Expert Witness Statement of Mr Alan Horncastle, Partner, Oxera Consulting LLP; and

(d) Expert Witness Statement of Mr Jostein Kristensen, Partner, Oxera Consulting LLP.

1.29 FE has also included the following key GD17 documents in **NOA-1**:

(a) UR, *Discussion Document on our Overall Approach: Price Control for Northern Ireland's Gas Distribution Networks GD17:* (19 December 2014) (***GD17 Approach Discussion Paper***);[31]

(b) FE's response to the GD17 Approach Discussion Paper (10 February 2015) (***FE Response to GD17 Approach Discussion Paper***);[32]

(c) UR, *Update on Our Overall Approach: Price Control for Northern Ireland's Gas Distribution Networks GD17* (17 April 2015) (***GD17 Final Approach Document***);[33]

(d) FE response to GD17 Final Approach Document (5 May 2015) (***FE Response to GD17 Final Approach Document***);[34]

(e) FE supplementary papers provided in response to the GD17 Final Approach Document (29 June 2015) and to supplement FE's GD17 Business Plan Submission (***FE June 2015 GD17 Supplementary Papers***); [35]

(f) FE, *Business Plan Template: GD17* (30 September 2015) (***Business Plan***); [36]

[29] GD17 Final Determination, **NOA-1 / Tab 7**. GD17 Licence Modification Consultation Paper, **NOA-1 / Tab 8**.

[30] See Annex1 to the GD17 Decision Paper, **NOA-1 / Tab 9A**.

[31] **NOA-1 / Tab 3**.

[32] **NOA-1 / Tab 15**.

[33] **NOA-1 / Tab 4**.

[34] **NOA-1 / Tab 16**.

[35] **NOA-1 / Tabs 17A** to **17L**.

(g) FE, *Business Plan Template Commentary: GD17*, (30 September 2015) (***Business Plan Submission***)[37], with accompanying supplementary papers (***FE September 2015 GD17 Supplementary Papers***);[38]

(h) UR, *Draft Determination*: *Price Control for Northern Ireland's Gas Distribution Networks GD17:* (16 March 2016) (***GD17 Draft Determination***);[39]

(i) FE's response to the Draft Determination, including supporting appendices (31 May 2016) (***FE Response to GD17 Draft Determination***);[40]

(j) FE letter to UR, "*GD17 financeability*" (18 July 2016); [41]

(k) FE letter to UR re "*Cost of capital adjustment proposals*" (5 August 2016);[42]

(l) FE letter to UR, "*GD17 financeability analysis*" (17 August 2016); [43]

(m) UR, *Final Determination: Price Control for Northern Ireland's Gas Distribution Networks GD17* (15 September 2016) (***GD17 Final Determination***); [44]

(n) UR, *Consultation Paper: Licence Modifications Pursuant to the GD17 Final Determination and other Regulatory Decisions* (15 September 2016) (***GD17 Licence Modification Consultation Paper***);[45]

(o) FE's response to the Licence Modification Consultation Paper (14 October 2016) (***FE Response to GD17 Licence Modification Consultation Paper***);[46]

(p) UR Decision Paper: Licence Modifications Pursuant to the GD17 Final Determination and other Regulatory Decisions (28 October 2016) (***GD17 Decision***);[47] and

(q) UR Licence Modification Notice under Article 14(8) of the Gas Order (28 October 2016) (***GD17 Licence Modification Notice***). [48]

1.30 The Appellant has endeavoured to provide all relevant facts, reasons, documentary evidence and witness statements with this Notice of Appeal. If permission to appeal is granted, however, it may be necessary for the Appellants to file further material, particularly following receipt of the UR's response and any disclosure.

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[36] **NOA-1 / Tab 18**.

[37] **NOA-1 / Tab 19**.

[38] **NOA-1 / Tab 20A - L**.

[39] **NOA-1 / Tab 6**.

[40] **NOA-1 / Tab 21**.

[41] **NOA-1 / Tab 23**.

[42] **NOA-1 / Tab 24**.

[43] **NOA-1 / Tab 26**.

[44] **NOA-1 / Tab 7**.

[45] **NOA-1 / Tab 8**.

[46] **NOA-1 / Tab 27**.

[47] **NOA-1 / Tab 9**.

[48] **NOA-1 / Tab 9D**.

F. CONTACT DETAILS

1.31 Appellant:

Firmus Energy (Distribution) Limited[49]

For the attention of:

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[49] A company registered in England and Wales with registration number 05375370.

Section 2: Summary of Grounds of Appeal and Relief Sought

A. OVERVIEW

2.1 Article 14D(4) of the Gas Order states that the CMA may allow an appeal where it is satisfied that the decision appealed against was wrong on one or more of the following grounds:

(a) the UR failed properly to have regard to its principal objective and/or its statutory duties under Articles 6B and 14 of the Energy Order;

(b) the UR failed to give the appropriate weight to its principal objective and/or its statutory duties under Articles 6B and 14 of the Energy Order;

(c) the GD17 Decision was based, wholly or partly, on an error of fact;

(d) the licence modifications fail to achieve, in whole or in part, the effect stated by the UR;[50]

(e) the GD17 Decision was wrong in law.

2.2 This section summarises the grounds of appeal, which are further developed in Sections 4 to 7 below.

B. GROUND 1: OPEX ALLOWANCE

2.3 The Opex component of the price control decision is intended to make provision for the efficient day-to-day costs of running FE's gas distribution network and covers key items such as manpower, network operations and maintenance, new connection incentives, advertising and marketing, emergency responses, I.T. and other business support activities (e.g. legal, audit, finance, insurance and regulation).

2.4 To determine the Opex allowance for FE, the UR undertook both a top-down benchmarking assessment comparing FE with the GB GDNs and a bottom-up cost line assessment of FE's Business Plan. Ground 1A relates to errors with the UR's top-down benchmarking assessment. Grounds 1B-1D relate to errors with the UR's bottom-up cost line assessment.

Ground 1A: The Benchmarking Error

2.5 To inform its view of FE's efficient operating costs, the UR undertook a top-down benchmarking assessment involving an econometric analysis of a cost dataset covering the GB GDNs. The UR sought to compare the relative efficiency of FE (a very small GDN with a growing network in a sparsely populated area) with that of the established GB GDNs (mature businesses of a scale orders of magnitude greater than that of FE).

2.6 The UR's model was fundamentally flawed, wholly unsuitable and unreliable for assessing FE's efficient costs and should not have been used to inform the UR's bottom-up cost line assessment of FE's efficient operating costs.

2.7 The expert evidence of Mr Horncastle of Oxera concludes that there were a number of "*fundamental flaws*" with the UR's top-down benchmarking analysis which produced

[50] The UR is required to state the effect of the modifications under Article 14(8)(b) of the Gas Order.

"*upwardly biased inefficiency estimates*" that were "*extreme results*" and "*not credible*".[51]

Ground 1B: The Maintenance Sparsity Error

2.8 FE operates in a largely rural and very sparsely populated area and has a much smaller customer base than PNGL which operates in a more densely populated urban area.

2.9 By substituting FE's actual costs with the UR's own figures produced from a benchmarking exercise which compare the maintenance costs of FE with those of PNGL, and then applying a 15% reduction, the UR failed to take proper account of the impact of sparsity (i.e. lower population and customer densities) within FE's Licence Area in its assessment of the efficiency of FE's Opex allowances for maintenance.

Ground 1C: The GIS Oversight Error

2.10 GIS is computerised mapping software used by GDNs for network operations, maintenance and planning. It is essential software for FE to safely and efficiently operate its business.

2.11 An allowance for professional and legal fees associated with GIS was recognised in the GD17 Draft Determination but has been omitted entirely from the GD17 Final Determination. The UR has since taken the position that this was not an error and suggested that an "element" of these costs could later be recovered through the uncertainty mechanism. However, it is wholly unclear as to how any such reconciliation will be made or on what basis.

2.12 The omission of GIS costs in the GD17 Final Determination was clearly an error. By failing to recognise this error, and not adjusting FE's allowance to account for this omission, the UR is requiring FE to enter GD17 with no ability to recover these efficient costs, nor any certainty about what "element" of these costs the UR may decide to allow in the future.

Ground 1D: The Manpower Scale Error

2.13 Over the GD17 period (2017-2022), FE's network is expected to grow by 65% in network kilometres and its customer base is expected to grow by 100%. The UR has also required FE to increase connections of domestic owner occupied properties by an annual average of 80% on FE's GD14 performance. Despite the projected growth in FE's business over GD17, the UR has (a) applied an 8% reduction in FE's average Opex annual allowances in GD17 compared with FE's actual Opex in 2015 and; (b) required FE to reduce its Opex in the first year of GD17 by 7.4% below its current forecast Opex expenditure for 2016 in 2014 prices.

2.14 In its bottom-up analysis of FE's manpower allowance for GD17, the UR failed to take proper account of scale cost drivers in its assessment of the efficiency of FE's operating costs and, as a consequence, did not adjust FE's manpower allowance to properly account for the significant growth in its business over GD17.

Ground 1E: The Omission Error

2.15 The UR's bottom-up assessment of the following Opex cost lines failed to properly account for, FE's efficient costs associated with legitimate and necessary audit, finance

[51] JK-**1 / Tab 1 / Paras 1.14, 1.16, 1.17** and **2.17**.

and regulation costs, and central services costs previously accounted for by a parental recharge allowance (which has been removed in GD17).[52]

2.16 The UR failed to demonstrate that FE's costs in each of these categories were inefficient and provided no adequate justification for its decision to reduce these legitimate and necessary costs.

Legal consequences

2.17 The UR's GD17 Decision on the Opex allowance was wrong on the following grounds:

(a) the UR failed properly to have regard to and/or to give appropriate weight to its principal objective to promote the development and maintenance of an efficient, economic and coordinated gas industry in Northern Ireland, by setting the Opex allowance below the level necessary to support the expansion and efficient operation of FE's gas network during the GD17 period;[53]

(b) the UR failed properly to have regard to and/or to give appropriate weight to its statutory duty to secure that licence holders are able to finance their licensed activities, by setting the Opex allowance at a level which means FE cannot recover its efficient costs and will need to overspend to meet its licence obligations;[54] and/or

(c) the Opex allowance modifications fail to achieve, in whole or in part, the effect stated by the UR, specifically to "*allow the GDNs to charge tariffs consistent with the maintenance and operation of a growing gas network whilst financing its activities*".[55]

C. GROUND 2: CONNECTIONS INCENTIVE

2.18 The connection incentive is a per connection allowance which can be recovered for a proportion of new connections to domestic owner occupied properties. It is intended to cover a GDN's sales-related costs in securing new connections (e.g. sales teams, advertising and marketing, direct customer incentives and associated overheads). The connection incentive is intended to promote development of the gas network and encourage new connections by making FE's ability to recover its sales-related costs contingent on its achievement of connection targets set by the UR. The UR considers that the connections incentive also helps FE take actions which increase awareness and encourage switching to natural gas to drive new gas connections in Northern Ireland, where gas is today not the primary fuel of choice for many households. [56]

Ground 2A: The Connection Target Error

2.19 The UR increased by 22% the already ambitious connection targets for domestic owner occupied properties that FE had proposed in its Business Plan.

[52] In the GD14 Final Determination, **NOA-1 / Tab 11 / Paras 6.111**, the UR provided a "*parental recharge*" allowance for costs incurred by FE in settlement of services provided by its parent company, Bord Gáis Eireann. The UR has removed this allowance in GD17 following the sale of FE to funds advised by iCON Infrastructure LLP in 2015.

[53] Article 14D(4)(a) and (b) Gas Order; Article 14(1) Energy Order.

[54] Articles 14D(4)(a) and (b) Gas Order; Article 14(2)(b) Energy Order.

[55] Article 14D(4)(d) Gas Order; GD17 Decision, **NOA-1 / Tab 9 / Para 2.40**.

[56] GD17 Final Determination, paragraph 6.115, **NOA-1 / Tab 7 / Para 2.17.**

2.20 The UR did so without any reliable evidence and failed to take proper account of FE's historical performance and specific Licence Area characteristics, which would have shown that the UR's targets were too high for the level of the connection allowance set by the UR.

2.21 The UR's connection target is unachievable having regard to the true efficient costs of domestic owner occupied connections in FE's Licence Area.

2.22 The expert evidence of Mr Kristensen of Oxera concludes that the UR made errors in setting connection targets which have been formulated using an assumption that is "*highly unlikely to be the case in practice*" and not consistent with the economic situation in Northern Ireland.[57]

Ground 2B: The Non-Additionality Error

2.23 The UR determined that 25% of target connections each year are "non-additional" because the UR has assumed that these consumers will connect to FE's network in the absence of any direct marketing or selling activities by FE. No connection allowance is recoverable in respect of non-additional connections.

2.24 The UR arbitrarily set the non-additionality rate at 25% without any evidential basis and ignored compelling evidence put forward by FE which supported a non-additionality rate of 5%.

Legal consequences

2.25 The UR's GD17 Decision on the connection incentive was wrong on the following grounds:

(a) the UR failed properly to have regard to and/or to give appropriate weight to its principal objective to promote the development and maintenance of an efficient, economic and coordinated gas industry in Northern Ireland, by setting domestic owner occupied connection targets at a level which cannot be achieved using the connection allowance provided for in GD17;[58]

(b) the UR failed properly to have regard to and/or to give appropriate weight to its statutory duty to secure that licence holders are able to finance their licensed activities, by setting domestic owner occupied connection targets at a level which will cause FE to significantly overspend if it attempts to achieve those targets or face a material reduction in its Opex allowance if it does not;[59]

(c) the UR failed properly to have regard to and/or to give appropriate weight to its statutory duty to promote the efficient use of gas and efficiency in the economy in the conveyance storage or supply of gas, by setting domestic owner occupied connection targets at a level which cannot be achieved using the connection allowance provided for in GD17;[60] and/or

(d) the connection incentive modifications fail to achieve, in whole or in part, the effect stated by the UR, specifically to "*incentivise the GDNs to further grow the*

[57] **JK-1 / Paras 3.6** and **6.1-6.4**.

[58] Article 14D(4)(a) and (b) Gas Order; Article 14(1) Energy Order.

[59] Article 14D(4)(a) and (b) Gas Order; Article 14(2)(b) Energy Order.

[60] Articles 14D(4)(a) and (b) Gas Order; Article 14(5)(a) Energy Order.

industry in an economic and co-ordinated manner" and "*allow the GDNs to charge tariffs consistent with the maintenance and operation of a growing gas network whilst financing its activities*".[61]

D. GROUND 3: UNDER RECOVERIES

2.26 An under-recovery represents a customer charge that FE would have been entitled to recover but decided not to do so in the relevant charge period. Under-recoveries are therefore akin to deferred revenue. Under-recoveries have a legitimate purpose in that they assist in the development of the network by reducing prices in the near term and thereby encourage take up of gas by customers The under-recovery can then be passed through and spread across a materially larger customer base at a future date.

Ground 3A: Regulatory uncertainty / breach of the principle of non-retroactivity

2.27 Up until the GD17 Decision, the FE Licence contained a condition which applied a rate of return on under-recoveries equal to the allowed cost of capital from time to time. The GD17 Final Determination proposes to discontinue the link between the allowed cost of capital and the rate of return on under-recoveries and replace it with a rate of return of LIBOR +2% (including a three year glide path).

2.28 The GD17 Decision withdraws previous commitments in FE's Licence regarding the applicable rate of return on under-recoveries. On under-recoveries, the proposed rate applies to under-recoveries accumulated *before* the start of GD17 thereby having retrospective effect. There was no indication in the GD14 Final Determination that it would be applied retrospectively. In any event, even if FE had been informed at the time of GD14 that the adjustment would be applied to previously accumulated under-recoveries, it would have been practically impossible for FE to eliminate accumulated under-recoveries during the three years of GD14.

Ground 3B: Disregarding the reasons for the licence condition in line with the UR's statutory duties

2.29 The UR asserts (without substantiation) that the current licence condition regarding the rate of return on under-recoveries are not in the public interest. The UR now also seeks to state that the primary reason for the licence condition was to manage differences between the relative price of oil and gas. FE considers this to be an incorrect characterisation of the reasons behind the licence condition and fails to properly take into account one of the other primary objectives behind the inclusion of the under-recoveries provision in the FE Licence, which was, and remains, squarely consistent with the furtherance of the UR's principal objective to promote the development of the gas network in Northern Ireland.

Ground 3C: Errors in the selection of the new rate of return

2.30 The UR has not provided any justification for the selection of a rate of LIBOR +2% (including a three year glide path). FE considers the selection of this measure to be inappropriate, arbitrary and disproportionate.

[61] Article 14D(4)(d) Gas Order; GD17 Decision, **NOA-1 / Tab 9 / Para 2.40**.

Legal consequences

2.31 The UR's GD17 Decision on under-recoveries was wrong on the following grounds:

(a) the UR failed properly to have regard to and/or to give appropriate weight to its principal objective to promote the development and maintenance of an efficient, economic and coordinated gas industry in Northern Ireland, by creating regulatory uncertainty through withdrawing previously made commitments regarding under-recoveries, providing insufficient notice and consultation, and proposing a change that has retrospective effect;[62]

(b) the UR was wrong in law because it asserts *without substantiation* that the licence provisions relating to under-recoveries are not in the public interest and, when making its decision, the UR has not sufficiently taken into account the effect of the licence condition on under-recoveries in supporting the growth of the gas network;[63] and/or

(c) the modifications to under-recoveries fail to achieve, in whole or in part, the effect stated by the UR, specifically to "*allow the GDNs to charge tariffs consistent with the maintenance and operation of a growing gas network whilst financing its activities*".[64]

E. GROUND 4: WACC AND FINANCEABILITY

2.32 The GD17 price control was the first time that the UR set a weighted average cost of capital (***WACC***) for FE. The UR set the WACC for FE primarily by taking into account what it considered to be "regulatory precedents" from decisions of other GB regulators.[65]

2.33 The UR also undertook modelling of FE's financeability and considered FE's ability to raise debt and equity to finance its business. In undertaking this analysis the UR states that it took into account key financial indicators used by credit rating agencies.[66]

2.34 Both the UR's assessment of FE's WACC and its financeability assessment are vitiated by errors, in particular:

(a) the asset beta used by the UR in its assessment of FE's WACC has not properly assessed the evidence relating to FE's risk and has mis-applied alleged "precedents" by failing to take into account the specific characteristics of FE's business leading to an allowed return for FE that is too low; and

(b) the debt financing assumptions used by the UR in its financeability assessment are not consistent with the outputs of its financeability analysis. FE has been benchmarked against an investment-grade cost of debt but will not, in practice, be in a position to finance its licensed activities at investment grade interest rates.

[62] Article 14D(4)(a) and (b) Gas Order; Article 14(1) Energy Order.

[63] Article 14D(4)(e) Gas Order.

[64] Article 14D(4)(d) Gas Order; GD17 Decision, **NOA-1 / Tab 9 / Para 2.40**.

[65] GD17 Final Determination, **NOA-1 / Tab 7 / Para 1.23**.

[66] GD17 Final Determination, **NOA-1 / Tab 7 / Para 1.24**.

Ground 4A: the asset beta error

2.35 The UR has set an incorrect asset beta based on a limited comparator set of companies that are not subject to the same degree of systematic risks as faced by FE, as well as being of a significantly greater scale. As a result, the allowed cost of equity understates the actual cost of equity for FE. In particular, the UR has taken no account of the systematic risk for FE arising from the scale of its connections growth combined with the impact of the connections incentive and has placed insufficient weight on the systematic risk associated with the scale of FE's capital programme.

Ground 4B: the financeability error

2.36 The UR has failed to act in accordance with its statutory duty to secure that FE is able to finance its activities by basing its financeability assessment on an incorrect assumption that FE will be able to finance its business on terms consistent with an investment grade credit rating when UR's own notional financeability modelling indicated a sub-investment grade outcome. The UR has failed to take into account appropriate sensitivity analysis which reinforces that FE will not be in a position to secure an investment grade rating for its debt.

Legal consequences

2.37 The GD17 Decision was wrong on the following grounds:

(a) the UR failed properly to have regard to and/or give appropriate weight to its principal objective to promote the development and maintenance of an efficient, economic and coordinated gas industry in Northern Ireland;[67]

(b) the UR failed properly to have regard to and/or give appropriate weight to its statutory duty to secure that licence holders are able to finance their licensed activities; and/or[68]

(c) the rate of return set for FE and the UR's financeability assessment both fail to achieve, in whole or in part, the effect stated by the UR, specifically to "*incentivise the GDNs to further grow the industry in an economic and co-ordinated manner*" and "*allow the GDNs to charge tariffs consistent with the maintenance and operation of a growing gas network whilst financing its activities*"[69],

because the UR:

(d) set a rate of return for FE that is too low, in particular by taking into account an asset beta that did not take the true risk position of FE into account; and/or

(e) failed to assess the financeability of FE's activities with sufficient regard to whether FE would be in a position to secure an investment grade rating.

[67] Article 14D(4)(a) and (b) Gas Order; Article 14(1) Energy Order.

[68] Article 14D(4)(a) and (b) Gas Order; Article 14(2)(b) Energy Order.

[69] GD17 Decision, **NOA-1 / Tab 9 / Para 2.40**.

F. RELIEF SOUGHT

2.38 The Appellant seeks permission to appeal the GD17 Decision.

2.39 If permission is granted, the Appellant requests that the CMA quash the GD17 Decision under Article 14E(2)(a) of the Gas Order and substitute its own decision under Article 14E(2)(c) to the extent necessary to remedy the errors in the GD17 Decision. The specific relief sought is explained in Sections 4-7 below.

2.40 In the alternative, the Appellants request that the CMA remit the matter to the UR under Article 14E(2)(b) of the Gas Order for reconsideration and determination in accordance with such directions from the CMA as are necessary to address the errors.

Section 3: Statutory Framework

A. OVERVIEW

3.1 In this section, the Appellant sets out the statutory framework governing this appeal, specifically:

(a) the principal objective and statutory duties to which the UR must have regard in making a gas licence modification;

(b) the statutory grounds of appeal to the CMA; and

(c) the standard to be applied by the CMA in its consideration of this appeal and the approach to be followed by the CMA when considering whether to allow the appeal.

3.2 The Appellant has included this section in order to state the requirements that it understands will apply under the statutory framework to this appeal, particularly as this is the first appeal under Article 14B of the Gas Order since the amendments made by the Gas and Electricity Licence Modification and Appeals Regulations (Northern Ireland) 2015.[70]

B. MODIFICATION OF LICENCE CONDITIONS

3.3 The UR has the power under Article 8(1)(a) of the Gas Order "*to grant a licence authorising any person to… (a) convey gas from one place to another in an area authorised by the licence*".

3.4 The UR granted a Gas Conveyance Licence to FE in March 2005.

3.5 The UR has the power to *"make modifications of … (a) the conditions of a particular licence*" under Article 14(1)(a) of the Gas Order.

3.6 The GD17 Decision was made under Article 14(1) of the Gas Order and published on 28 October 2016. A copy of Articles 8 and 14 of the Gas Order is extracted at **NOA-1 / Tab 32**.

C. STATUTORY GROUNDS OF APPEAL

3.7 *Right of Appeal*: Article 14B(1) of the Gas Order states that

> An appeal lies to the CMA against a decision by [the UR] to proceed with the modification of a condition of a licence under Article 14.

3.8 An appeal may be brought by a "*relevant licence holder*" and certain other persons or bodies (Article 14B(2)). FE is a "*relevant licence holder*" as defined in Article 14(11) of the Gas Order as it is the holder of a particular licence, the conditions of which are to be modified by the GD17 Decision.

3.9 *Permission to appeal*: Article 14B(3) of the Gas Order states that:

> The permission of the CMA is required for the bringing of an appeal under this Article.

[70] S.1. 2015/1 (NI).

3.10 In the case of an appeal brought by a relevant licence holder, Article 14B(4)(d) of the Gas Order provides that the CMA may refuse permission to appeal only on the following grounds:

> (i) that the appeal is brought for reasons that are trivial or vexatious;
>
> (ii) that the appeal has no reasonable prospect of success.

3.11 Neither of these potential grounds is applicable to any of the grounds raised by FE in this appeal.

3.12 *Relevant matters*: Article 14(D)(3) of the Gas Order states that, in determining the appeal, the CMA:

> (a) may have regard to any matter to which the Authority was not able to have regard in relation to the decision which is the subject of the appeal; but
>
> (b) must not, in the exercise of that power, have regard to any matter to which the Authority would not have been entitled to have regard in reaching its decision had it had the opportunity of doing so.

3.13 Accordingly, the CMA may consider evidence not considered by the UR in making its final decision, where such evidence was not previously available.

3.14 *Determination of an appeal*: Article 14D(2) of the Gas Order states that:

> In determining an appeal the CMA must have regard, to the same extent as is required of the Authority, to the matters to which the Authority must have regard—
>
> (a) in the carrying out of its principal objective under Article 14 of the Energy Order; and
>
> (b) in the performance of its duties under that Article and Article 6B of the Energy Order.

3.15 Articles 6B and 14 of the Energy Order contain the UR's principal objective and statutory duties. A copy of Articles 6B and 14 is extracted at **NOA-1 / Tab 33.**

3.16 *Legal test on appeal:* Article 14D(4) of the Gas Order states that:

> The CMA may allow the appeal only to the extent that it is satisfied that the decision appealed against was wrong on one or more of the following grounds—
>
> (a) that [the UR] failed properly to have regard to any matter mentioned in paragraph (2);
>
> (b) that [the UR] failed to give the appropriate weight to any matter mentioned in paragraph (2);
>
> (c) that the decision was based, wholly or partly, on an error of fact;
>
> (d) that the modifications fail to achieve, in whole or in part, the effect stated by [the UR] by virtue of Article 14(8)(b);
>
> (e) that the decision was wrong in law.

3.17 This section goes on to consider each of the grounds listed under Article 14D(4).

<u>Article 14D(4)(a) and (b): The UR failed properly to have regard to, or give appropriate weight to, its principal objective and/or statutory duties</u>

3.18 Article 14(1) of the Energy Order states that:

> The principal objective of the Department and the [UR] in carrying out their respective gas functions is to promote the development and maintenance of an efficient, economic and co-ordinated gas industry in Northern Ireland, and to do so in a way that is consistent with the fulfilment by [the UR], pursuant to Article 40 of the Gas Directive, of the objectives set out in paragraphs (a) to (h) of that Article.

3.19 Article 40 of the Gas Directive[71] sets out a list of "*general objectives*" of the UR as a regulatory authority.

3.20 Article 14(2) of the Energy Order requires the UR to carry out its gas functions:

> … in a manner which [the UR] considers is best calculated to further the principal objective, having regard to:
>
> (a) the need to ensure a high level of protection of the interests of consumers of gas;
>
> (b) the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under Part II of the Gas Order or this Order;
>
> (c) the need to secure that the prices charged in connection with the conveyance of gas through designated pipe-lines (within the meaning of Article 59) are in accordance with a common tariff which does not distinguish (whether directly or indirectly) between different parts of Northern Ireland or the extent of use of any pipe-line; and
>
> (d) the need to protect the interests of gas licence holders in respect of the prices at which, and the other terms on which, any services are provided by one gas licence holder to another.

3.21 When performing these duties, the UR must have regard to the interests of individuals who are disabled or chronically sick, individuals who are of pensionable age and individuals with low incomes.[72]

3.22 Article 14(5) states that, subject to its duties under Article 14(2), the UR must:

> … carry out its gas functions in the manner it considers is best calculated:
>
> (a) to promote the efficient use of gas and efficiency and economy in the conveyance, storage or supply of gas;
>
> (b) to protect the public from dangers arising from the conveyance, storage, supply or use of gas;
>
> (c) to secure a diverse, viable and environmentally sustainable long-term energy supply; and
>
> (d) to facilitate competition between persons whose activities consist of or include storing, supplying or participating in the conveyance of gas;
>
> and shall have regard, in carrying out those functions, to the effect on the environment of activities connected with the conveyance, storage or supply of gas.

3.23 The Appellant submits that the UR has failed to give appropriate weight to its objectives where it gives undue or insufficient weight to any of its objectives.[73]

Article 14D(4)(c): The GD17 Decision was based, wholly or partly, on an error of fact

3.24 In the ED1 Determinations, the CMA adopted the Competition Commission's (the ***CC***'s) reliance on the Court of Appeal's decision in *Azzicurazioni Generali Spa v Arab Insurance Group*[74] where the Court held that an error of fact is one that lies "*outside the bounds within which reasonable disagreement is possible"* and "*is for us if necessary to make up our own mind about the correctness or otherwise of any findings of primary fact or inference from primary fact that the judge made or drew and which the claimants*

[71] Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009, OJ 14.8.2009 L 211/94, **NOA-1 / Tab 34**.

[72] Article 14(3)(a)-(c) Energy Order.

[73] CMA BGT ED1 Determination, Para 7. 44.

[74] [2003] 1 WLR 577.

challenge".[75] Similarly, where errors relate to evaluations of fact by the UR such evaluations must be reasonable and appropriate in all the circumstances.[76]

The licence modifications fail to achieve the effect stated by the UR

3.25 Article 14(8)(b) of the Gas Order requires the UR to "*state the effect of the modifications*" in the GD17 Decision. This ground will be met where the GD17 Decision is unlikely adequately to achieve its stated effect.

The GD17 Decision was wrong in law

3.26 The Appellant submits that the UR's GD17 Decision will be wrong in law where the UR has made a mistake as to the scope of its objectives or as to its duties in making the decision. Basic mathematical errors can also be considered "*wrong in law*".[77] The CC's decision in *E.ON* made it clear that the standard of "*wrong in law*" also includes the public law duties to act in accordance with natural justice and procedural fairness.[78]

D. STANDARD OF REVIEW

3.27 Though this is the first appeal to the CMA under Article 14B the Gas Order, the CMA gave guidance as to the standard and nature of its review in respect of the analogous statutory appeal provisions applicable in Great Britain in the ED1 Determinations.

3.28 ED1 was the first appeal under the new appeals regime in the Electricity Act 1989 (***EA89***). As the EA89 grounds of appeal mirror those contained in Article 14D(4) of the Gas Order, the CMA's approach in the ED1 Determinations provides relevant guidance under the Gas Order.

3.29 *Merits review*: In the ED1 Determinations, the CMA made clear that the applicable standard of review is a merits review, going beyond judicial review and stated that:

> We agree that we are not limited to reviewing the decision on conventional judicial review grounds and that we are not only able, but required by EA89, to consider the merits of the decision under appeal, albeit by reference to the specific grounds of appeal laid down in the statute.[79]

3.30 The ED1 Determinations also refer to the government's response to the Department of Energy and Climate Change's (***DECC***'s) consultation on the 'Implementation of the Third Internal Energy Package' (which led to the introduction of the appeals regime), stating the government's intention that the appeals regime should *"enable the appeal body to take into account the merits of the case"*.[80]

3.31 Noting the approach of the Supreme Court in *BT v Telefonica O2 UK*[81] concerning the relevant appeals regime in the Communications Act 2003, the CMA also confirmed in

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[75] Adopted in CMA BGT ED1 Determination, paragraph 3.30. Also adopted by CC in *E.ON UK Plc and GEMA and British Gas Trading Limited: Decision and Order of the Competition Commission* (Case CC02/07) (10 July 2007) (https://assets.publishing.service.gov.uk/media/55194bf440f0b6140400036a/eon_final_decision.pdf%20) (***E.ON***).

[76] CMA BGT ED1 Determination, Paras 3.30 and 3.31.

[77] Danae Air Transport v Air Canada [2000] 1 WLR 395, Page 406.

[78] *E.ON*, Para 5.18.

[79] CMA ED1 BGT Determination, Para 3.24; CMA NPg ED1 Determination, Para 3.23.

[80] DECC, *Implementation of the EU Third Internal Energy Package: Government Response* (January 2010) (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/43266/1163-eu-third-package-gov-response.pdf), Para 2.24.

[81] BT v Telefonica O2 UK [2014] UKSC 42 [2014] All ER 907.

the ED1 Determinations that it had the power to make "*certain factual judgments*"[82] and should not limit itself to considerations of errors of law or judicial review.

3.32 On this basis, the Appellant submits that the CMA is required to consider the merits of the grounds raised in its appeal including making its own factual judgments where appropriate to take the merits of the Appellant's arguments into account.

3.33 *Materiality*: In the ED1 Determinations, the CMA stated that:

> We understand that it was common ground between the parties that we [the CMA] should only interfere with the Decision if we consider that the error identified is material, and this approach is obviously correct.[83]
>
> … an error will not be a material error where it only has an insignificant or negligible impact in relative terms on the overall level of price control that has been set by GEMA.[84]

3.34 None of the matters raised in this appeal could reasonably be characterised as insignificant or negligible and each of the grounds of appeal raises matters which are clearly material to FE.

[82] CMA ED1 BGT Determination, Para 3.41; CMA NPg ED1 Determination, Para 3.40.

[83] CMA NPg ED1 Determination, Para 3.56; CMA BGT ED1 Determination, Para 3.58.

[84] CMA NPg ED1 Determination, Para 3.58; CMA BGT ED1 Determination, Para 3.60.

Section 4: Appeal Ground 1 – Opex Allowance

A. OVERVIEW

4.1 The first ground of appeal concerns errors made by the UR in its determination of the annual operating expenditure (***Opex***) that FE is allowed to recover in GD17. The UR has set FE's Opex allowance at a level that does not allow FE to recover its efficient operating costs.

4.2 The Opex component of the price control is intended to make provision for the efficient costs of running FE's gas distribution network and covers key items such as manpower, network operations and maintenance, new connection incentives, advertising and marketing, emergency responses, I.T. and other business support activities (e.g. audit, finance, regulation and professional and legal costs). The UR breaks down FE's overall Opex allowance into 22 different cost lines which are summarised in Table 55 at paragraph 6.285 of the GD17 Final Determination.[85]

4.3 FE is a very small and developing business. It is still at an early stage of its network rollout and operates on a much smaller scale than PNGL and the established GB GDNs. FE currently has approximately 31,000 customers and serves approximately 17% of the total households in its Licence Area.[86] This limited reach of FE's network is a function of both the stage of FE's network rollout and the sparsely populated and largely rural Licence Area within which it operates. These are unique characteristics which differentiate FE from PNGL and the well-established GB GDNs and are an important background consideration in any assessment of the relative efficiency of FE's cost base.

4.4 The UR made the following errors in setting FE's Opex allowance for GD17:

(a) in making its bottom-up assessment of FE's operating costs, the UR took into account a wholly unsuitable and unreliable "top-down" econometric analysis which sought to compare the relative efficiency of FE (a very small GDN with a growing network in a sparsely populated area) with that of the established GB GDNs (mature businesses of a scale orders of magnitude greater than that of FE). In reality, no relevant comparison can be made between FE and the GB GDNs and the UR has misdirected itself in taking this irrelevant assessment into account in its Decision (the ***Benchmarking Error***); and

(b) the UR's bottom-up analysis of FE's operating cost lines failed to properly assess FE's efficient costs over the GD17 period by:

(i) failing to take proper account of the impact of sparsity (i.e. lower population and customer densities) within FE's Licence Area in its assessment of the efficiency of FE's Opex allowances for maintenance (the ***Maintenance Sparsity Error***);

(ii) erroneously omitting professional and legal costs associated with the GIS mapping software which is essential for the safe and efficient operation of FE's business (***GIS Oversight Error***);

[85] The UR defines Opex as "*operating costs of the GDN excluding capital expenditure (capex), depreciation, amortisation, profit on sale of assets, release of deferred contributions and charges/releases of provisions*". See UR, *RIGS*, **NOA-1 / Tab 5 / Page 173**.

[86] **Martindale-1 / Paras 4.4** and **4.7**.

(iii) failing to take proper account of scale cost drivers in its assessment of the efficiency of FE's manpower allowance (the ***Manpower Scale Error***); and

(iv) failing to take proper account of FE's efficient costs associated with audit finance and regulation, and central services previously accounted for by a parental recharge allowance which has been removed in GD17 (the ***Omission Error***).

4.5 The UR's GD17 Decision on the Opex allowance was therefore wrong on the following grounds:

(a) the UR failed properly to have regard to and/or to give appropriate weight to its principal objective to promote the development and maintenance of an efficient, economic and coordinated gas industry in Northern Ireland, by setting the Opex allowance below the level necessary to support the expansion and efficient operation of FE's gas network during the GD17 period;[87]

(b) the UR failed properly to have regard to and/or to give appropriate weight to its statutory duty to secure that licence holders are able to finance their licensed activities, by setting the Opex allowance at a level which means FE cannot recover its efficient costs and will need to overspend to meet its licence obligations;[88] and/or

(c) the Opex allowance modifications fail to achieve, in whole or in part, the effect stated by the UR, specifically to "*allow the GDNs to charge tariffs consistent with the maintenance and operation of a growing gas network whilst financing its activities*".[89]

4.6 The combined effect of the UR's errors was a **£4.43 million** (in 2014 prices) reduction in FE's Opex allowance for GD17 which can be broken down as follows:

(a) £0.97 million reduction attributable to the Maintenance Sparsity Error;

(b) £1.11 million reduction attributable to the GIS Oversight Error

(c) £1.20 million reduction attributable to the Manpower Scale Error; and

(d) £1.15 million reduction attributable to the Omission Error.

4.7 The Benchmarking Error contributed to each of the errors above, other than the GIS Oversight Error, because the UR's flawed top-down benchmarking assessment was used to "*reinforce*" and "*sense check*" its bottom-up assessment, which gave rise to further downward bias in the UR's overall assessment of FE's efficient operating costs.

[87] Article 14D(4)(a) and (b) Gas Order; Article 14(1) Energy Order.

[88] Article 14D(4)(a) and (b) Gas Order; Article 14(2)(b) Energy Order.

[89] Article 14D(4)(d) Gas Order; GD17 Decision, **NOA-1 / Tab 9 / Para 2.40**.

B. THE UR'S DECISION ON THE OPEX ALLOWANCE

FE's Business Plan

4.8 FE's Business Plan set out an ambitious growth target which would see FE:

(a) expand its network by approximately 73% in terms of properties passed and a 65% increase in terms of additional kilometres of additional network mains over the GD17 period;[90] and

(b) add an additional 27,224[91] connections (a total increase of approximately 88% compared with the number of connections at the start of GD17), of which 16,724[92] will be new domestic owner occupied connections (an average annual increase of approximately 48% compared with FE's GD14 performance[93]).

4.9 To achieve this significant scale of activities, FE sought an overall Opex allowance of £46.97 million (in 2014 prices).[94] The requested Opex allowance was based on a detailed bottom-up analysis of the resources needed to run the business and efficiencies which could be achieved during a period of significant growth, while maintaining high standards of safety and customer service.[95] The average annual Opex allowance requested by FE represented a 12% increase from FE's 2015 actual Opex (in 2014 prices),[96] primarily as a result of:

(a) an increase to staff headcount (i.e. manpower) required in order to (i) safely deliver network growth, (ii) support an increase in the rate of growth in new connections, and (iii) service a growing customer base;[97]

(b) an increase in maintenance expenses compared with their level during the GD14 period, as a result of certain assets passing the 10-year inspection/replacement mark; [98] and

(c) an increase in advertising and marketing costs remunerated by the "connections incentive", which is a function of the increased level of connections forecast for the period. The connections incentive is discussed in further detail in Section 5 below.

GD17 Decision

4.10 The GD17 Decision represents a reduction of 18% in FE's GD17 Opex allowance compared with its Business Plan.[99] The Opex allowance for the first year of GD17 is

[90] FE GD17 Business Plan Submission, **NOA-1 / Tab 19 / Paras 3.3.3** and **7.1; JK-1 / Para 2.7**.

[91] FE GD17 Business Plan Submission, **NOA-1 / Tab 19 / Para 3.1.3**.

[92] FE GD17 Business Plan Submission, **NOA-1 / Tab 19** / **Para 5.3.2 (Figure 5.7)**.

[93] Based on figures submitted to the UR in 2015, comprising 2014 actuals and projections for 2015 and 2016: FE GD17 Business Plan Submission, **NOA-1 / Tab 19** / **Para 2.2.4 (Figure 2.3).**

[94] Following information requests from UR, subsequent to FE's GD17 Business Plan Submission, meter replacement costs of £1,028,060 were re-allocated out of Emergency Costs into Capex and additional Opex costs of £117,593 were included under Maintenance and Metering.

[95] **Martindale-1** / **Para 7.7**.

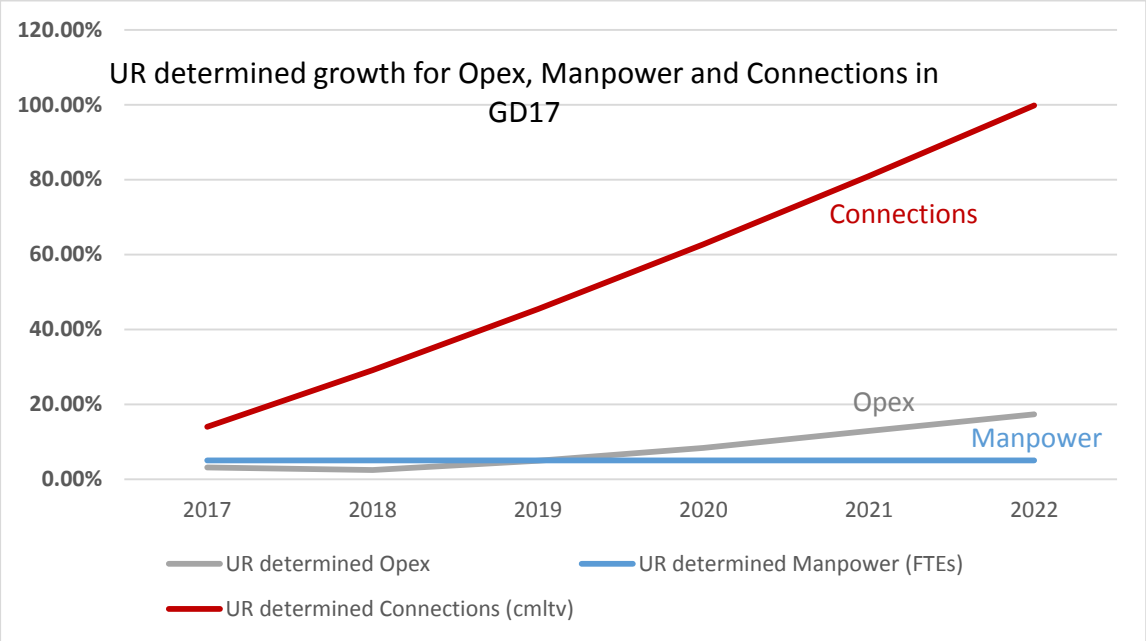
[96] FE Letter to the UR containing 2015 RIGS headline actuals, **NOA-1 / Tab 22 / Page 1**

[97] FE GD17 Business Plan Submission, **NOA-1**, **Tab 19 / Para 6.2.2**

[98] FE GD17 Business Plan Submission, **NOA-1**, **Tab 19 / Para 6.1**

[99] See table at paragraph 0. This includes the £1.7 million shortfall from the connections incentive which forms part of FE's Opex allowance and is discussed in Section 5.

£6.4 million (in 2014 prices), which is 7.4% below FE's current forecast of actual 2016 Opex (in 2014 prices).



Source: UR's GD17 determined growth for Opex, Manpower and Connections, relative to the UR's GD14 determination for 2016

4.11 Relevant for this appeal, the UR set the following Opex allowances for FE over the GD17 period. A more detailed breakdown of FE's Opex allowance (including for those cost lines which are not the subject of this appeal) can be found at paragraphs 6.99 and 6.285 of the GD17 Final Determination.[100]

Opex cost line (£ Dec 2014)	FE Submission[101]	GD17 Final Determination[102]	Variance	% Variance
Asset Management	787,841	538,473	(249,368)	(32%)
Maintenance and Metering[103]	6,322,093	5,315,269	(1,006,824)	(16%)
Operations Management	2,277,206	1,655,637	(621,569)	(27%)
Customer Management	2,799,534	1,553,315	(1,246,218)	(45%)
System Control	1,271,323	1,391,636	120,313	9%
IT & Telecoms	1,799,612	1,170,146	(629,466)	(35%)
Property Mgt (including rates)	6,017,187	5,015,801	(1,001,386)	(17%)
HR & non-ops training	738,550	545,833	(192,717)	(26%)
Audit, Finance & Regulation	3,620,612	2,337,603	(1,283,008)	(35%)
Insurance	1,613,576	1,344,775	(268,801)	(17%)
Procurement	167,930	115,878	(52,052)	(31%)
Advert. & Market Dev (non-OO)	1,438,168	1,335,410	(102,758)	(7%)
Trainees and Apprentices	800,105	387,823	(412,282)	(52%)
Sub-Total of Opex items subject to errors	**29,653,736**	**22,707,598**	**(6,946,139)**	**(23%)**
Other Opex items	18,224,228	17,389,785	(834,443)	(5%)
Total Opex	**47,877,964**	**40,097,382**	**(7,780,582)**	**(16%)**
Adjustments made to FE's Business Plan following submission[104]				
Re-allocation of costs from Opex to Capex	(1,028,060)	-	1,028,060	-
Additional items included in maintenance	117,593	-	(117,593)	-
Adjusted Total Opex	**46,967,497**	**40,097,382**	**(6,870,115)**	**(15%)**
Restatement of UR GD17 Final Determination to reflect FE's Business Plan DOO Connections				
Advert. & Market Dev (OO)	-	(1,674,148)	(1,674,148)	-
Restated Total Opex	**46,967,497**	**38,423,234**	**(8,544,263)**	**(18%)**

4.12 In other words, the GD17 Decision anticipates that FE will be able to deliver a material increase in its scale of activities, assets and customers (discussed at paragraph 4.8 above) without any material increase in the efficient costs of running the business currently.

[100] **NOA-1 / Tab 7 / Para 6.99** and **6.285**

[101] FE GD17 Business Plan, Worksheet: "3.1 Opex Matrix", **NOA-1 / Tab 18**; GD17 Final Determination, **NOA-1 / Tab 19 / Para. 6.99.**

[102] GD17 Final Determination, **NOA-1 / Tab 7 / Para. 6.285** (figures post-frontier shift)

[103] This comprises two cost lines in the GD17 Final Determination: (i) "maintenance" which is the examination and repair of plant and equipment within the network, including costs associated with operational property and IT; and (ii) "metering" which refers to activities associated with the maintenance of a meter to record the quantity of as consumed at a domestic or I&C premise. See UR RIGS, **NOA-1 / Tab 5 / Pages 169** to **170** for definitions.

[104] See footnote 94 above.

This approach fails to reflect the significant Opex costs associated with connecting new premises to FE's network and maintaining an expanded network, particularly with regard to the characteristics of FE's Licence Area.[105] The overall result is an Opex allowance that is inadequate for any efficient GDN operating in FE's Licence Area to meet the growth requirements of the GD17 Final Determination.

C. UR'S ERRORS IN SETTING THE OPEX ALLOWANCE

Ground 1A: The Benchmarking Error

Overview

4.13 The UR's top-down benchmarking assessment involved econometric analysis of a cost dataset covering the GB GDNs in an attempt to assess the relative efficiency of FE's Opex in comparison with that of the established and much larger GB GDNs.[106] This exercise massively overestimated the efficiency gains that FE could be expected to achieve over GD17. FE understands that top down benchmarking is a tool used by regulators in GB to inform price control determinations. It is, however, a tool that can only produce reliable results if the companies being compared share similar characteristics, or when the data set used robustly accounts for relevant differences between regulated companies that inevitably affect their relative efficiency, to ensure a like-for-like comparison.

4.14 GD17 is the first price control in which the UR has sought to undertake top-down benchmarking for the purpose of assessing the relative Opex efficiency of the Northern Ireland GDNs compared to other GDNs. The UR stated that:

> Benchmarking is essentially the process of comparing a firm's costs and performance to the industry best or best practices from other *similar companies*. For the Utility Regulator this effectively means comparing the relative performance of Northern Ireland GDNs to those GDNs who operate in Great Britain (using Ofgem data).[107] (*emphasis added*)

4.15 The UR's top-down benchmarking assessment concluded that "*there is scope to reduce FE's business plan Opex costs by up to 25.3%, to reach what has been assessed as efficient operational costs*".[108] This conclusion was then used by the UR to inform its bottom-up cost line assessment of FE's Opex allowances.

4.16 Top-down benchmarking is only reliable where FE is compared with other *similar* GDNs or where the dataset allows for sufficient normalisation to enable an equitable comparison, a point acknowledged by the UR in the GD17 Final Determination.[109]

4.17 Attempting to use top-down benchmarking to properly assess the relative efficiency of FE's Opex by undertaking a like-for-like comparison with the GB GDNs will be particularly difficult having regard to the characteristics of FE's Licence Area which make it quite unlike any other GDN and wholly different to the GB GDNs. These characteristics, discussed in Martindale-1 (sections 4 and 5) and AH-1[110], include:

[105] **Martindale-1 / Para 5.**

[106] See UR overview in GD17 Final Determination, **NOA-1 / Tab 7 / Paras 6.28, 6.81** and Annex 5, **NOA-1 / Tab 7E**.

[107] GD17 Final Determination, Annex 5, **NOA-1 / Tab 7E / Para 1.8.**

[108] GD17 Final Determination, **NOA-1 / Tab 7 / Para** and Annex 5, **NOA-1 / Tab 7E / Para 3.46**.

[109] GD17 Final Determination, Annex 5, **NOA-1 / Tab 7E / Para 1.8**.

[110] **AH-1** / **Tab 1 / Section 2C**.

(a) the relative immaturity of gas as a domestic energy source in Northern Ireland (particularly outside Greater Belfast);

(b) the limited reach and much smaller scale of FE's network; the largely rural and very sparsely populated Licence Area within which FE operates;

(c) FE's small customer base;

(d) the relatively small number of customers per kilometre of gas main compared with other GDNs; and

(e) lower average gross disposable income levels which make consumers very sensitive to the up-front cost of switching to gas.

4.18 Accordingly, FE is an extreme outlier in any dataset relating to the sample of GB GDNs which were used in the UR's top-down benchmarking assessment. The UR was therefore wrong to:

(a) have regard to its flawed top-down benchmarking analysis in setting or testing FE's Opex allowance for GD17; and

(b) allow its flawed top-down benchmarking assessment to influence its bottom-up cost line assessment.

The Challenges of Benchmarking FE against GB GDNs

4.19 The UR's top-down econometric modelling relied upon a dataset of cost and scale information for PNGL and the GB GDNs.[111]

4.20 The UR recognises that "*FE is a clear outlier in terms of scale compared to PNGL and the GB GDNs*" accepting that FE has a customer base that is "*approximately a hundredth of the GB GDNs' customer base*."[112] Mr Horncastle of Oxera also highlights the "*significant structural and operational differences*" between FE and the GB GDNs, including "*scale, customer penetration, sparsity, technology (network composition)*".[113] A model fitted to GB GDNs should not, and cannot, therefore reliably be used to determine the efficiency of Opex for FE.[114]

4.21 FE sought the expert opinion of Mr Horncastle of Oxera in relation to the top-down benchmarking exercise carried out by the UR for the GD17 price control.

4.22 Mr Horncastle concludes that:

> The scale of difference in characteristics between FE and its GB and NI gas distribution network (GDN) comparators is so extreme that it cannot be captured robustly by the UR's econometric models. FE is around 100 times smaller than the average GB GDN in terms of customer numbers. In addition, FE's operational area is almost four times sparser than the average GB GDN and more than three times sparser than the most sparse GB GDN. Its low customer penetration at this stage of the network building phase exacerbates this issue.[115]

[111] See Annex 5 of the GD17 Final Determination, **NOA-1 / Tab 7E**, describing UR's approach to its top-down benchmarking analysis.

[112] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.46** and Annex 5 **NOA-1 / Tab 7E / Para 2.4**.

[113] **AH-1 / Tab 1 / Para 1.14**.

[114] **AH-1 / Tab 1 / Para 1.14**.

[115] **AH-1 / Tab 1 / Para 1.11**.

4.23 Mr Horncastle identifies the following "*fundamental flaws*" in the top-down benchmarking exercise carried out by the UR:[116]

(a) the differences in scale of operations between FE and other GDNs have not been taken into account

(b) the UR has not taken into account the differences in sparsity between FE and other GDNs;

(c) the issue of the economies of scale is further exacerbated by FE's low penetration rate;

(d) the UR made an inappropriate adjustment to FE's labour costs;

(e) the UR has made an incorrect adjustment with regard to Xoserve costs[117];

(f) the UR has inappropriately relied on the percentage of iron mains as a proxy for age of the network;

(g) the UR has inappropriately focused on one model which produces the most extreme results; and

(h) the UR has not addressed a number of issues related to model specification, estimation approaches employed, diagnostic testing of models, and translation of results into Opex targets.

4.24 Mr Horncastle finds that these fundamental flaws "*have not been robustly accounted for in any of UR's models resulting in upwardly biased inefficiency estimates*" [118] and states that:

> I conclude that, from the evidence available to me, the UR's top-down OPEX benchmarking does not provide a robust basis with which to assess FE's efficiency or inform its allowed OPEX. The results that the UR focuses on for FE are driven by the assumptions used in the modelling and the particular models selected, and are not likely to reflect FE's actual operational efficiency. To that end, I consider that FE's OPEX allowance has been informed by fundamentally flawed top-down OPEX benchmarking.[119]

4.25 Accordingly, the UR has informed its assessment of FE's Opex costs by reference to an exercise which was wholly uninformative and produces an incorrect and misleading view of FE's efficiency.

4.26 FE has sought to draw the UR's attention to the problems with top-down benchmarking against both PNGL and GB GDNs from the outset of the GD17 process. In its response to the GD17 Approach Discussion Paper, FE highlighted that "*benchmarking has shortcomings especially when comparing with a small sample size and there is the*

[116] **AH-1 / Tab 1 / Para 1.10** and **Section 2**.

[117] Xoserve acts as a single service point between gas transporters and gas shippers in Great Britain. It provides transportation transactional services for the entire GB gas network on behalf of the GB GDNs and National Grid Gas Transmission (who jointly own Xoserve). These functions include managing information about gas supply points across GB and providing charging and settlement support to gas transporters. Xoserve does not operate, nor is there any Xoserve equivalent, in Northern Ireland. The NI GDNs manage these functions internally and do not benefit from the significant economies of scale enjoyed by Xoserve (which manages more than 20 million gas supply points in GB).

[118] **AH-1 / Para 1.16**.

[119] **AH-1 / Para 1.18**.

distinct possibility of unreasonable results if rigid comparisons are made with companies who are significantly different in both size and scale".[120]

4.27 FE previously commissioned Oxera to produce a report on approaches to benchmarking and efficiency assessment having regard to FE's unique characteristics, which it made available to the UR in June 2015 as part of its overall Business Plan Submission.[121] The June 2015 Oxera Report stressed that that "*it is important to take into account a number of major differences between the conditions under which FE and its peers operate*" and that "*[p]otentially, this could be the biggest reason for the cost differentials, which, without necessary adjustments, would make the cost base non-comparable*."[122]

4.28 To assist in its benchmarking analysis, the UR was advised by Deloitte LLP, who provided a report which is at Annex 4 of the GD17 Draft Determination. The same report was included as Annex 4 of the GD17 Final Determination.

4.29 The "*particular challenges*" of UR's top-down benchmarking analysis are acknowledged by Deloitte which describes FE's Licence Area characteristics as "*quite idiosyncratic*" and notes that "*the GB GDNs all operate on a scale materially greater than either FE or PNGL. Whilst the econometric analysis seeks to allow for economies of scale the extent to which this is fully captured is challenging as the dataset is dominated by larger GDNs*". Mr Horncastle of Oxera describes this difference in scale as "*extreme*"[123].

4.30 Deloitte recognises that "*the main driver of cost variation over time and across GDNs is scale*"[124], a view shared by Mr Horncastle of Oxera who states that "*companies' scale of operations is the principle cost driver*".[125]

4.31 Deloitte also state that "*FE has a significantly different profile to any of the other GDNs in terms of the ratios between network length, customer numbers and volume of gas supplies. This results in significant challenges in assessing the extent to which FE costs are inefficient or are due to the characteristics of the business*."[126]

4.32 Compounding this issue, the UR adopted a different efficiency range to those set out in Deloitte's analysis and concluded that FE had a potential efficiency range of 10.2% to 25.3%.[127] This was driven by the UR's choice to select two particular model specifications from a larger set, both of which were at the upper end of estimates in Deloitte's report for the GB-only dataset and entirely above the range Deloitte provided based on the GB and PNGL dataset. Mr Horncastle of Oxera states that the model chosen by the UR is the "*least precise in estimating the scale elasticity*"[128] and produced "*extreme results*" which were "*upwardly biased inefficiency estimates*" and "*not credible*".[129]

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[120] FE Response to GD17 Approach Discussion Paper, **NOA-1 / Tab 15 / Page 4**.

[121] Oxera, "Benchmarking and Efficiency Assessment" (June 2015) (the ***June 2015 Oxera Report***), **NOA-1 / Tab 17E**.

[122] June 2015 Oxera Report, **NOA-1 / Tab 17E / Page 1**.

[123] **AH-1 / Para 2.14**

[124] GD17 Final Determination, Annex 4, **NOA-1 / Tab 7D / Page 4**.

[125] **AH-1 / Tab 1 / Para 2.14.**

[126] GD17 Final Determination, Annex 4, **NOA-1 / Tab 7D / Page 4**.

[127] GD17 Final Determination, **NOA-1 / Tab 7 / Paras 6.41** and **6.44**.

[128] Taking also into account the revised results presented by the UR in the GD17 Final Determination, although these have only been presented for the GB only dataset.

[129] **AH-1** / **Tab 1 / Para 2.19, 1.13** and **1.16**.

4.33 The GD17 Final Determination modelling outputs used a GB-only dataset, however, the UR does not justify its choice of a GB-only dataset, and it is noteworthy that that the use of a GB and PNGL dataset in the Deloitte analysis led to lower efficiency estimates. Furthermore, by opting for a GB-only dataset, FE's position as an outlier is magnified even further.

4.34 In the GD17 Final Determination , the UR suggests that "*we have decided to apply the results of our bottom-up Opex assessment in the final determination and … focused on the bottom up analysis. However, the top-down econometric and unit cost results have informed the final determination and have provided a useful 'sense-check' of the bottom-up results*."[130]

4.35 The GD17 Decision went further, stating that "*the top-down benchmarking review reinforced our bottom-up approach*".[131] This was wrong in principle. The dataset used by the UR in its top-down benchmarking approach did not contain useful information on the efficiency of FE. Deloitte confirms the challenges with using the dataset for these purposes (see paragraphs 4.29 and 4.31 above) but there is no indication in the GD17 Final Determination that these challenges are acknowledged or taken into account by the UR.

4.36 The UR used the results of its top-down benchmarking analysis as an "indication" that there is scope to reduce FE's business plan Opex costs by up to 25.3%[132] and then went on to cut FE's Opex allowance by 19%.[133] The UR accepted that FE is a "*clear outlier*" in terms of scale but nevertheless concluded that these results were "*indicative*" of opportunities for Opex efficiency for FE in the range of 10% to 25%.[134] Given the fundamental errors in the UR's top-down benchmarking analysis, the UR had no basis for these findings which, in addition to being incorrect, were inappropriately taken into account in the UR's bottom-up cost line assessment of FE's GD17 Business Plan.

4.37 Given the lack of account of FE's characteristics, the UR's top-down benchmarking analysis should have been left out of consideration entirely. At the very least, it could not be used to inform the UR's assessment of FE's efficient costs without detailed consideration of how to mitigate the challenges identified by Deloitte. The Deloitte report is clear: "*a detailed analysis of special factors driving cost differences between FE and other GDNs, which is outside of the scope of this report, would be required to isolate these effects*".[135] The UR has made no attempt to take proper account of FE's characteristics. It was therefore wholly wrong to "*reinforce*" or "*sense check*" any decision on Opex having regard to this exercise.[136] Indeed, the results produced by the top-down model produce a misleading view of FE's efficiency which Mr Horncastle describes as "*not credible*".[137] In these circumstances, the UR has misdirected itself when considering the efficiencies of FE's efficient Opex costs, including with its bottom-up analysis.

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[130] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.27**.

[131] GD17 Decision, **NOA-1 / Tab 9 / Para 2.12**.

[132] GD17 Final Determination **NOA-1 / Tab 7 / Para 6.45**.

[133] GD17 Final Determination, Annex 5, **NOA-1 / Tab 7E / Para 5.17**.

[134] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.46** and **6.47**.

[135] GD17 Final Determination, Annex 4, **NOA-1 / Tab 7D / Page 4**.

[136] GD17 Decision **NOA-1 / Tab 9 / Para 2.12**. GD17 Final Determination, **NOA-1 / Tab 7 / Para. 6.27**.

[137] **AH-1 / Tab 1 / Para 1.16**

4.38 This conclusion is supported by the expert evidence of Mr Horncastle of Oxera who has identified "*a number of material and fundamental flaws regarding the robustness of the analysis in assessing FE's efficiency*" and states that "*the top-down models, in their currently employed form, cannot provide a robust indication of FE's efficiency and thus cannot be used to inform the Opex allowance whether used explicitly or implicitly as a cross-check to the bottom-up analysis*".[138]

4.39 Grounds 1B to 1D below go on to consider specific errors in the UR's bottom-up cost line assessment of FE's GD17 Business Plan, which were informed by the UR's flawed top-down analysis.

Ground 1B: The Maintenance Sparsity Error

4.40 In setting FE's Opex allowance for maintenance in GD17, the UR substituted FE's actual costs for its own figures produced from a benchmarking exercise it undertook to compare the maintenance costs of FE (a very small GDN operating in a sparsely populated and largely rural area) with those of PNGL (a more mature GDN operating in a more heavily populated urban area) and then applied "*a reduction of 15% to the variable costs estimated by FE to reflect this benchmarking exercise*".[139] This suggests that the UR approached its bottom-up assessment of FE's maintenance costs with a presumption that FE is inefficient compared with PNGL. However, no justification is provided for this 15% reduction.

4.41 In adopting this approach, the UR failed to take proper account of sparsity (i.e. significantly lower population and customer densities) within FE's Licence Area in its bottom-up assessment of the efficiency of FE's Opex allowances for maintenance costs. A small customer base spread across a largely rural Licence Area with low population density makes it more expensive for the company to maintain its network on a per-customer basis.

4.42 Sparsity is clearly a relevant factor in FE's Licence Area. FE provided the UR with robust evidence tailored to its Licence Area to demonstrate the impact of sparsity on its maintenance costs. For example, FE highlighted the rural and provincial nature of its network in response to the initial GD17 Approach Discussion Paper.[140] Further, the June 2015 Oxera Report emphasised the unusual sparsity of FE's network which "*implies that FE may incur higher unit costs to maintain its network*".[141]

4.43 The map at **NM-1 / Tab 1** clearly shows the difference in in the size and coverage of FE's Licence Area in comparison with PNGL's licence area.

4.44 The table below also illustrates the extent to which the FE Licence Area differs from PNGL and Northern Gas Networks using the measure of customers per km of main.

[138] **AH-1 / Tab 1 / Para 1.14** and **2.3.**

[139] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.212**.

[140] FE Response to GD17 Approach Discussion Paper**, NOA-1 / Tab 15 /** P**age 4**.

[141] The June 2015 Oxera Report, **NOA-1 / Tab 17E / Page 10**.

Network Area (as at 2014)	Customers	Network mains length (km)	Customers per km of main	Population per km^2
Ten Towns (FE)	25,000	1,000	25	166
Greater Belfast (PNGL)	180,000	3,000	60	897
Northern Gas Networks	2,700,000	37,000	68	246

Source: Figure 3.4 in FE Response to GD17 Draft Determination, page 40.[142]

4.45 The UR has disregarded or failed to take proper account of the evidence FE has provided regarding network sparsity and provided no proper justification for rejecting its impact on FE Opex allowance for maintenance costs.

4.46 The UR instead chose to set the cost of maintenance for FE by reference to the projected costs for PNGL.[143] It did so notwithstanding that FE's Licence Area (the "Ten Towns" area) has a much lower population density than the Greater Belfast area where PNGL operates.

4.47 The DNV.GL analysis submitted by FE in response to the GD17 Draft Determination[144] makes the following conclusions about the effect of sparsity on maintenance costs within the FE Licence Area:

(a) "*the maintenance team travel time associated with firmus energy's dispersed networks will be 15% higher than for PNGL's urban network*"; and

(b) "*the comparatively low asset concentration within firmus energy's networks result in unit maintenance costs that are 24% higher than PNGL's, inclusive of travel time effects*".

4.48 A number of UK regulators have acknowledged the impact of sparsity on network operating costs. In particular, previous regulatory determinations, including UR determinations, have accepted that there is a relationship between sparsity (or rurality) and the costs associated with travel times, emergency and repair responses, and staffing requirements. In several cases, UK regulators have applied 'special factor' adjustments, modelling changes, or pre-modelling input adjustments to account for sparsity. For example:

(a) *UR*: the UR itself has previously acknowledged the impact of rurality network operating costs in the case of NI Water (PC15) where the UR allowed a special factor adjustment of £1.57 million specifically for the impact of rurality on travel times (compared to a claim of £2.92 million).[145]

(b) *Ofgem*: Ofgem's approach is typically to adjust the underlying raw cost data prior to benchmarking. For example:

[142] The customers per kilometre of main figure for FE has been adjusted from 27 to 25 since the FE Response to the GD17 Draft Determination.

[143] GD17 Final Determination, **NOA-1 / Tab 7 / Page 6.71**

[144] FE Response to GD17 Draft Determination, Appendix 7, **NOA-1 / Tab 7G / Page 1**.

[145] Water and Sewerage Services Price Control 2015-21, Final Determination Annex P, Opex Special Factor Report, December 2014, pp. 4 - 14 (https://www.uregni.gov.uk/sites/uregni.gov.uk/files/media-files/UR_PC15_FD_Annex_P_-_Opex_Special_Factors.pdf). The UR used a top down approach to determine cost allowances. NI Water argued that special factors relating to rurality (e.g. impact of rurality on travel times, water treatment, and sewage pumping stations) were not captured within the UR's modelling. NI Water conducted an internal comparison of travel times in rural and non-rural areas within its operating area. Costs per connection were calculated separately in each area to identify the impact of rurality on labour time, vehicle repair costs, and fuel costs. The difference between the total costs implied in the two areas was used to calculate a bottom up special factor for rural travel. The UR replicated the approach proposed by NI Water, although the UR chose to change the balance between rural and non-rural areas by including additional properties in the non-rural area.

(i) in DPCR5, Ofgem made specific adjustments to acknowledge greater travel times in remote areas of Scotland;[146]

(ii) in RIIO GD1, Ofgem made adjustments to raw cost data for emergency and repair activities prior to benchmarking the GB GDNs. A sparsity index was constructed and used to adjust raw cost data such that the sparsest GDN was provided with an uplift for additional emergency and repair costs (prior to benchmarking efficient costs);[147] and

(iii) in RIIO ED1, the most recent price control review, Ofgem made specific adjustments for Scottish and Southern Energy Distribution[148] to account for the impact of higher travel, communication and staffing costs in remote areas.[149]

(c) *WICS*: In its review of Scottish Water (Price Setting 2010-2015), WICS made specific adjustments to Ofwat's econometric models to account for excess travel times in Scotland. Scottish Water argued that geographic factors and low population density increased average travel times relative to England and Wales. WICS acknowledged these travel time differences, providing an uplift of £7 million (WICS had requested £8.8 million).[150]

4.49 In the GD17 Final Determination, despite acknowledging that the DNV.GL analysis could support "*a range of adjustments from as low as 3% to the 25% proposed by [FE]*", the UR went on to conclude that "*we have not applied a sparsity adjustment to our benchmark costs for FE*" on the basis of an Ofgem "*precedent*" considering GDN costs in GB.[151] The decision by Ofgem to only apply sparsity adjustments to emergency costs is based upon a GB-only sample, and does not recognise the marked difference between FE and GB GDNs, nor any of the other alternative "precedents" discussed above.

4.50 The UR's GD17 Decision is also at odds with its own consultants who advised that FE's proposed maintenance costs for "*the activities identified were reasonable and that the bottom up estimates of the unit costs was broadly reasonable with some exceptions*".[152] The clear evidence of the effect of sparsity on FE's costs in a Licence Area which the UR's own consultants considered to be unlike those of other GDNs could not properly be dismissed in this fashion without proper evaluation and assessment.

4.51 FE also presented the UR with evidence of the DNV.GL analysis being borne out in practice. An engineering contractor stated during a tender process in 2015 that "*geography had a material impact upon their rates*" and that the differences in network densities lead "*to a construction team productivity of 2 jobs per day for firmus energy*

[146] Ofgem, Electricity Distribution Price Control Review: Final Proposals - Allowed revenue - Cost assessment appendix, Para 1.51 (https://www.ofgem.gov.uk/ofgem-publications/46749/fp3cost-assesment-network-investmentappendix.pdf).

[147] Ofgem, RIIO-GD1: Final Proposals - Supporting document - Cost efficiency (17 December 2012), Paras 2.1, 2.6 to 2.8, 2.12 to 2.14 (https://www.ofgem.gov.uk/sites/default/files/docs/2012/12/4_-riiogd1_fp_cost_efficiency_0.pdf).

[148] RIIO-ED1 business plan expenditure assessment : methodology and results (6 December 2013), Paras 4.1 and 4.9. (https://www.ofgem.gov.uk/ofgem-publications/85039/costassessmentmethdologyandresultsmasterv2.pdf).

[149] As in RIIO-GD1, raw cost data were adjusted prior to benchmarking, resulting in 92% of the allowance requested by Scottish and Southern being accepted. It is noteworthy that Ofgem's consideration in RIIO-ED1 covered a broader range of cost items compared with its decision in GD1.

[150] WICS, Price Setting 2010-2015: Draft Determination Staff Paper 6: Allowed for operating costs, pages 12 to 14 (http://www.watercommission.co.uk/UserFiles/Documents/Staff%20paper%206.pdf), .

[151] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.213**.

[152] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.205**.

teams and 3 jobs a day for Phoenix teams". The contractor also noted that there was a notable impact on other aspects of the support function and that "*[e]ven though the contractor undertakes efficient planning of works by grouping the areas of work, there is still a significant amount of travel "downtime" experienced by all operatives*".[153]

4.52 The Maintenance Sparsity Error in the UR's bottom-up analysis was compounded by the Benchmarking Error, through the UR's use of a flawed top-down benchmarking assessment to "*reinforce*" and "*sense check*" its assessment.[154] Attempting to compare FE to the larger and well established GB GDNs created an illusion of reliability in the UR's bottom-up assessment when in fact both the top-down and bottom-up analyses were downward biased because they failed to properly account for the impact of sparsity on FE's maintenance costs.

4.53 The UR itself has acknowledged that:

> In terms of customer density, both PNGL and FE have a lower number of customers per network main than the eight GB GDNs. As customers continue to connect to these new networks, these numbers have increased steadily and are expected to increase further into the medium term. Due to its network serving a more rural customer base, even once it reaches maturity, it is likely that FE will have a relatively low customer density.[155]

4.54 The impact of sparsity within FE's Licence Area is also acknowledged by the UR's benchmarking consultants (Deloitte) who describe the characteristics of the FE Licence Area as "*quite idiosyncratic*"[156] in comparison with other GDNs and warn throughout their report that:

> FE has a significantly different profile to any of the other GDNs in terms of the ratios between network length, customer numbers and volume of gas supplies. This results in significant challenges in assessing the extent to which FE costs are inefficient or are due to the characteristics of the business. As such, FE's relative efficiency has been computed by estimating a model using the GB only or GB and PNGL data and fitting the model to the FE data. *A detailed analysis of special factors driving cost differences between FE and other GDNs, which is outside of the scope of this report, would be required to isolate these effects.*[157] (emphasis added)
>
> … any efficiency analysis of the Northern Ireland GDNs has some particular challenges primarily associated with benchmarking companies from different regions, the small number of comparators and their varying stage of development.[158]
>
> … there are questions on variations in the FE cost data and challenges associated with separating NI's, and in particular FE's, efficiency from heterogeneity, i.e. small scale, network utilisation.[159]
>
> … given the idiosyncrasy of the NI GDNs and in particular FE, and the sensitivity of the results, special factors (both positive and negative) should be taken into account for the efficiency determination.[160]

4.55 In setting FE's maintenance costs by reference to those of PNGL (which is a larger GDN operating in a more densely populated urban area), the UR materially underestimated the efficient cost of maintaining FE's gas distribution network. Given the unique

[153] FE, Supplementary Paper: Period Contract (June 2015), **NOA-1 / Tab 17L / Pages 1-2**.

[154] GD17 Decision, **NOA-1 / Tab 9 / Para 2.12**. GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.27**.

[155] GD17 Final Determination, Annex 5, **NOA-1 / Tab 7E / Para 2.8**.

[156] GD17 Final Determination, Annex 4, **NOA-1 / Tab 7D / Pages 10**.

[157] GD17 Final Determination, Annex 4, **NOA-1 / Tab 7D / Page 4**.

[158] GD17 Final Determination, Annex 4, **NOA-1 / Tab 7D / Page 9**.

[159] GD17 Final Determination, Annex 4, **NOA-1 / Tab 7D / Page 13**.

[160] GD17 Final Determination, Annex 4, **NOA-1 / Tab 7D / Page 20**.

characteristics of FE's Licence Area, and the UR's view that FE is a "*clear outlier*", a more appropriate bottom-up approach would have involved comparing the general level of expenditure proposed by FE against historic data and considering the detailed information provided by the FE to justify its proposed maintenance costs for GD17. This is the approach the UR adopted to determine that PNGL's maintenance costs were reasonable. It is unclear why the UR adopted a different approach for FE.[161]

4.56 The Maintenance Sparsity Error has resulted in FE's efficient Opex allowance being understated by £0.97 million .

Ground 1C: The GIS Oversight Error

4.57 GIS is computerised mapping software used by GDNs for network operations, maintenance and planning. The licensed software provides detailed maps showing the location of gas mains and gas supply points. It is essential software for FE to safely and efficiently operate its business.

4.58 An allowance for professional and legal costs associated with GIS has been omitted entirely from the GD17 Final Determination. These are necessary and legitimate expenses that FE will incur in GD17. These costs were recognised and included in the GD17 Draft Determination but omitted from the GD17 Final Determination.[162]

4.59 In the GD17 Final Determination, the UR states that it made "*a number of corrections*" to its analysis including "*the removal of items covered elsewhere in the submission under legal and professional services including GIS costs, software licences and fees for base maps*".[163] The UR does not, however, identify where in the GD17 Final Determination these GIS costs are covered nor did it provide any explanation of how it made this "correction".

4.60 As Mr Martindale's Witness Statement explains:[164]

(a) FE highlighted this omission following the GD17 Final Determination; and

(b) the UR took the position that, despite the inclusion of GIS costs in the GD17 Draft Determination and previous price controls, their omission from the GD17 Final Determination was not an error and suggested that an "*element*" of these costs could later be recovered through the uncertainty mechanism.[165]

4.61 However, it is wholly unclear as to how any such reconciliation will be made or on what basis. It is also unclear, having previously accepted these costs in the GD17 Draft Determination, what "element" the UR is now considering excluding during any reconciliation and the justification for doing so.[166] No reasons are given in the GD17 Final Determination for this significant omission nor does the UR explain in the GD17 Decision why, having been alerted to the omission by FE, no provision is being made now, to cover the period in which the costs will be incurred.

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[161] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.71**.

[162] GD17 Draft Determination, **NOA-1** / **Tab 6** / **Paras 6.124** to **6.126**.

[163] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.210**.

[164] **Martindale-1 / Paras 6.35** and **9.9-9.14**

[165] GD17 Decision, **NOA-1 / Tab 9 / Para 2.17.** The Opex uncertainty mechanism addresses uncertainties by retrospectively adjusting determined allowances to account for actual costs or outputs. Those Opex items to be considered within FE's uncertainty mechanism for GD17 can be found at GD17 Decision, **NOA-1 / Tab 9 / Para 9.21 (Table 180).**

[166] GD17 Decision, **NOA-1 / Tab 9 / Paras 2.16** to **2.18**.

4.62 The omission of these costs in the GD17 Final Determination was clearly an error. By failing to recognise this error, and not adjusting FE's allowance to account for this omission, the UR is requiring FE to enter GD17 with no ability to recover these efficient costs, nor any certainty about what "element" of these costs the UR may decide to allow in the future. Finally, any suggestion that this error could be subsequently dealt with through the uncertainty mechanism fails to recognise that (i) this would require a further licence modification as the uncertainty mechanism was not designed for this purpose; and (ii) this would involve a deferral of FE revenue for no legitimate reason.

4.63 The GIS Oversight Error has resulted in FE's efficient Opex allowance being understated by £1.11 million.

Ground 1D: The Manpower Scale Error

4.64 The UR failed to take proper account of scale cost drivers in its assessment of the efficiency of FE's manpower allowance. In doing so, the UR:

(a) has underestimated the efficient level of manpower required to deliver the significant growth in FE's business over GD17 projected by its Business Plan; and/or

(b) is requiring FE to achieve economies of scale over the GD17 period which are not realistic or achievable having regard to the projected size of FE's business and the characteristics of its Licence Area. In this regard, using the UR's top-down benchmarking analysis to "*reinforce*" or "*sense check*" FE's Opex allowance by reference to efficiencies obtained by the much larger and more established GB GDNs achieved is wholly inappropriate.[167]

4.65 Mr Horncastle of Oxera states that "*companies' scale of operations is the principle cost driver*" and that "*FE will not be able to achieve the level of economies of scale relative to customer numbers enjoyed by the GB GDNs that it is compared to*" in the UR's top-down benchmarking analysis.[168]

4.66 One of the principal conclusions of the UR's top-down econometric modelling is that scale is an important determinant of cost. As Deloitte stated: *"The main driver of cost variation over time and across GDNs is scale. The models estimate that a 1% increase in the scale of a GDN is expected to increase costs by 0.69% to 0.81%. The key [scale] factors that drive cost differentials between GDNs are the network size, number of customers and gas volume…"*[169]

4.67 The GD17 Decision anticipates material growth in the scale of FE's operations over the GD17 period. In particular, the GD17 Final Determination contemplates:

(a) network size increasing by 65% (by network kilometres);[170] and

(b) FE adding an additional 30,950 connections (a 100% increase over GD17), of which 20,450 are domestic owner occupied connections (approximately an 80% increase on current like for like OO connections).[171]

[167] GD17 Decision, **NOA-1 / Tab 9 / Para 2.12**. GD 17 Final Determination, **NOA-1 / Tab 7 / Para 6.27**.

[168] **AH-1** / **Tab 1 / Paras 2.14** and **2.34**.

[169] GD17 Final Determination, **NOA-1 / Tab 7 / Page 4**.

[170] GD 17 Final Determination, **NOA-1 / Tab 7 / Para 1.43**.

[171] GD17 Final Determination, **NOA-1 / Tab 7 / Para 5.12**.

4.68 Applying the logic in the Deloitte report to the increase in the scale of FE's activities under the GD17 Decision would imply a material increase in FE's operating costs over GD17.

4.69 This is in stark contrast to the manpower allowance granted by the UR, which contemplates a flat manpower profile over GD17 and a reduction in manpower compared with FE's actual FTE employees today.

Manpower (FTEs)	GD14			GD17					
	2014	2015	2016	2017	2018	2019	2020	2021	2022
FE requested allowance[172]	57.1	59.1	59.1	65.7	65.7	65.7	65.7	65.7	65.7
UR GD17 Final Determination	54.4	55.9	55.5	58.3	58.3	58.3	58.3	58.3	58.3
Variance	(2.7)	(3.2)	(3.6)	(7.4)	(7.4)	(7.4)	(7.4)	(7.4)	(7.4)
FE actual	53.7	56.0	61.0						

Source: GD17 Final Determination, Table 28[173]; FE business records.

4.70 The UR has required FE to achieve significant connections growth while only allowing a 5% increase in FE's full time equivalent employee (***FTE***) allowance from the final year of GD14 to GD17 (from 55.5 to 58.3).[174] Based on actual FTE employee numbers at November 2016, FE would need to achieve this significant connections growth while reducing (and then retaining) its actual FTE employees from 61 to 58.3 (a 4.4% reduction) in order to meet the GD17 manpower allowance. This is unrealistic and unachievable.

4.71 The UR acknowledges that manpower is "*an integral part of the price control*" but has failed to recognise in the manpower allowance that, as FE's connections increase significantly, so too must its manpower costs as it takes on the additional employees to meet its new connection requirements and service a growing customer base.

4.72 The UR instead observes that in one year (2014), FE's manpower was lower than the manpower allowance for that year and goes on to conclude that "*we consider that we have allowed a sufficient increase in FTEs in the final determination for FE in the GD17 period, which recognises the envisaged growth in the FE network*".[175] FE explained in its response to the GD17 Draft Determination that this shortfall arose because its actual FTE figure for 2014 was "*understated by 1.4 FTEs due to the average number of positions open, or furloughs caused by staff turnover, during 2014. This would re-base actual FTEs in 2014 to 55.1.*"[176]

4.73 By setting a manpower allowance which is static at 58.3 FTEs for the entire duration of GD17, while FE's annual connection requirements continue to increase year on year, the UR has failed to take proper account of the efficient costs that FE would necessarily incur as it attempts to achieve these connection requirements which have been set by the UR. The UR was therefore wrong to:

[172] This figure included 3 agency staff. The GD17 Draft Determination proposed 56.5 FTEs for each year of the GD17, **NOA-1 / Tab 6 / Para 6.48**. FE's response proposed a glide-path increase to manpower numbers to reach 65.7 by 2022 . This proposal was also rejected by the UR. **NOA-1 / Tab 7 / Para 6.104 - 6.105**.

[173] **NOA-1 / Tab 7 / Para 4.69**.

[174] GD17 Final Determination **NOA-1 / Tab 7 / Para 6.104**.

[175] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.113**.

[176] FE Response to GD17 Draft Determination, **NOA-1 / Tab 7 / Section 3.2.2**.

(a) ignore FE manpower data for 2015 where FE had more FTE employees than its manpower allowance (a position which continued in 2016);

(b) conclude that, because FE's actual manpower in one year (2014) was 1.3% lower than its manpower allowance for that year, FE could sustain a 11.3% decrease in its requested manpower allowance for each of the six years covered by GD17; and

(c) require FE to achieve economies of scale which would not be possible for any efficient GDN which is (i) in the build phase of its network rollout; and (ii) required to achieve such significant connection increases within its sparsely populated Licence Area.

4.74 Any attempt to justify FE's manpower allowance by reference to the UR's flawed top-down benchmarking analysis would be wrong for the reasons discussed at Ground 1A above.

Implications of the GD17 Decision

4.75 As the graph at paragraph 4.10 shows, there is a clear disconnect between the growth in properties passed and new connections for GD17 on the one hand, and FE's overall Opex allowance and manpower allowance which will be necessary to support this growth on the other.

4.76 By failing to take proper account of scale cost drivers within FE's business, the GD17 manpower allowance that the UR has determined for FE is not adequate to allow FE to meet its obligations under the FE Licence (which has been modified to give effect to the GD17 price control) without either overspending and depressing its profits below the WACC[177], or reducing its activities. For example, without material overspend by FE, the GD17 Opex allowance set by the UR:

(a) means that FE would need to reduce the level of meter maintenance, which could lead to an increase in the number of meter errors (and subsequently emergency costs);

(b) places in question FE's ability to meet its required KPIs for customer service; and

(c) does not allow FE to train new recruits.

4.77 The Manpower Scale Error has resulted in FE's efficient Opex allowance being understated by £1.20 million.

Ground 1E: The Omission Error

4.78 The UR's bottom-up methodology for determining FE's Opex allowance failed to properly to account of FE's efficient costs associated with the following legitimate and necessary Opex items:

(a) audit, finance and regulation costs; and

(b) central services costs previously accounted for in the parental recharge.

[177] As set out in Section 7 (Ground 4), FE considers that the UR set a WACC for FE that is too low, which compounds the effect of this error.

4.79 FE's GD17 Business Plan contained genuine and efficient business costs in each of these cost lines and the UR had no proper basis to exclude or reduce them in FE's GD17 Opex allowance.

4.80 The UR used 2014 cost data as its base year for the purposes of its bottom-up assessment of FE's operating costs. Setting FE's Opex allowances for the 6 years covered by GD17 using only a single year of operating cost data, without sufficient regard to more recent information (which was available), is likely to have contributed to the Omission Error. This base year issue is discussed further below before turning to each of the errors identified above.

Implications of using 2014 as the base year for UR's bottom-up analysis

4.81 The selection of an appropriate base year is fundamental to the calibration of future Opex allowances. This is a point acknowledged by the UR's consultants (Deloitte) in their top-down analysis who state that "*the relative efficiency estimates, in particular for FE, are quite sensitive to the year used as the basis for the computation of efficiency*".[178]

4.82 Use of operating cost data from a single year (2014) to set the base year for the purposes of determining FE's Opex allowances for GD17 was problematic for some cost lines because not all operating costs are distributed equally across the 3 years covered by GD14. For example, regulatory costs associated with the GD17 price control were incurred later in the GD14 period.

4.83 This problem was exacerbated by the fact that FE materially overspent its Opex allowances to meet its GD14 obligations, but by selecting 2014 as its single base year for determining FE's GD17 allowances, the UR failed to take proper account of these actual costs necessarily incurred by FE (instead choosing only to focus on the first year). By using FE's 2014 costs as its base year and projecting these forward over the 6 years covered by GD17, the UR:

(a) did not properly take account of credible evidence in the form of more recent 2015 Opex data which demonstrated that FE's GD14 Opex allowances were inadequate; and

(b) had materially underestimated FE's efficient costs in a number of GD17 cost lines, including (i) audit, finance and regulation costs; and (ii) central services costs previously accounted for in the parental recharge.

4.84 The UR had 2015 data available to help guide its assessment. FE also offered to provide more granular 2015 data but was not taken up on this offer. The UR confirmed to FE that it did not take up this offer because another GDN was not in a position to provide 2015 Opex data within the timeframe required by the UR.[179]

4.85 The UR stated in its GD17 Final Determination that "*we have decided not to use 2015 costs as the basis for GD17 as the data was not available in a timely or detailed manner. We have however used it to verify at a high level, where appropriate, for some of the allowances.*"[180]

[178] GD17 Final Determination, Annex 4, **NOA-1 / Tab 7D / Page 4**.

[179] **Martindale-1 / Para 9.21**.

[180] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.89**.

4.86 The UR's methodology for assessing FE's efficient costs over GD17 presented a particular challenge, and therefore required a cautious approach, because the UR was basing Opex allowances for the next 6 years on actual costs data from the first year of the previous GD14 price control where FE's actual performance against its GD14 allowances was largely untested.

4.87 Had the UR considered FE's Opex data for 2015, it would have been clear that:

(a) FE's actual costs in 2015 were approximately £853,044 (14%) higher than actual costs in 2014[181]; and

(b) FE incurred legitimate and necessary costs in 2015 which it had not incurred in 2015 (e.g. regulatory costs associated with the GD17 price control).

4.88 To ignore more recent Opex data in a growing business like FE is counter-intuitive. Omitting to take relevant and more recent information into account for FE on the basis that another GDN could not provide similar data in time was flawed.

4.89 Consideration of a more recent data set would have shown that GD14 allowances had already presented significant Opex challenges for FE and that other costs for which 2014 was an anomalous year should be accounted for in FE's Opex allowance for GD17.

4.90 This approach is consistent with the CMA's approach in its recent review of Ofwat's AMP6 price determination where the CMA found that "*using any one year might be unrepresentative and that an average was therefore a more robust approach*".[182] In that case, the CMA adjusted Bristol Water's Opex in AMP6 for atypical costs and then "*used an adjusted average of the AMP5 period rather than 2013/14 as a single base year*" to determine AMP6 Opex.[183] This approach is even more important in the context of a growing business, such as FE, which requires material year on year growth in Opex as it continues to build out its network and connect new properties. Bristol Water, on the other hand, is a more mature company which is not reliant on significant customer and network growth.

Audit, finance and regulation

4.91 Audit, finance and regulation covers the costs of "*performing the statutory, regulatory and internal management cost and (business support activity) performance reporting requirements and customary financial and regulatory compliance activities for the network*".[184]

4.92 FE requested an allowance of £3,620,612 for audit, finance and regulation in its Business Plan.

4.93 In its bottom-up assessment of FE's audit, finance and regulation costs, the UR reduced FE's allowance by 35% to £2,337,603. No clear justification was provided for this

[181] This figure excludes one-off expenditure costs. See Business Plan Submission, **NOA-1 / Tab 19 / Para 2.2.6**.

[182] CMA: Bristol Water plc, *A reference under section 12(3)(a) of the Water Industry Act 1991* (6 October 2015), Para 5.55.

[183] CMA: Bristol Water plc, *A reference under section 12(3)(a) of the Water Industry Act 1991* (6 October 2015), Para 5.56.

[184] UR RIGS, **NOA-1 / Tab 5 / Appendix 1**, **Para A1.4**. Appendix 3 provides further guidance and lists the following activities as being captured within audit, finance and regulation: Process of payments and receipts; Time sheet evaluation where not part of the payroll process; Financial & risk management – e.g. credit & exposure management; Financial planning, forecasting & strategy; Financial accounting; Management accounting; Investment accounting; Treasury management; Transportation income accounting; Pricing; Statutory & regulatory reporting; Tax compliance & management; Internal audit & management of the relationship with external audit function; External audit fees; Cost of regulatory department.

reduction in the GD17 Final Determination, other than the UR stating that it thought its reduction in the FTE employee allowance for this cost line was "appropriate".[185] This is striking given a number of costs in this category are necessary to meet statutory and regulatory requirements (e.g. external auditing; price control process). Preventing FE from recovering its efficient costs for legitimate and necessary audit, finance and regulation activities is clearly an error and contrary to the UR's statutory duty to ensure licence holders can finance their activities.

4.94 The impact of the GD17 Decision is highlighted in the allowance for regulatory costs associated with the GD23 price control. By selecting data from a single base year (2014) to perform its bottom-up cost line assessment of FE's efficient costs, the UR chose a year which was the first year *after* the GD14 price control took effect and *before* the GD17 price control process commenced.

4.95 The UR acknowledges that "*in using 2014 as a base year there may be some costs which are higher or lower in other years*" but seeks to justify this oversight by stating that "*we have not seen evidence that suggests these changes would not be appropriate over the duration of the control period, as these costs tend to average out*".[186] However, engaging with the price control process is an unavoidable cost that FE must meet and these costs were not included within the 2014 cost dataset taken as the base year. This was a clear omission and appropriate allowance should be made for this cost element.

4.96 The costs FE submitted in its Business Plan for audit, finance and regulation included costs associated with the GD23 price control process. Had the UR considered FE's 2015 cost data, it would have been clear that FE had already incurred approximately £327,000 (in 2014 prices) in costs associated with the GD17 price control. FE's Business Plan was submitted at a time before much of the detail about GD17 and the UR's assessment of FE's costs was known. In practice, the GD17 price control process required much greater resources than FE initially anticipated and FE actually incurred costs of approximately £584,000 (in 2014) in connection with the GD17 price control process (excluding this appeal). However, FE is only seeking to recover its modest Business Plan estimate in this appeal.

Central services costs previously accounted for in the parental recharge

4.97 At the time of the GD14 Final Determination, FE was controlled by Bord Gáis Eireann (***BGE***). The GD14 price control included an Opex allowance for "parental recharges" of £282,000 per annum (in 2014 prices) relating to central services supplied by BGE to FE.[187] The GD14 Final Determination states that:

> '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.[188]

[185] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.248**.

[186] GD17 Final Determination, Annex 13, **NOA-1 / Tab 7M / Item 17**.

[187] GD14 Final Determination, **NOA-1 / Tab 11 / Para 6.117** includes an allowance of £266,000 in 2012 prices.

[188] GD14 Final Determination **NOA-1 / Tab 11 / Para 6.111**.

4.98 In June 2014, FE was sold to funds advised by iCON Infrastructure LLP. The central services provided by BGE have since ceased and FE is managed on a standalone basis. However, the genuine business activities represented by the former parental recharges continue to be required and will need to be absorbed into other Opex cost lines.

4.99 The UR stated in the GD17 Final Determination that "*our approach is not to make adjustments as a result of change of ownership and no additional allowances will be granted to fund these costs*".[189] However, no costs associated with the change of ownership were included within FE's Business Plan.

4.100 The costs associated with services provided under the parental recharge were genuine necessary business costs such as ongoing I.T, audit, regulatory, HR, procurement and training costs. Although FE no longer obtains these activities on an "outsourced" basis from its former parent, it must undertake these activities internally or acquire them from third party service providers. It is therefore appropriate to make provision for the efficient costs of these activities by FE. Failure to include any allowance whatsoever for activities previously covered by the parental recharge merely as a result of the sale of FE to funds advised by iCON Infrastructure LLP was a clear omission, and therefore erroneous.

4.101 In removing the parental recharge allowance in GD17, the UR was therefore wrong not to make appropriate adjustments to other Opex cost lines to take proper account of the legitimate and necessary efficient costs which had previously been provided for within the parental recharge.

Implications of GD17 Decision

4.102 The Omission Error has resulted in FE's efficient Opex allowance being understated by £1.15 million.

D. RELIEF SOUGHT

4.103 The GD17 Decision in relation to FE's Opex allowance was wrong under the statutory grounds identified in paragraph 4.4(b)(iv).

4.104 For the reasons outlined above, FE requests that the CMA quash the GD17 Decision under Article 14E(2)(a) of the Gas Order and substitute its own which increases FE's operating expenditure allowance by £4.43 million in line with FE's Business Plan.

[189] **NOA-1 / Tab 7 / Para 6.86**.

Section 5: Appeal Ground 2 – Connection Incentive

A. OVERVIEW

5.1 The second ground of appeal concerns the UR's determination of the connection incentive to apply each year for the 6 years covered by GD17. The UR has provided an allowance of £9.37 million post-efficiency for the connection incentive over the 6 years covered by GD17, however, FE's ability to recover this amount depends on it achieving the substantially higher connection targets set by the UR in GD17.

5.2 The connection incentive is a per connection allowance which can be recovered for a proportion of new connections to domestic owner occupied properties (***DOO Connections***). The connection incentive makes up approximately 23% of FE's overall Opex allowance.[190]

5.3 FE incurs marketing and sales-related costs in connecting new customers to its gas network. In GD17, the connection incentive is the mechanism by which FE can recover these costs. The connection incentive is intended to promote development of the gas network and encourage new connections by making FE's ability to recover its sales-related costs contingent on the achievement of connection targets set by the UR. The UR considers that the connection incentive also helps FE to take actions which increase awareness of, and encourage switching to, natural gas in Northern Ireland, where gas is today not the primary fuel of choice for many households.[191]

5.4 The UR notes that the connection incentive is typically used by GDNs to "*cover the sales teams, advertising and marketing, direct customer incentives and associated overheads*".[192] Therefore, setting annual DOO Connection requirements which are realistic and achievable is important to ensure that FE has a reasonable prospect of meeting the target and can recover its sales-related costs. A failure to meet the annual DOO Connection requirements results in an underperformance penalty (discussed below).

5.5 FE proposed an ambitious but achievable plan to grow its DOO Connections by 16,724 over the course of GD17. This target was built from the bottom-up having regard to FE's historical connections performance; infill area pilot studies; a review of gas market penetration rates achieved in Northern Ireland and Great Britain; and expert advice from third party consultants.[193] This represented an ambitious average annual increase in DOO Connections of approximately 48% compared with FE's actual performance in GD14 and was based on an assumption that FE could connect 65% of premises passed by 2045.

5.6 The UR increased FE's ambitious DOO Connection target by 22% from 16,724 to 20,450 new connections over the GD17 period. The UR's DOO Connection targets represent an annual average increase of 80% of FE's performance during GD14. This uplift is based on a long term UR assumption that 85% of properties passed will connect to the FE gas network by 2045 (the ***85% Assumption***).

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[190] The connection incentive is represented by the Opex cost line "AMPR (OO)" in Table 55 in the GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.285** . The range represents the difference between FE's Business Plan and the GD17 Final Determination (assuming FE meets the connection targets set out in its Business Plan).

[191] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.115**.

[192] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.311**.

[193] Business Plan Submission, **NOA-1 / Tab 7 / Page 34**.

5.7 FE is required to achieve this 22% increase in a sparsely populated Licence Area where the conversion cost to the consumer of a new connection is between £2,000 to £3,000[194] and households have average gross disposable incomes that are lower than in the Greater Belfast area (served by PNGL) and significantly lower than the UK average.[195]

5.8 The UR made the following errors in setting the connections incentive in GD17:

(a) using the unjustified 85% Assumption to set annual connection targets that FE is required to achieve for new domestic owner occupied properties at a level that:

(i) failed to take proper account of FE's historic performance, specific FE Licence Area characteristics, economic conditions and reliable evidence put forward by FE; and

(ii) is unachievable having regard to the true efficient costs of DOO Connections in FE's Licence Area,

(the ***Connection Target Error***); and

(b) arbitrarily determining, without any evidential basis and ignoring compelling evidence put forward by FE, that 25% of new customers will connect to FE's network in the absence of any direct marketing or selling activities by FE, which means that no connections allowance is recoverable in respect of these connections (the ***Non-Additionality Error***).

5.9 The UR's GD17 Decision on the connection incentive was therefore wrong on the following grounds:

(a) the UR failed properly to have regard to and/or to give appropriate weight to its principal objective to promote the development and maintenance of an efficient, economic and coordinated gas industry in Northern Ireland, by setting domestic owner occupied connection targets at a level which cannot be achieved using the connection allowance provided for in GD17;[196]

(b) the UR failed properly to have regard to and/or to give appropriate weight to its statutory duty to secure that licence holders are able to finance their licensed activities, by setting domestic owner occupied connection targets at a level which will cause FE to significantly overspend if it attempts to achieve those targets or face a material reduction in its Opex allowance if it does not;[197] and/or

(c) the connection incentive modifications fail to achieve, in whole or in part, the effect stated by the UR, specifically to "*incentivise the GDNs to further grow the industry in an economic and co-ordinated manner*" and "*allow the GDNs to charge tariffs consistent with the maintenance and operation of a growing gas network whilst financing its activities*".[198]

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[194] This figure typically includes, for example the costs of removing the old oil system, installing a new gas, boiler, flue, etc. See FE, Connections Incentive Supplementary Paper, **NOA-1 / Tab 7 / Page 15**.

[195] 2014 gross disposable household income (***GDHI***) figure presented for FE is an average of the three Office for National Statistics (ONS) regions in which the "Ten Towns" Licence Area lies: North of Northern Ireland, East of Northern Ireland and West and South of Northern Ireland. (Dataset: link) ; 2014 GDHI figure presented for PNGL is an average of the two ONS regions in which the Greater Belfast Licence Area lies, Belfast and Outer Belfast (Dataset: link)

[196] Article 14D(4)(a) and (b) Gas Order; Article 14(1) Energy Order.

[197] Article 14D(4)(a) and (b) Gas Order; Article 14(2)(b) Energy Order.

[198] Article 14D(4)(d) Gas Order; GD17 Decision, **NOA-1 / Tab 9 / Para 2.40**.

5.10 The combined effect of the UR's errors was a **£1.67 million** (in 2014 prices) reduction in FE's Opex allowance for GD17.

B. THE UR'S DECISION ON THE CONNECTION INCENTIVE

5.11 The connection incentive in GD17 is made up of three key elements:[199]

(a) *the connection target*: the number of domestic owner occupied properties a GDN is required to connect to its gas network each year;

(b) *the connection allowance*: a fixed amount per connection that the GDN is permitted to recover within its overall Opex allowance for new connections; and

(c) *non-additional connections*: a set number of connections, calculated as a percentage of the DOO Connection target (not actual connections), which are assumed to "*occur anyway without any direct marketing or selling to these customers*" meaning no connection allowance is recoverable in respect of these connections.[200]

5.12 The connection incentive rewards outperformance and penalises underperformance by linking the value of the connection incentive to a GDN's achievement of its DOO Connection target. In this regard, it links FE ability to recover a number of inherently fixed costs to the achievement of a connection target.

DOO Connection targets

5.13 The following table summarises FE's submission and the UR's decision on the DOO Connection targets in GD17:[201]

Connection target	**Domestic owner occupied properties**						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**	**GD17**
FE submission							
Connection target	2,466	2,537	2,622	2,753	3,100	3,246	**16,724**
Non-additional connections	100	100	100	100	100	100	**600**
GD17 Final Determination							
Connection target	2,600	2,950	3,300	3,600	3,900	4,100	**20,450**
Non-additional connections	650	738	825	900	975	1,025	**5,113**
Variance							
Uplift to Connection target	134	413	678	847	800	854	**3,726**
Uplift to non-additional connections	550	638	725	800	875	925	**4,513**
Total increase in connections required to achieve full allowance	684	1,051	1,403	1,647	1,675	1,779	**8,239**

[199] For a more detailed explanation of how the connection incentive is calculated (including the formula set by the UR), see **NOA-1 / Tab 7 / Para 6.124** of the GD17 Final Determination.

[200] Final Determination, **NOA-1 / Tab 7 / Para 6.157**.

[201] Final Determination, **NOA-1 / Tab 7 / Para 6.146 (Table 34)**.

5.14 The UR based its annual DOO Connection targets for GD17 on the following assumptions:[202]

(a) 85% of properties passed will connect to the FE network by 2045; and

(b) a connection rate of 5% per annum for properties passed but not connected.

5.15 These assumptions are significantly higher than FE's Business Plan assumption of 65%. They also represent a material departure from the UR's modelling used in GD14 which projected a 30 year penetration rate for FE of 45% by 2034.[203]

5.16 The UR did not provide any quantitative evidence to support its assumptions or change to FE's annual DOO Connection targets, stating only that "*we have assumed that 85% of properties will connect to the network in the long run at a rate of 5% per annum of properties passed but not connected. This is generally in line with the long term connection rate that we have seen to date. It is higher than the connection rate assumed for GD14*".[204]

Connection allowance

5.17 The UR set the following connections allowances in the GD17 Final Determination.

DOO Connection allowance (£)	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
FE Business Plan	**573**	**573**	**573**	**573**	**573**	**573**
UR GD17 Final Determination	**700**	**670**	**650**	**620**	**600**	**570**
Standard allowance per connection (£)	550	520	500	470	450	420
'New area' allowance	150	150	150	150	150	150

5.18 The table above gives the impression that the UR has increased the connection allowance above FE's Business Plan proposal, however, this is not the case when FE's proposed DOO Connection target and non-additionality rate are factored in. Adopting FE's Business Plan DOO Connection targets, the effective connection allowance per premises (after accounting for non-additionality) is set out as follows. As the table below shows, the connection allowance set by the UR in GD17 is significantly below the actual cost of

Effective DOO Connection allowance (£)[205]	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
FE Business Plan (GD17)	550	550	551	552	555	555
UR Determination (GD17)	515	475	445	417	411	390

Actual DOO Connection cost[206]	**GD14 average (£)**
DOO connection cost (actual)	810

5.19 Gas in Northern Ireland, and particularly in FE's Licence Area, is still at a reasonably early stage of development compared with GB. Given the financial cost of making a new

[202] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.149**.

[203] FE Response to GD17 Draft Determination, **NOA-1 / Tab 21 / Para 2.3.1**. GD14 assumption of 45% contained in UR, *Analysis: FE infill cost per meter GD14 review* (2 February 2015), **NOA-1 / Tab 12**.

[204] Final Determination, paragraph 7.21.

[205] Calculated using 5% non-additionality rate for FE's Business Plan and 25% non-additionality rate for the GD17 Final Determination and assuming that FE achieves its Business Plan connection targets set out at paragraph 5.13.

[206] Average connection cost (actual) per connection when accounting for non-additionality. See **Martindale-1 / Para 11.11**.

connection (approximately £2,000-3,000 per premises), the connection incentive is essential to secure consumer uptake of gas in FE's Licence Area. In the long term, gas is expected to be in the consumer's economic interest when compared with oil.

Area	Estimated percentage of households not connected to the gas network
Great Britain	**10%**
England	9%
Scotland	17%
Wales	15%
Northern Ireland	**67%**

Source: DECC, Sub-national estimates of households not connected to the gas network (2016);[207] NISRA[208]

5.20 A GDN's ability to achieve its DOO Connection target is influenced by the connections allowance that the GDN is permitted to recover in respect of new connections. This connections allowance helps the GDN to fund marketing and selling activities necessary to secure new connections.

Non-additionality rate

5.21 The UR determined a fixed non-additionality rate which assumes that the first 25% of target connections (not actual connections) would have occurred anyway without any direct marketing or selling activities by FE. The non-additionality rate has the effect of:

(a) setting a minimum number of connections that FE must achieve before it earns *any* connection allowance; and

(b) averaging down the effective connection allowance per new connection (see table at paragraph 5.18 above).

5.22 The effect of the non-additionality rate for a GDN is that it is not permitted to recover the connection allowance in respect of connections which are deemed to be "non-additional".

5.23 The UR's rationale for including a non-additionality rate is that "*since FE could in theory avoid any sales-related costs to connect such customers, no allowance will be applicable for these customers*".[209]

5.24 The UR did not provide any modelling or quantitative evidence in the GD17 Final Determination to support its conclusion that a 25% non-additionality rate was appropriate, stating only that:

(a) "*having considered the arguments from FE and reflecting on the stage of FE network development and the information on properties passed, we propose that maintaining the 25% "non-additional" represents a reasonable figure which recognises that the FE network is not as developed as that for PNGL*";[210] and

[207] https://www.gov.uk/government/statistics/sub-national-estimates-of-households-not-connected-to-the-gas-network

[208] http://www.nisra.gov.uk/archive/census/2011/results/population-estimates/summary-tables.pdf

[209] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.157**.

[210] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.159**.

(b) "*we propose to retain the non-additionality rate at 25% for FE to reflect the fact that it still has a significant percentage of customers unconnected*".[211]

Underperformance / outperformance mechanism

5.25 The connections incentive is an output-based mechanism under which the financial risk associated with new connections is borne by FE because FE's ability to recover a number of inherently fixed costs is contingent upon its achievement of the DOO Connection target set by the UR. This means that FE is rewarded for any outperformance of its DOO Connections target and penalised for underperformance of its DOO Connections target. It is for this reason that setting a realistic and achievable DOO Connections target is so important.

5.26 Where the DOO Connection target is set too high, the risk to FE is heavily weighted on the downside as a consequence of the underperformance mechanism within the connection incentive.

5.27 The underperformance element of the mechanism operates as follows:

(a) by setting the non-additionality rate as a percentage of target connections (not actual connections), a GDN is penalised more the greater it underperforms its connections target. This is because the number of connections equal to 25% of target connections will be deducted from those actual connections which are eligible for the connections allowance; and

(b) a further underperformance penalty (which the UR refers to as a "collar") applies where a GDN underperforms its DOO Connection target by more than 50%, in which case the GDN is only eligible for 25% of the connection allowance for those properties it does connect (if any) in excess of the non-additionality rate.[212]

5.28 The UR did not provide any modelling or analysis in the GD17 Final Determination in support of the underperformance penalty.

C. UR'S ERRORS IN SETTING THE CONNECTION INCENTIVE

Ground 2A: The Connection Target Error

5.29 To formulate the DOO Connection targets for FE, the UR used a long term assumption that 85% of properties passed will connect to the FE network by 2045 at a rate of 5% per annum of properties passed but not connected.[213]

5.30 This 85% Assumption is similar to the proportion of domestic properties in the UK that are connected to the gas network and use gas central heating.[214] The UR has, however, not provided any explanation of how it formulated its 85% Assumption. If the UR has used the current level of gas connections in the UK (which is heavily skewed by the history of gas networks in GB and the large and mature GB GDNs) as a proxy for the 85% Assumption on which it set FE's DOO Connection targets, this represents a significant error which is likely to materially overstate the actual number of DOO

[211] GD17 Final Determination, **NOA-1 / Tab 7 / Para 1.46**.

[212] The UR provides worked examples in the GD17 Final Determination (**NOA-1 / Tab 7 / Para 6.163)** to demonstrate how these penalties are intended to operate.

[213] GD17 Final Determination, **NOA-1 / Tab 7 / Paras 6.149** and **7.21**.

[214] **JK-1 / Tab 1 / Para 3.20**.

Connections achievable for FE in GD17 (discussed further below and in the expert evidence of Mr Kristensen of Oxera[215]).

5.31 The UR was, in addition, wrong to set FE's annual DOO Connection targets on the basis of its 85% Assumption for the following three reasons:

5.32 *First*, in developing its 85% Assumption, the UR failed to have regard to historical FE connections data which does not support the GD17 DOO Connection targets set by the UR.

5.33 FE's actual DOO Connections in GD14 are summarised in the table below:

GD 14 DOO Connections	2014	2015	2016 (est.)	Total
UR GD14 Final Determination	2,000	2,000	2,000	6,000
Actual DOO Connections (including HA)	1,580	2,085	2,000	5,665
Housing Association	119	289	400	808
Actual DOO Connections	1,461	1,796	1,600	4,857

Source: **Martindale-1 / Para 11.11**.

5.34 FE's connection rates in GD14 are a consequence of significant marketing and sales expenditure by FE (over and above the connections allowance) to encourage customers to switch to natural gas. These initiatives are described in the witness statement of Mr Martindale[216] and included making a contribution towards customer connection costs (often between £300-£500 per connection).

5.35 As Mr Martindale's Witness Statement explains, FE is close to its GD14 connection target, anticipated to miss by only 350 connections (or 6%), however:

(a) in doing so, FE overspent its GD14 connections allowance by £2.8 million (or c.155%) in 2014 prices.[217] This amounts to an annual average overspend of £933,000 in 2014 prices; and

(b) FE's actual connections in GD14 included Housing Association properties which have now been excluded from the DOO Connection target in GD17.

5.36 The size of FE's overspend in GD14 is strong evidence that a further 22% increase in FE's DOO Connection targets for GD17 compared with its ambitious Business Plan proposal, and an average annual increase of 80% compared with FE's actual DOO Connections in GD14, would result in an even larger overspend if FE were to try to achieve those connection targets, notwithstanding the notional increase to the connection allowance in GD17.

5.37 The UR does not address these considerations in its GD17 Final Determination, instead stating that "*we do not use actual costs as a basis for setting connection incentive allowances*".[218] The UR was wrong not to have regard to this evidence in formulating the 85% Assumption.

[215] **JK-1 / Tab 1 / Section 4**.

[216] **Martindale-1 / Para 11.3 - 11.18**.

[217] **Martindale-1 / Para 11.18**.

[218] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.87.**

5.38 FE highlighted the issues with the UR's assumptions in its response to the GD17 Draft Determination:

> The Utility Regulator's modelling does not appear to reflect the reduced network growth rate projected beyond the GD17 horizon. No explanation is provided for the very significant increase from the 45% penetration assumption set out in the Utility Regulator's revised GD14 Final Determination modelling. Benchmarking against other utility networks demonstrates that the annual growth rate is likely to be less than 5% (i.e. c.3%) in the post GD17 period when the majority of network rollout is complete.
>
> Modelling by the Utility Regulator on the basis of an arbitrary 85% penetration figure is therefore unsupported, as is its application to backcast connection rates for the GD17 period. This has resulted in a connections target that we do not believe is achievable, particularly with the proposed funding available.[219]

5.39 Notwithstanding this, the UR failed to provide any quantitative evidence justifying the assumptions it had used and simply states in the GD17 Final Determination that the long-term assumptions it has adopted *"generally in line with the long term connection rate that we have seen to date*".[220]

5.40 FE sought the expert opinion of Mr Jostein Kristensen, a partner of Oxera, on the methodology employed by the UR in relation to setting FE's connections targets, which relate to the long-term level of owner-occupied property connections relative to the number of properties passed but not connected (85%) as well as the projected rate for owner-occupied properties (5%). Mr Kristensen concludes that there are a number of errors in the approach adopted by the UR. In particular:

(a) first, it is not clear from the UR's GD17 Decision how its 85% long-term connections assumption determined the GD17 owner-occupied property connections target. It is also ambiguous how this long-term assumption is related to the 5% projected annual connection rate;[221]

(b) second, the UR has implicitly adopted an assumption which is " *highly unlikely to be the case in practice*" that there is a uniform distribution of owner-occupied property types within FE's Licence Area;[222]

(c) third, although changing economic conditions over time may significantly affect the incentive to connect to FE's gas network, the UR's methodology fails to account for this;[223]

(d) fourth, it is not appropriate to rely on evidence from the wider UK gas sector because the manner in which the gas industry in Norther Ireland is being developed is not as coordinated as the historic growth of the GB GDNs;[224] and

(e) fifth, there is an absence of an objective evidence base to underpin the UR's long-term connections assumption.[225]

[219] FE Response to GD17 Draft Determination, **NOA-1 / Tab 21 / Page 24**.

[220] GD17 Final Determination **NOA-1 / Tab 7 / Para 7.21**.

[221] **JK-1 / Para 3.3, 3.18, 3.19, 3.23 and 6.2.**

[222] **JK-1 / Para 3.6**.

[223] **JK-1 / Paras 3.13-3.17 and 6.4**.

[224] **JK-1 / Para 4.10, 4.14 and 6.3**.

[225] **JK-1 / Para 3.3 and 3.18**.

5.41 The UR suggests that "*the 5% connection rate (of properties passed and not yet connected) is supported by an analysis of historical connection rates in both the firmus area and PNGL areas and reflects local experience*"[226], however, this statement fails to have regard to several important facts:

(a) FE significantly overspent its connection allowance in GD14 to achieve its GD14 DOO Connection rates. That is, had FE only spent the connection allowance provided for in GD14, the DOO Connection rate would have been significantly lower;

(b) As noted in Mr Kristensen's expert evidence,[227] the UR's decision to use a 5% connection rate when setting the owner occupied connections target does not seem to have accounted for changes in economic conditions that are relevant to FE's business plan. In those circumstances, the UR has failed to take into account relevant features of FE and its network that indicate that FE's connections target would be expected to be more challenging than that for PNGL, all else being equal. In particular, FE's network is considerably less mature than PNGL's and FE's network area has a less affluent demographic profile than PNGL's;

(c) the UR has narrowed the class of properties covered by the connection incentive in GD17 so that it now expressly excludes domestic premises which are owned by a Housing Association. As private rented properties, Housing Association properties are captured in FE's historical performance figures and are estimated to account for approximately 14.3% of total connections in GD14.[228] It was inappropriate, therefore, to set a substantially higher target for new DOO Connections in circumstances where a significant part of the customer base by reference to historic growth performance has been excluded. In addition, Mr Kristensen notes that "*Great Britain is not an appropriate benchmark for estimating the long-term penetration rate for FE. In particular, a GB gas penetration rate that is estimated using the number of properties with gas central heating would capture properties that do not match the definition used to determine the connection target for owner-occupied properties in FE's licence area*";[229] and

(d) the UR's own acknowledgement that where properties have been passed but yet to be connected, "*these customers typically connect when their existing heating source comes up for replacement or renovation to the property occurs*".[230] Yet, this statement is at odds with the uniform distribution which underlies the UR's 85% Assumption. As noted by Mr Kristensen, the UR's methodology does not account for changes in the propensity of marginal customers to connect to FE's network over time.[231]

5.42 FE's GD14 connection figures, therefore, overstate the ability with which FE could achieve similar connection rates in GD17 using the connection allowance provided for in GD17.

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[226] GD17 Final Determination **NOA-1 / Tab 7 / Para 6.149**.

[227] **JK-1/ Paras 3.13** to **3.15**.

[228] Precise data is not available because FE does not record, nor is it required to report, HA connections separately from other DOO Connections.

[229] **JK-1 / Tab 1 / Para 3.36**.

[230] GD17 Final Determination **NOA-1 / Tab 7 / Para 6.146**.

[231] **JK-1 / Tab 1 / Para 3.10**.

5.43 This conclusion is supported by the expert evidence of Mr Kristensen of Oxera, who:

(a) finds it "*striking that UR did not provide any economic justification for its estimate of the proportion of owner occupied properties passed that would eventually connect to FE's gas network (i.e. 85%) or the connection rate (i.e. 5%)*";[232]

(b) states that "*new-build properties and social housing are likely to have a higher gas penetration rate than the rest of the housing stock*".[233] Accounting for these categories of housing stock in FE's overall connections target for GD17 indicates that the UR would need to set the proportion of owner-occupied properties passed that will eventually connect at a materially lower level than 85% in order to reflect FE's economic situation in GD17; and

(c) observes that the data suggests that the 85% Assumption is consistent with the penetration of gas central heating for domestic residential properties in Great Britain.[234] However, "*FE's connections growth trajectory is not currently consistent with the growth trajectory within the wider UK gas market"* and that "*an overall 85% long-term penetration rate may not be achievable within the current trajectory for FE*."[235]

5.44 In its response to FE's feedback on UR's significant increase to its DOO Connection targets, the UR has stated that "*we consider that we have dealt with this issue by removing the cap from the OO connection incentive for GD17*".[236] This response completely fails to address the issue raised by FE. Pointing to the potential benefit in theory of outperforming a DOO Connection target which the UR increased by 22% does not in any way address the fact that the DOO Connection target is itself unachievable having regard to the connection allowance provided for in GD17.

5.45 <u>*Second*</u>, the characteristics of the FE Licence Area mean that the DOO Connection targets set by the UR are uneconomic and unachievable. The UR did not adequately take these FE specific characteristics into account in setting the DOO Connection targets.

5.46 The FE Licence Area is unique in the following respects:

(a) *low income levels*: gross disposable income levels in the FE Licence Area are, on average, lower than in the PNGL and GB GDNs licence areas, meaning a greater proportion of a customer's disposable income is required to fund the cost of a new connection (between £2,000 to £3,000). For example, the cost of a gas network connection as a proportion of disposable household income in the "Ten Towns" region is 17%, compared with 16% in PNGL's licence area and 13% at a UK level.[237] The upfront cost of switching to gas for low income households impacts on FE's ability to meet its DOO Connection targets; and

(b) *sparsity*: the FE Licence Area covers a largely rural area in Northern Ireland with low population densities. As the table above at paragraph 4.43 shows, the FE

[232] **JK-1 / Tab 1 / Para 3.19**.

[233] **JK-1** / **Tab 1 / Para 3.22**.

[234] **JK-1 / Tab 1 / Para 4.9**.

[235] **JK-1 / Tab 1 / Para 4.14.**

[236] GD17 Final Determination, Annex 13, **NOA-1 / Tab 7M / Item 3**.

[237] See footnote 16.

> Licence Area has the lowest population density per kilometre of network length of any gas distribution business in the UK. This means that FE has a high marketing and sales spend on a per-connection basis to achieve its DOO Connection targets.

5.47 Mr Martindale's Witness Statement and FE's response to the GD17 Draft Determination provides further information on the ways in which FE's Licence Area is unique compared with other UK GDNs.[238]

5.48 The combination of these factors means that the take-up of new domestic owner occupied connections in the FE Licence Area is likely to be significantly less than the DOO Connection target set by the UR. Setting a DOO Connection target which is realistically achievable having regard to these specific characteristics and the connection allowance determined by the UR is important to ensure that FE is not required to overspend its connection allowance in order to meet the connection requirements set by the UR.

Economic drivers of gas network connections

5.49 The expert evidence of Mr Kristensen of Oxera finds that there are two main economic drivers of new gas connections: (i) the level of upfront costs relative to the ongoing cost savings from switching to gas from other fuels, principally heating oil; and (ii) household income and the wider macroeconomic outlook.[239]

5.50 The UR has failed to take adequate account of these economic drivers in setting the DOO Connection target. As Mr Kristensen notes:

(a) there are significant upfront costs of switching to gas from other fuels, which deter connections uptake by owner-occupiers;

(b) to reduce upfront costs of switching faced by consumers, subsidies and government grants can play an important role, however the availability of such incentives is uncertain in Northern Ireland in GD17 and beyond; and

(c) recent movements in oil and gas markets have eroded the extent to which consumers can save on ongoing fuel costs by switching to gas.[240]

5.51 In relation to the upfront costs of switching to gas, Mr Kristensen states that:

> The economic benefits to consumers from gas conversion are […] not likely to support a high level of new connections. To illustrate this, assuming an upfront cost of gas conversion of £2,500 (within a potential range of £2,000 to £3,000 cited by the CC[…]) and annual savings on consumer bills of £400, the payback from gas conversion would be around six years. The analysis prepared for the Committee on Climate Change described above implies that such a payback period would mean that less than 20% of domestic consumers would be prepared to pay for the gas conversion. This estimate would suggest that the take up of gas connections is likely to be slow.[241]
>
> Oil prices have experienced a sharp decline since 2012 eroding the price advantage to the consumer of oil over gas. … As a result, the recent fall in the price of oil has made it the cheapest source of domestic energy. Specifically, it is estimated that oil is about 30% cheaper than gas for heating an average three-bedroom home in Great Britain. Should low oil prices persist, the incentive to switch to gas would continue to be limited. Indeed, if customers expected oil to

[238] **Martindale-1 / Sections 2** and **3** and FE Response to GD17 Draft Determination, **NOA-1 / Tab 21 / Section 2.4.2**.

[239] **JK-1 / Para 5.1**.

[240] **JK-1** / **Para 5.2**.

[241] **JK-1 / Para 5.7**.

remain the cheapest source of domestic energy they would not be willing to switch from oil to gas on the basis of the potential savings in household energy bills alone.[242]

5.52 Furthermore, if consumers expect a negative economic outlook the decision to convert to gas from existing fuels (especially heating oil) might be significantly delayed.[243] The licence area for FE covers a region of Northern Ireland that is characterised by lower incomes than those in the Greater Belfast area as well as the rest of the UK.

5.53 Average gross disposable household income (***GDHI***) in the FE Licence Area is also lower than in the Greater Belfast area (served by PNGL) and significantly lower than the UK average.[244] This makes the challenge of convincing consumers to switch to gas greater given that the cost of a new connection (between £2,000 to £3,000) consumes proportionally more of their disposable income.[245]

5.54 FE explained to the UR that conversion cost was one of the main barriers to a consumer's decision to switch to natural gas and that approximately 75% of customers who cancel their conversion do so because they cannot afford the installation cost.

5.55 The impact of low income levels on consumers switching to gas in Northern Ireland was recognised by the CC in its 2012 decision in relation to the PNGL price determination where it found that:

(a) "*the costs of converting a typical property to natural gas are between £2,000 and £3,000*";[246]

(b) "*Given the comparatively low earnings in Northern Ireland, finding the necessary funds from within their own resources to pay for conversion to natural gas may be difficult or impossible for many households*";[247] and

(c) "*Low-income families living in social housing and privately rented accommodation will in the vast majority of cases be dependent on others to pay for the conversion*".[248]

5.56 Mr Kristensen also notes that the uptake of gas connections by domestic owner-occupiers may be adversely affected by the worsened macroeconomic outlook following the Brexit referendum.[249] In those circumstances, the proposed level of connections growth in UR's GD17 Final Determination seems to be inconsistent with the economic prospects for Northern Ireland.[250]

5.57 Each of the above matters was highly relevant to the UR's assessment of an achievable connections incentive. Accordingly, the UR was wrong to set the DOO Connection target without taking these factors significantly into account.

[242] **JK-1 / Para 5.15**

[243] **JK-1 / Para 5.17**.

[244] See footnote 195.

[245] **Martindale-1 / Paras 5.9** and **10.12**.

[246] PNGL Case, Para 4.103.

[247] PNGL Case, Para 4.105.

[248] PNGL Case, Para 4.106.

[249] **JK-1 / Para 5.22**.

[250] **JK-1 / Para 5.23**

Impact of sparsity

5.58 As discussed in Section 1 above, and Mr Martindale's Witness Statement, gas is a relatively new energy source in FE's Licence Area with FE's network build starting only 10 years ago and only 17% of households connected to gas.

5.59 Consumer awareness of gas as an alternate energy source in FE's Licence Area is not high, which is perhaps unsurprising given the CMA's recent Energy Market Investigation found "*evidence of domestic customers' lack of understanding of, and engagement in, retail energy markets*".[251]

5.60 To drive new connections, FE has developed a comprehensive marketing and sales strategy focused on increasing awareness and encouraging consumers to switch to natural gas. FE needs to undertake these marketing and sales-related activities to achieve the ambitious DOO Connection targets contained in its Business Plan. FE's costs of engaging in these activities are recovered through the Opex allowance provided by the connection incentive.

5.61 FE's marketing and sales-related costs in GD17 will be significantly affected by:

(a) sparsity within FE's Licence Area, which increases the costs of reaching and engaging with customers (discussed below); and

(b) the 22% average annual increase in the new DOO Connections that FE is required to achieve over GD17 (above FE's Business Plan projection).

5.62 As Mr Martindale's Witness Statement explains, to achieve the DOO Connections target included in FE's Business Plan in a largely rural area, FE will need to undertake a localised approach to marketing which has proven most effective in the past.[252] FE's relatively small customer base compared with the customer bases of PNGL and the GB GDNs also reduces the extent to which FE can rely on "word of mouth" marketing from existing customers.[253]

5.63 FE's specialist media partners (Genesis Advertising) have identified two key impacts that sparsity within FE's Licence Area has on FE's marketing costs compared with those of PNGL, which operates in a much more densely populated licence area:

(a) FE's target audience is spread over a much wider geographic area than PNGL's (which is confined to Greater Belfast) meaning FE must use more media formats to reach its target audience (e.g. more radio stations, more press titles). By way of example, to reach most of its target audience, PNGL could use a single newspaper and a single radio station covering Belfast whereas FE would need to use at least 7 regional newspapers and 7 radio stations to cover the entirety of its Licence Area; and

(b) press, radio and outdoor radio space is not priced in direct proportion to the number of people coming into contact with that outlet making it more cost effective to develop effective market reach and frequency levels within a more densely populated area (e.g. Greater Belfast).[254]

[251] CMA, *Final Report: Energy market investigation* (24 June 2016), Para 8.104.

[252] **Martindale-1 / Para 11.9 - 11.10**

[253] **Martindale-1 / Para 11.9**

[254] FE Response to GD17 Draft Determination **NOA-1 / Tab 21 / Section 2.4.2.5**.

5.64 There are also a number of advertising routes to market which are not available in FE's Licence Area. For example, at least three of the towns served by FE's network do not have a single advertising billboard. FE also does not have the installer base that PNGL has in Greater Belfast which reduces the extent to which installers can be used to assist FE in promoting gas. For example, a number of installers have showrooms in the Greater Belfast area which assist in raising awareness of gas and drive new gas connections, and can justify this expense by the foot traffic associated with a more densely populated larger urban centre.[255] However, these showrooms are not present in FE's Licence Area.

5.65 Sparsity also affects the number of customers that FE's energy advisors can visit for the purposes of educating consumers about the benefits of switching to gas. As the table at paragraph 4.43 shows, the population density in the FE Licence area is approximately 166 people per km^2 which significantly restricts the number of customers FE's energy advisors can visit compared with Greater Belfast where the population density is 897 people per km^2.

5.66 In its GD17 Final Determination, the UR acknowledges some differences in the FE Licence Area but fails to take such differences properly into account when setting FE's DOO Connection targets. For example, the UR recognises that the "*FE network is not as developed as that for PNGL*" and that "*due to its network serving a more rural customer base, even once it reaches maturity, it is likely that FE will have a relatively low customer density*"[256].

5.67 If the UR had proper regard to the factors discussed above, it would have been clear that the DOO Connection targets set in GD17 could not be met by any efficient GDN operating in the FE Licence Area without significant marketing and sales expenditure over and above what is provided for in the connection incentive.

5.68 *Third*, by setting the DOO Connection targets on the basis of a flawed assumption and without taking proper account of FE's Licence Area characteristics, it is highly likely that FE will not achieve those connection targets and will be penalised for this underachievement through the operation of the underperformance penalty mechanism described at paragraph 5.25 above.

5.69 Penalising FE for its failure to meet unachievable targets will mean it cannot recover a number of inherently fixed costs and will further hinder FE's ability to finance new connections without incurring significant additional expenditure over and above what it is permitted to recover through the connection allowance. This is contrary to the purpose of the connection incentive and the financial impact of this will be significant for FE's business, a point recognised by the UR which states that "*the impact of this incentive is wide ranging for the overall business, as it covers a certain percentage of costs to cover all overheads of the organisation*".[257] It also fails to deliver on one of the assurances of the UR when it changed FE's form of price control from a price cap to a revenue cap. In June 2015, the UR stated that "*under a revenue cap form of control, firmus would be slightly less incentivised to grow the market although this can be dealt with through the connections incentive*".[258]

[255] **Martindate-1 / Para 11.10**.

[256] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.159** and Annex 5**, NOA-1 / Tab 9E / Para 2.8**.

[257] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.119**.

[258] UR Consultation Paper: Modifications to the Price Control conditions of the firmus Energy (Distribution) Limited Licence (18 June 2015), **NOA-1 / Tab 13 / Para 3.3**.

5.70 Setting the connections target at a level which is realistic and potentially achievable for an efficient GDN operating in the FE Licence Area is therefore important to ensure that the GDN is not set up to fail by the operation of the underperformance penalties. This is particularly the case where, as discussed above, and in the expert evidence of Mr Kristensen, household income and the wider economic outlook in FE's licensed area are key drivers of consumer decisions and the UR has failed to take these factors properly into account.

Ground 2B: The Non-Additionality Error

5.71 The UR failed to provide evidence to justify the 25% non-additionality rate it applied to the connection incentive and ignored compelling evidence provided by FE based on its experience in GD14. The UR was wrong to do so.

5.72 FE provided evidence which demonstrated that it is unlikely that customers in the FE Licence Area will switch to gas without any marketing effort or incentives. This included:

(a) FE's historical expenditure, which demonstrates that despite substantially exceeding the GD14 allowance for marketing and sales, it was still unable to meet the GD14 connection targets. The UR has accordingly underestimated the efforts and expenditure needed to meet the DOO Connection targets within the FE Licence Area and, in particular, the likelihood that customers in FE's Licence Area will switch to gas in the GD17 period without any marketing expenditure by FE; and

(b) a trial conducted by FE in Loughgall, County Armagh, that demonstrated that essentially no customers switched to gas where no marketing activities were conducted. In its response to the GD17 Draft Determination, FE noted that "*having laid pipes and made gas live to 200 potential domestic connections in Loughgall in January 2016, we purposely, undertook no sales visits and no other advertising for the first 5 months of this year*".[259]

5.73 This evidence, which was provided to the UR in FE's response to the Draft Determination, undermines the UR's assertions that:

(a) "*a significant amount of customers are aware of the benefits of gas and are willing to switch without the need for marketing and sales teams. This is increasingly the case when gas is the dominant fuel and neighbours and families use the fuel"*;[260] and

(b) consumers in FE's Licence Area are now sufficiently aware of gas as a fuel such that it has become the "*fuel of choice*".[261]

5.74 No evidence is presented in the GD17 Final Determination to support these assertions or to contradict the clear evidence to the contrary presented by FE. Furthermore, it is wrong to suggest that gas is the "*dominant fuel*" or the "*fuel of choice*" in the FE Licence Area where only 17% of households are connected to FE's gas network.

[259] FE Response to the GD17 Draft Determination, **NOA-1 / Tab 21 / Section 2.4.1.3**.

[260] GD17 Final Determination, Annex 13, **NOA-1 / Tab 7M / Item 4**.

[261] GD17 Final Determination, **NOA-1 / Tab 7 / Para 6.158**.

5.75 Customers in the FE Licence Area also tend to have lower propensities to switch to gas given the relatively high connection costs as a proportion of their disposable income (see discussion at ground 2A above). This means that it is unlikely that new connections can be set up without any additional cost to FE. As Mr Martindale's Witness Statement explains, this conclusion is supported by local market research conducted by third-party marketing consultants. In a survey of oil customers in FE's Licence Area, among respondents who had seen advertising, 24% were interested in switching, a rate four times higher than the proportion of people who had not been exposed to advertising (3%).[262] This implies that the true non-additionality rate is much lower than 25% in FE's Licence Area and is likely to be closer to the 5% figure included in FE's Business Plan.

5.76 The arbitrary non-additionality rate has a compounding financial impact. This impact becoming more marked if FE fails to meet the GD17 Decision connection targets, given that non-additionality remains 25% of the annual UR target connections not FE's actual connections.

D. RELIEF SOUGHT

5.77 The GD17 Decision in relation to the connection incentive was wrong under the statutory grounds identified in paragraph 5.9.

5.78 For the reasons outlined above, FE requests that the CMA quash the GD17 Decision under Article 14E(2)(a) of the Gas Order and substitute its own which:

(a) *connection target*: sets the annual DOO Connection targets at the level proposed in FE's Business Plan, which are achievable for an efficient GDN operating in the FE Licence Area having regard to the connection allowance contained in the GD17 Decision; and

(b) *non-additionality rate*: applies a non-additionality rate of 5% to reflect the specific characteristics of FE's Licence Area and its level of network maturity.

[262] **Martindale-1 / Para 11.23.**

Section 6: Appeal Ground 3 – Treatment of Under-Recoveries

A. OVERVIEW

6.1 The third ground of appeal concerns the UR's determination to discontinue the link between the allowed cost of capital and the rate of return on under-recoveries.

6.2 The UR made the following errors in setting the proposed reduction:

(a) *creation of regulatory uncertainty and damaging investor confidence:* the UR retrospectively changed the rate of return to eliminate perceived "perverse incentives", which is erroneous because:

(i) the proposed changes withdraw commitments previously made publicly and incorporated in FE's licence and relied upon by FE and its investors in determining their business and investment strategies;

(ii) the retrospective nature of the proposed changes acts as a penalty in respect of past decisions, which by definition cannot impact incentives;

(iii) insufficient notice and consultation was provided; and

(iv) FE was given no reasonable warning as to the *nature* of the future changes and, in particular, the retrospective effects of the proposed change.

(b) *disregarding the reasons for the licence condition:* the UR seeks to reverse its former decision-making taken in accordance with its statutory duties, which is erroneous because:

(i) strong evidence demonstrates that the UR took a considered decision in the full understanding of the effects of the current arrangements; and

(ii) the inclusion of the under-recoveries provision in the licence was and remains squarely consistent with the furtherance of the UR's primary objective to promote the development of the gas network in Northern Ireland.

(c) *errors in the selection of the new rate of return:* the UR has proposed a new rate of return of LIBOR +2% to apply to accumulated under-recoveries (with a three year glide path), which is erroneous because:

(i) the proposed rate is inappropriate and arbitrary, and was not set in a transparent way; and

(ii) the proposed rate is disproportionate and inconsistent with regulatory principle because it applies to previously accumulated under-recoveries and will have a detrimental financial impact on FE, and is therefore at odds with the UR's statutory duties to have regard to the need of licence holders to finance their activities.

6.3 The UR's GD17 Decision on under-recoveries was wrong on the following grounds:

(a) the UR failed properly to have regard to and/or to give appropriate weight to its principal objective to promote the development and maintenance of an efficient, economic and coordinated gas industry in Northern Ireland, by creating regulatory

uncertainty through withdrawing previously made commitments regarding under-recoveries, providing insufficient notice and consultation, and proposing a change that has retrospective effect;[263]

(b) the UR was wrong in law because it asserts *without substantiation* that the licence provisions relating to under-recoveries are not in the public interest and, when making its decision, the UR has not sufficiently taken into account the effect of the licence condition on under-recoveries in supporting the growth of the gas network;[264] and/or

(c) the modifications to under-recoveries fail to achieve, in whole or in part, the effect stated by the UR, specifically to "*allow the GDNs to charge tariffs consistent with the maintenance and operation of a growing gas network whilst financing its activities*".[265]

6.4 The combined effect of the UR's errors was **£0.99 million** (in 2014 prices).

B. THE UR'S DECISION ON UNDER-RECOVERIES

6.5 Up to the start of the GD17 price control period, FE operated under a price cap form of control. Under this mechanism, the UR sets an allowed tariff (as opposed to overall revenue levels), meaning that FE carries the risk of any volume under-performance and keeps the benefit of any volume out-performance. FE was given some discretion in setting actual tariffs and FE used this discretion in light of market conditions to set tariffs below the permitted maximum level, thus building up so-called "under-recoveries".[266]

6.6 An under-recovery therefore represents a customer charge that FE would have been entitled to make but has decided not to make in the relevant charge period. Accordingly, FE's current licence stipulates that FE should receive a rate of return on under-recoveries equal to the allowed rate of return based on the regulator's assessment of the weighted average costs of capital (***WACC***). Up until the GD17 Final Determination, the UR has been applying a rate of return of 7.5% to FE's under-recoveries which reflects the allowed cost of capital in GD14.[267] FE's current licence conditions also permit setting tariffs at a level of up to 40% greater than its allowed tariffs so as to ensure that FE is able to recoup under-recovered revenues over time. Prior to the licence modifications implementing the GD14 price control, the extent to which FE could make an over-recovery to total revenue in any one year was limited to only 10% above the determined tariff.

6.7 The only incentive for accumulating under-recoveries is in order to assist in the development of the network by encouraging take up of gas by consumers. As a result of the under-recoveries, FE has been able to spread its costs over a larger volume base to the benefit of all of its customers, thereby reducing prices for customers.

6.8 However, the UR claims that FE's current licence conditions on the treatment of under-recoveries have created a "perverse incentive" to increase volumes.[268] It asserts (without

[263] Article 14D(4)(a) and (b) Gas Order; Article 14(1) Energy Order.

[264] Article 14D(4)(e) Gas Order.

[265] Article 14D(4)(d) Gas Order; GD17 Decision, **NOA-1 / Tab 9 / Para 2.40**.

[266] GD17 Decision, **NOA-1 / Tab 9 / Para 4.1**.

[267] GD14 Final Determination, **NOA-1 / Tab 11 / Para 10.46**; GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.77**.

[268] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.79** to **11.82**.

substantiation) that such provisions are not in the public interest and are not aligned with the licences of PNGL and SGN.[269] It is not clear from its GD17 Final Determination what the UR considers are the "public interest" considerations relevant to its Decision on under-recoveries. To the extent that the UR has applied a test that is different to its statutory duties, this is wrong in law. To the extent that the UR has equated the "public interest" test to its statutory duties, it has misapplied them, as explained further below.

6.9 The GD17 Final Determination proposes a reduction to the allowed rate of return on under-recoveries from being equal to the allowed cost of capital to LIBOR +2% by 2019, including under-recoveries accumulated before the start of GD17.[270] In order to facilitate a glide towards the new rate, UR proposed applying LIBOR plus 4% in 2017 and LIBOR plus 3% in 2018.[271]

C. UR'S ERRORS IN SETTING THE APPLICABLE RATE OF RETURN FOR UNDER-RECOVERIES

Ground 3A: Regulatory uncertainty / breach of the principle of non-retroactivity

6.10 The UR's proposed changes withdraw commitments in FE's licence regarding the applicable rate of return. These commitments were negotiated when the licence was originally granted in 2005. Additionally, although the UR indicated at the time of the GD14 Final Determination that it might seek to amend the rate of return for future under-recoveries following GD17, there was no indication in the GD14 Final Determination that any change to the rate of return would be applied retrospectively.

6.11 It is a well-established principle of good regulation that regulators should not seek to implement retrospective change and should create a consistent environment to encourage future investment. Confidence that the operator can recover a pre-agreed value is a cornerstone of the UK system of incentive-based regulation. That confidence is the basis for investment in regulated assets, and gives the regulator the credibility necessary to create effective incentives for the company. That system has delivered, and continues to deliver, substantial benefits to energy, telecoms and water customers in the UK, and has been so successful since it was introduced over 30 years ago that it has been replicated in many jurisdictions across the world. Retrospective adjustments of the type that the UR is proposing serve to undermine this cornerstone of the regime, to the longer-term detriment of customers. It is unreasonable to expect a regulated company and its investors to have to second-guess the regulator's future retrospective actions when making their investment decisions. A regime which allows for this type of behaviour is contrary to the regulatory practice of ensuring transparency, and serves only to promote regulatory uncertainty and risk to the business and investors. Indeed, as noted by the UR's consultants, First Economics, in the GD17 Draft Determination Annex 7, "*what matters is whether investors can be reasonably confident that they will be able to collect the full value of the investment that they have made in the business".*[272] Furthermore, in its 2012 price control re-determination for PNGL, the Competition Commission (***CC***) emphasised that *"[r]egulatory stability is particularly important in the context of natural gas in Northern Ireland, given that this is not a fully mature industry, and that future investment in*

[269] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.89 - 11.90**.

[270] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.96**; firmus energy (Distribution) Limited – Licence for the conveyance of Gas in Northern Ireland (28 October 2016), **NOA-1 / Tab 9A / Condition 4.1.9**.

[271] GD17 Final Determination, **NOA-1 / Tab 7 / Para 1.39** and **11.97;** firmus energy (Distribution) Limited – Licence for the conveyance of Gas in Northern Ireland (28 October 2016), **NOA-1 / Tab 9A / Condition 4.1.9**.

[272] GD17 Draft Determination, Annex 7, **NOA-1 / Tab 7 / Page 21**.

network expansion is expected and desired".[273] The network of FE is likewise not "fully mature" and future investment of £226 million is expected by UR in the GD17 period.[274]

6.12 As part of its decision in the PNGL case, the CC reiterated the importance of well-evidenced and predictable regulatory frameworks. It made a number of criticisms of the UR's approach in 2012, that equally apply to the current situation: *"any revision of previous regulatory determinations should be: well-reasoned, properly signalled, subject to fair and effective consultation, clear and understood, and, normally, forward-looking"*.[275] None of these criteria have been applied by the UR to this issue.

6.13 The 2012 CC review of the UR's price control determination of PNGL involved a UR proposal to reduce PNGL's Total Regulatory Value (***TRV***) by around £75 million to share historic capex outperformance with its customers, which it had accrued in the period 1996 to 2006. The CC rejected the UR's proposals concerning sharing historic outperformance on the basis that it gave no public indication of the proposed change and that the effect on the expectations of PNGL and its investors could impact regulatory stability and damage investor confidence.[276] The CC also highlighted that such an outcome *"could impede future gas network development which could otherwise create substantial future benefits for future consumers"*.[277]

6.14 There are close parallels between the previous PNGL case and the UR's current proposals around under-recoveries. In both cases, the UR proposed a retrospective change to its regulatory approach in an attempt to reduce revenues available to a GDN; and the UR claimed the previous regulatory approach was flawed, was not working in the interests of consumers and was resulting in an inefficient allocation of revenue to the GDN in question.

6.15 The UR has failed to uphold the important principles of predictable regulatory frameworks and was wrong to adjust the allowed rate of return on under-recoveries for the reasons set out below.

6.16 *First*, the proposed changes withdraw previous commitments made in FE's licence. In the GD17 Final Determination, the UR expressly acknowledges that condition 4.10.4 of FE's licence states that there will be no adjustment made to the under-recovery rate of return until 2034.[278] Condition 4.2.19 of the licence introduces the term Xu,t – this is the adjustment factor to the rate of return that would be needed to encourage or discourage accumulated under-recoveries. In condition 4.10.4, the licence specifically sets the value of Xu,t term at zero to 2034.[279] This adjustment factor applies to accumulated under-recoveries, denoted by the term 'Z' in the licence (see condition 4.10.5 and conditions 4.2.16-19).[280] Therefore, while the FE licence contains a designated parameter that allows the UR to adjust the rate of return on under-recoveries above or below the allowed cost of capital, condition 4.10.4 of the licence expressly does not provide for such an

[273] CC (2012), *Phoenix Natural Gas Limited price determination*, 28 November 2012, Para 9.114.

[274] GD17 Final Determination, **NOA-1 / Tab 7 / Page 2**. Note that this figure relates to all three GDNs.

[275] CC (2012), *Phoenix Natural Gas Limited price determination*, 28 November 2012, Para 32.

[276] CC (2012), *Phoenix Natural Gas Limited price determination*, 28 November 2012, Para 32-33.

[277] CC (2012), *Phoenix Natural Gas Limited price determination*, 28 November 2012, Para 37.

[278] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.77**.

[279] See Bord Gais Eireann – Licence for the conveyance of Gas in Northern Ireland (24 March 2005), **NOA-1 / Tab 1**.

[280] See Bord Gais Eireann – Licence for the conveyance of Gas in Northern Ireland (24 March 2005), **NOA-1 / Tab 1**.

adjustment until 2034.[281] The proposed changes in the GD17 Decision specifically retract this clear provision which does not envisage changes to the rate of return until 2034.[282]

6.17 *Second*, if the purpose of the change is to avoid alleged "perverse incentives", a retrospective change to the return on previously accrued under-recoveries can have no impact on incentives in any event and will only act as a penalty for previous decisions.

6.18 It is, at best, unclear why the UR should consider a decision by FE not to recover the full charge possible in order to incentivise network roll-out to be "perverse". The UR has given insufficient consideration to the interests of consumers and the development of the network in characterising FE's decision in this way. The UR's own reason for making the change is inconsistent with the application of any revised rate to accrued under-recoveries.

6.19 *Third*, FE was given insufficient notice of the change. The UR's statements in the GD14 Final Determination demonstrate a recognition of the importance of certainty in the rate of return on accumulated under-recoveries, when the UR states that *"[w]e 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 we are not altering the return on under-recoveries in GD14"*.[283] Nevertheless, the proposed changes made in GD17 run contrary to these previous assertions by penalising FE for built-up under-recoveries.

6.20 FE disagrees with the UR's suggestion in the GD17 Final Determination that it provided the company with a *"lengthy notice period"* that it intended to change its approach to the treatment of under-recoveries.[284] The UR's claim in the GD17 Final Determination was that by signalling a possible change to the approach on under-recoveries in GD14, they "*allowed time for FE to eliminate the 'Z' under-recovery amount*".[285]

6.21 FE disputes that any clear signal was given at the time of GD14 that the UR would apply any changes retrospectively.[286] But in any event, FE's model[287] shows that this would have been unachievable. During GD14, FE was (and during GD17 will continue to be) bound by a limit on the annual amount by which it could reduce its balance of accumulated under-recoveries. While the UR increased this limit from 0.1 to 0.4 at GD14,[288] the model shows that had FE increased its conveyance charges to the maximum allowable level (namely 40% above the level implied by the GD14 price cap), FE could not have unwound its level of under-recoveries during the three years of GD14.

6.22 Furthermore, it would have been unrealistic to expect FE to increase its conveyancing charges to this maximum allowable level (i) because some of the tariffs at the beginning of the three year period had already been published prior to GD14 Final Determination; and (ii) due to limitations put in place by the netback arrangements, which led to a certain

[281] See Bord Gais Eireann – Licence for the conveyance of Gas in Northern Ireland (24 March 2005), **NOA-1 / Tab 1** and FE Response to GD17 Approach Discussion Paper **NOA-1 / Tab 15 / Page 7**.

[282] GD17 Decision, **NOA-1 / Tab 9 / Para 4.9**.

[283] GD14 Final Determination, **NOA-1 / Tab 11 / Para 10.49**.

[284] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.81**.

[285] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.81**.

[286] **Martindale-1 / Para 12.22**

[287] **NOA-1 / Tab 28**.

[288] GD14 Final Determination, **NOA-1 / Tab 11 / Page 164**.

level of essentially unavoidable under-recovery in 2014 and Q1 2015.[289] FE did increase its prices and reduce the overall level of under-recoveries by £8 million (38%) by the end of 2016,[290] but the UR did not provide FE with sufficient time or ability to increase prices yet further during GD14 in a manner that could have reduced the balance to zero.

6.23 The UR does not, in any event, explain why it would have been in the interests of consumers or the development of the network for all of the under-recoveries to have been recouped in a single price control period, as the UR appears now to have envisaged. In addition, the ability to meet the new connections target would have been jeopardised by an introduction of a sudden increase in prices - this would have affected the connections incentive allowance and revenues, and had a detrimental impact on consumers.

6.24 FE also notes that the UR had oversight of overall tariffs charged to customers in the Licence Area, including the FE conveyance charge element thereof. If the UR had begun to develop concerns regarding FE's approach to under-recoveries, there would have been ample opportunities for the UR to raise this during the annual tariff approval processes.[291]

6.25 *Fourth*, while the UR stated in GD14 that it "*will consider future licence modifications to reduce the return on under-recoveries in GD17"*,[292] the UR did not provide sufficient detail on what modifications it envisaged or how they would operate. Importantly, there was no indication in GD14 that the UR would consider applying a retrospective adjustment to its approach to under-recoveries already incurred. Given the financial importance to FE of a retrospective application, FE would have expected the UR to make any consideration of such an intention very clear at GD14.

6.26 The approach taken by the UR therefore runs contrary to the approach outlined by the CC in the PNGL case that a revision of a previous regulatory determination should be well-reasoned, properly signalled, and subject to fair and effective consultation.[293]

Retrospective effect

6.27 FE considers it necessary to clarify why the proposed change would be retrospective, given the UR's assertions to the contrary. The GD17 Final Determination states that *"[i]n relation to regulatory uncertainty we would highlight that the change is forward looking only and will only apply from 2017. FE will retain the 7.5% return on 'Z' under-recovery built up in the period to 2017, which, as at the end of 2016, is estimated to make up c80% of the 'Z' under-recovery amount"*.[294]

6.28 However, this is inconsistent with the GD17 Consultation Paper, which reflects the position the UR has conveyed to FE, namely that "*the decision and proposed licence*

[289] The "netback" arrangements arise from the relationship with FE's supply business. In order to ensure fair pricing in the supply business, the supply business was operated on a zero EBIT basis. The netback arrangement was put in place to adjust distribution charges set by the distribution business to the supply business to ensure that this objective was achieved. If the supply business realised a loss, the conveyancing charges would be reduced to reduce the loss to zero. Up until Q1 2015, the level to which distribution charges could be increased (and consequently under-recoveries reduced) was constrained by this netback arrangement mechanism.

[290] FE Response to GD17 Draft Determination, **NOA-1 / Tab 21 / Para 6.1.4**.

[291] **Martindalte-1 / Para 12.49 - 12.50**.

[292] GD 14 Final Determination, **NOA-1 / Tab 11 / Para 10.50**.

[293] CC (2012), *Phoenix Natural Gas Limited price determination: A reference under Article 15 of the Gas (Northern Ireland) Order 1996)*, 28 November 2012, Para 32.

[294] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.92**. Also **Martindate-1 / Para 12.46** as to why the 80% figure is a highly misleading comparison.

modifications mean that the interest rate applied to under-recovery of revenue will be set at the LIBOR plus 4% in 2017, LIBOR rate [*sic*] *3% in 2018 and LIBOR plus 2% from 2019 onwards. <u>This rate of return will apply to accumulated under-recoveries from the start of the GD17 price control period onwards</u>. The 7.5% return currently allowed on under-recoveries will continue to apply until the end of 2016*".[295]

6.29 The UR's suggestion that the proposed change is forward looking as it will apply from 2017 is therefore incorrect. While it is technically correct that the revised return on FE's 'Z' recoveries will commence taking effect from a date in the future, the application of the revised rate of return on FE's existing accumulated under-recoveries clearly has a retrospective effect. The accumulated under-recoveries that were incurred in the past under the previously applicable regime were incurred at a time when there was a clear and legitimate expectation that a rate of return equal to the allowed cost of capital from time to time would be earned until 2034.[296]

<u>Ground 3B: Disregarding the reasons for the licence condition</u>

6.30 The GD17 Final Determination states that, "*[w]e do not agree with the proposition that the current arrangements were put in place for good policy reasons at the time and therefore we should not proceed with the modifications"*.[297] The UR states that the ability to under-recover and earn a 7.5% rate of return created a *"perverse incentive*"[298] to under-recover and that (without substantiation) the current licence is *"not in the public interest*".[299] However, FE does not believe the UR has sufficiently taken into account the positive impact that the licence condition on under-recoveries has had in the promotion of the natural gas network in FE's licence area in making its decision at GD17.

6.31 <u>*First*</u>, FE notes that charging less than the full tariff (under-recovery) cannot fairly be characterised as against the public interest where it is done to support an increase in volume growth. As stated in the Oxera report on under-recoveries of 31 May 2016: *"To the extent that volume outperformance in earlier price control periods is passed on in the form of lower prices in later periods, it is not clear that the existing approach to under-recoveries has worked against the public interest*".[300]

6.32 FE emphasises that the only incentive to reduce charges is for reasons associated with the growth of the network and the under-recoveries of revenues has played an important role in the development of the gas network in Northern Ireland.[301] Indeed, by supporting the development of the gas network, the inclusion of the under-recoveries provision in the current licence conditions is squarely in line with the UR's primary objective to "*promote the development and maintenance of an efficient, economic and co-ordinated gas industry in Northern Ireland*".[302] It is unclear to what extent the UR has applied a different "public interest" test to this part of the GD17 Final Determination. If it did so, it

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[295] **NOA-1 / Tab 8 / Para 4.16**.

[296] FE Response to GD17 Draft Determination, **NOA-1 / Tab 21 / Para 6.1.4**.

[297] **NOA-1 / Tab 7 / Para 11.87**.

[298] **NOA-1 / Tab 7 / Para 11.79**.

[299] **NOA-1 / Tab 7 / GD17 Final Determination** / **Para 11.90**.

[300] Oxera Report, 31 May 2016, *The Utility Regulator's proposed licence modification regarding the rate of return on under-recoveries*, (submitted with FE Response to GD17 Draft Determination, May 2016), **NOA-1 / Tab 21F / Page 7**. The exhibited document contains "draft" on the header, however, this was an error.

[301] Oxera Report, 31 May 2016, *The Utility Regulator's proposed licence modification regarding the rate of return on under-recoveries*, **NOA-1 / Tab 21F / Page 7**.

[302] Energy (Northern Ireland) Order 2003, Article 14(1).

was wrong in law. No reasoning is provided to explain why circumstances have changed to such an extent that a provision that the UR considered was in accordance with its statutory duties at the time of the licence grant now creates "perverse incentives".

6.33 *Second*, the sophistication of the licence condition drafting demonstrates that the UR was quite aware, at the time of drafting, how it was intending to treat under-recoveries and over what time period. The licence describes in substantial detail the regulator's approach in dealing with under-recoveries, including detailed accompanying formulae.[303] The clear representations made by the Chairman of the Authority in a side letter sent to FE at the time the licence was awarded and the matters referred to in Mr Martindale's witness statement[304] concerning the licence negotiations further demonstrate that the UR set the provisions of the licence with a clear understanding of both the intended effect and duration of the provisions. It was also not in doubt that these clear provisions would be relied on by the licensee which entered into the licence on that basis.

6.34 *Third*, the UR now seeks to state that the primary reason for the licence condition was to manage differences between the relative price of oil and gas – see both the GD14 and GD17 final determinations:

(a) GD14 Final Determination: "*[t]he reasoning behind the inclusion of under-recoveries in the licence was to allow FE flexibility to ensure gas was competitive versus oil as it built its customer base.*"[305]

(b) GD17 Final Determination: "*[t]he reasoning behind the inclusion of under-recoveries in the licence was to allow FE flexibility as it built its customer base e.g. to manage times when oil would be cheaper than gas.*"[306]

6.35 However, FE has found no basis for the UR's specific claim that the mechanism was limited to managing a perceived price differential between oil and gas. Rather, the purpose of under-recoveries is much broader as it provides FE with the ability to grow volumes quickly and more generally to promote the development of the Northern Irish gas network where necessary by reducing charges to incentivise 'take up' by consumers.

6.36 The GD17 Final Determination states that *"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 raised questions as to the motive of building up such large under recoveries*".[307] FE disagrees with the UR's suggestion in the GD17 Final Determination that there was some kind of improper motive for FE reducing the charges, and emphasises that under-recoveries promoted the growth of the network in Northern Ireland.

6.37 Moreover, in the GD17 Final Determination, the UR describes under-recoveries as an *"extreme measure to deal with difficult circumstances such as gas being very uncompetitive with oil*".[308] By confining the use of under-recoveries to being an "extreme measure", the UR suggests that the purpose is even more limited than simply to manage the impact of price differentials between oil and gas. This even more limited

[303] Bord Gais Eireann – Licence for the conveyance of Gas in Northern Ireland (24 March 2005), **NOA-1 / Tab 1 / Condition 4.2.17**.

[304] **Martindale-1 / Paras 12.8 - 12.18**.

[305] GD14 Final Determination, **NOA-1 / Tab 11 / Para 10.45**.

[306] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.78**.

[307] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.78**.

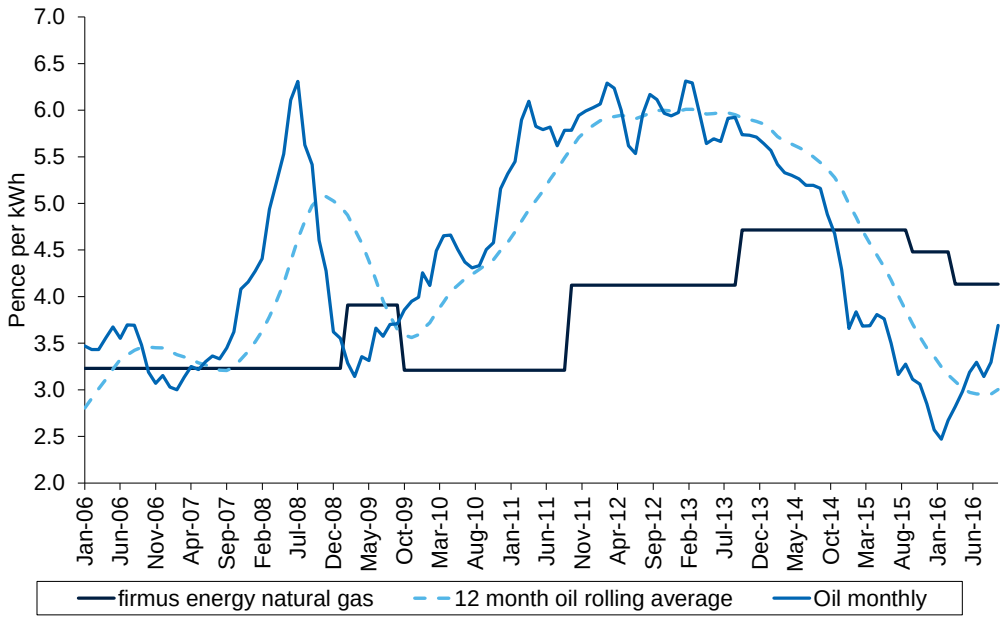
[308] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.87**.

characterisation of the purpose of under-recoveries reinforces the case that the UR has misdirected itself as to the purpose underlying the under-recoveries mechanism.

6.38 Indeed, FE referred to the reasons behind the flexibility in the licence provisions on under-recoveries in September 2013, in its response to the GD14 Draft Determination: *"[w]e are running under-recoveries based on our assessment of the state of the market, competitor fuels, and to encourage connection and use of the network in the interests of all stakeholders. This is the flexibility for which our licence provides. As a result of the current state of the market, our view is that under-recoveries should persist for some time, again in the interests of all stakeholders"*.[309]

6.39 *Fourth*, oil has now become cheaper than gas for the first time for many years. As the graph below shows, since mid-2015, the price of FE natural gas has returned to being higher than oil – for both the 12 month rolling price of oil and the monthly price of oil.

Oil price and FE's PAYG price (January 2006 to October 2016)



Source: Received from FE, based on the data from The Consumer Council for Northern Ireland and Millward Brown Ulster.

6.40 Therefore, even if the policy intention of the approach to under-recoveries is inaccurately interpreted so as to be confined to supporting gas when oil was cheaper, the proposed change is being imposed at an inappropriate time (given that oil is again cheaper than gas) and the gas distribution network should thus be supported rather than penalised.

6.41 *Fifth*, the UR has ignored a key element of FE's regulatory regime and history and failed to take account of the way that FE's prices are modified by the profiling adjustment. The profiling adjustment has the effect of smoothing prices over the long term for FE's customers, deferring the recovery of some allowed revenue into future price control periods. The recovery of this deferred revenue is secured by way of an addition to the TRV via a mechanism known as the "profile adjustment". The profile adjustment builds

[309] FE Response to GD14 Consultation, 20 September 2013, **NOA-1 / Tab 14 / Page 107**.

up over the course of each price control period, and then forms part of FE's asset base at the beginning of each price control review.[310]

6.42 The GD17 Final Determination states that *"[t]he suggestion that the under recovery mechanism is the equivalent of the Profile Adjustment does not withstand scrutiny*" and that "*the role of under recovery is very different* […] *[t]herefore it must be treated differently from the Profile Adjustment"*.[311] However, contrary to the claims made by the UR, FE submits that there are strong links between the rationale underlying the profiling adjustment and the approach to remunerating under-recoveries because (i) both mechanisms have resulted in lower costs for customers; and (ii) under-recoveries are accumulated against revenues after the profiling adjustment has been applied. The profiling adjustment is calculated on a net present value (***NPV***) neutral basis. Breaking the link between the cost of capital and return on under-recoveries would remove any NPV neutral treatment on under-recoveries, thereby creating an inconsistent approach to these two mechanisms.

6.43 The proposed change to the treatment of under-recoveries would remove one of the key ways by which consumers benefit from lower prices and which promotes the growth of the gas distribution network. Indeed, taking the opposite approach and unwinding under-recoveries at an accelerated rate will have the effect of raising prices and creating price volatility, which surely would be contrary to the UR's statutory duty to promote the development of the gas industry.

Ground 3C: Errors in the selection of the new rate of return

6.44 The UR has not provided any justification for the selection of a rate of LIBOR +2%. FE considers the selection of this measure to be inappropriate, arbitrary and disproportionate.

6.45 *First,* FE submits that the chosen metric is inappropriate. An appropriate rate of return should reflect the risks to the company of managing its under-recoveries. For example, any deferral of FE revenues will need to be funded in cash by FE, which supports the use of the WACC in the calculation for the remuneration of under-recoveries. The risks FE faces in financing under-recoveries are not linked to LIBOR.

6.46 To date FE's under-recoveries have been remunerated at the same rate of return as the remainder of the TRV. This approach is consistent with the fact that the deferral of revenues needs to be funded in cash by FE in the same way as the other elements of the capital employed in our business.[312] FE does not understand why the UR would choose to replace an absolute rate of return (WACC) with a fluctuating index (LIBOR). Doing so introduces additional risk to FE that it will have to manage. The UR has not taken this additional risk into account when setting the alternative rate of return.

6.47 *Second,* FE submits that, even if it was appropriate to employ a differentiated rate of return, the proposed rate is arbitrary. The UR first proposed to set the level of the alternative rate of return on under-recoveries at LIBOR +2% in the GD17 Draft Determination.[313] There is no accompanying explanation for the choice of either the LIBOR index or the 2% premium. Given its importance and the change to existing practice, it was incumbent on the UR to carefully explain its choice of the appropriate

[310] FE Response to GD17 Draft Determination, May 2016, **NOA-1 / Tab 21 / Section 5.7**.

[311] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.87**.

[312] FE Response to GD17 Draft Determination, **NOA-1 / Tab 21 / Para 6.1.3**.

[313] GD17 Draft Determination, **NOA-1 / Tab 6 / Para 11.79**.

rate of return and the expected effects and benefits of this new measure compared to the other measures on FE's incentives and on consumers.

6.48 The only explanation included in the GD17 Final Determination is that the rate *"is consistent with the PNGL and SGN licences and reflects the fact that we view under recoveries as something which should be a short term arrangement that should not be incentivised in the licence"*.[314] FE considers this reasoning to be insufficient since this still does not explain why the LIBOR +2% rate was selected – the fact that it was used in other licences is not a justification in the present circumstances.

6.49 All three of the GDNs have had under-recoveries treated differently within their licences. FE does not consider the PNGL licence as capable of translation to FE's situation given that changes to the rate of return on PNGL's past under-recoveries were subsumed within a wider, non-public, negotiation as a result of which PNGL was permitted to earn a return of 7.5% on its entire TRV for an additional 10 years over and above what has been made available to FE. As for SGN, its licence contains provisions under which under-recoveries incurred in the future will be remunerated at LIBOR +2%. However, SGN has no existing balance of under-recoveries to which this rate of return is capable of applying.[315] It is therefore erroneous for the UR to make a direct comparison with PNGL and SGN for the rate of return on under-recoveries without taking into account the wider context underpinning each of the three licences.

6.50 The most significant change between the GD17 Draft Determination and GD17 Final Determination is the introduction of a glide path on the LIBOR rate of return starting in 2017 and running for three years: 2017 at LIBOR +4%; 2018 at LIBOR +3%; and 2019 at LIBOR +2%.[316] However, the glide path introduced does not negate the fact that the rate is inappropriate, arbitrary, retrospective, and the significant adverse effect on FE.[317]

6.51 *Third*, FE considers the chosen metric to be disproportionate. The proposed change to the rate of return is a significant reduction that will have a detrimental financial impact on the accumulated under-recoveries built up by FE. LIBOR is a nominal rate, and 1-year LIBOR is currently at 0.8%.[318] Under the UR's proposed approach on the LIBOR rate of return (including the glide path), FE will lose c.£1.09 million in nominal terms[319], over GD17, if the alternative rate of return is applied to under-recoveries (see **NOA-1 / Tab 29**).[320] This estimate assumes a rapid decline in the level of under-recoveries, such that the balance is reduced to zero by the end of FY 2020. The impact on FE will be greater than c.£1.09 million if this is not achievable, if UK inflation is higher than forecast, or if the LIBOR rate falls further over the coming years.

[314] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.96**.

[315] FE Response to GD17 Draft Determination, **NOA-1 / Tab 21 / Para 6.1.4**.

[316] GD17 Final Determination, **NOA-1 / Tab 7 / Para 11.97**.

[317] FE Response to GD17 Licence Modification Consultation Paper, **NOA-1 / Tab 27 / Page 3**.

[318] See link for LIBOR rates.

[319] Approximately £0.99 million in 2014 prices.

[320] The inflation figure used for 2017 to 2020 is 3.07%, in line with the figure used by the UR (see GD17 Final Determination, **NOA-1 / Tab 7 / Page 281**). This figure differs from the figure included in the GD17 Final Determination of less than £800,000 (see **NOA-1 / Tab 7 / Para 11.93**). The c.£800,000 estimated loss figure was based on working sent by FE to the UR on 8 August 2016 (see **NOA-1 / Tab 25**). However, FE contends that there are two reasons that the c.£800,000 estimated loss figure is inappropriate: (i) the figure had not been adjusted to incorporate inflation; and (ii) this figure was calculated before the glide path was proposed

D. RELIEF SOUGHT

6.52 The GD17 Decision in relation to the appropriate rate of return for under-recoveries was wrong under the statutory grounds identified in paragraph 6.3.

6.53 For the reasons outlined above, FE requests that the CMA quash the GD17 Decision under Article 14E(2)(a) of the Gas Order and substitute its own which reinstates the link between the allowed cost of capital and the rate of return on under-recoveries, in line with the UR's statutory duties.

Section 7: Appeal Ground 4 – WACC and Financeability

A. OVERVIEW

7.1 The UR has a statutory duty to act in accordance with its principal objective to "*promote the development and maintenance of an efficient, economic and co-ordinated gas industry in Northern Ireland*."[321] The UR has a further statutory duty to act in accordance with "*the need to secure that licence holders are able to finance [their] activities.*"[322]

7.2 The GD17 price control was the first time that the UR set a weighted average cost of capital (***WACC***) for FE. Prior to GD17, an allowed rate of return of 7.5% (pre-tax, real) was embedded in FE's Licence. In setting the WACC, the UR states that it applied the Capital Asset Price Model (***CAPM***).[323] The UR also took into account what it considered to be "regulatory precedents" from decisions of other regulators in Great Britain and worked with other UK regulators.[324]

7.3 The UR also undertook modelling of FE's financeability and considered FE's ability to raise debt and equity to finance its activities. In undertaking this analysis the UR states that it took into account key financial indicators used by credit rating agencies.[325]

7.4 Both the UR's assessment of FE's WACC and its financeability assessment are vitiated by errors:

(a) The UR has set an allowed return on equity that is too low for a business with the risk profile and other characteristics of FE. In particular, the asset beta used by the UR in its assessment has not properly assessed the evidence relating to FE's risk and has mis-applied alleged "precedents" by failing to take into account the specific characteristics of FE's business.

(b) The debt financing assumptions used by the UR in its financeability assessment are not consistent with the outputs of its financeability analysis, which reveal no basis for its assumptions that FE will be able to finance itself at an investment grade level. FE has been benchmarked against an investment-grade cost of debt but will not, in practice, be in a position to finance its licensed activities at investment grade interest rates.

7.5 The net result of these errors, separately and cumulatively, is that UR has set a rate of return for FE which is too low. Correction of these errors would lead to an increase in FE's rate of return from 4.32% to 4.90%.

7.6 The combined effect of the UR's errors was **£5.88 million** (in 2014 prices).

[321] Article 14(1) Energy Order.

[322] Article 14(2)(b) Energy Order.

[323] GD17 Final Determination, **NOA-1 / Tab 7 / Para 1.23**.

[324] GD17 Final Determination, **NOA-1 / Tab 7 / Para 1.23**.

[325] GD17 Final Determination, **NOA-1 / Tab 7 / Para. 1.24**.

B. THE UR'S DECISION ON WACC AND FINANCEABILITY

WACC Decision

7.7 The CMA will be familiar with the CAPM from other regulatory matters which it regularly considers. The UR's financial model provides for FE to earn a return on its allowed expenditures up until the point of recovery of those expenditures from customers. The value of this return is calculated as a weighted average of FE's costs of equity and debt.[326]

7.8 The CAPM estimates the required return on equity to be a function of the risk-free rate (R_f), the expected return on the market portfolio (R_m) and a firm-specific measure of risk known as the "beta" (β_e). The formula applied by the UR is represented as:

$$\text{Return on equity} = R_f + \beta_e \,.\, (R_m - R_f)$$[327]

7.9 FE was concerned by a number of aspects of the UR's approach to setting the WACC as part of the price control. For the purposes of this appeal FE is most concerned by the "beta", the firm-specific measure of risk, that has been applied by the UR in its calculations. In particular, as explained further below, the "beta" used by the UR for FE has failed to take account of FE's specific characteristics and the UR has relied inappropriately on alleged "precedents" relating to businesses with wholly different characteristics to FE. In doing so, the UR has arrived at a "beta" that does not reflect the true risks faced by FE in its business and is therefore not in accordance with UR's primary objective or with its duty to secure that FE can finance its activities.

Financeability decision

7.10 The UR's approach to assessing the financeability of FE's business is set out at paragraphs 10.60 to 10.80 of the GD17 Final Determination.

7.11 The UR understood its duty, in broad terms, to mean that the price control ought to be set at a level which would allow an efficient company to finance its licensed activities.[328] The UR considered the ability of FE to utilise both equity and debt finance.[329] In relation to equity finance, the UR considered that the key determinant of the company's ability to access equity finance is the allowed rate of return on equity. The UR considered that its proposed return was slightly higher, on a like-for-like basis, than the return applied by Ofgem in its RIIO-GD1 and RIIO-ED1 price control decisions and "accordingly" was satisfied that FE ought to be able to secure equity finance on an ongoing basis during the GD17 period.[330]

7.12 In relation to debt finance, the UR stated that *"it will be important for … FE to maintain investment grade debt quality"*.[331] The UR did not provide a statement of its methodology for its financeability analysis. However, the GD17 Final Determination sets out the results of some modelling that was conducted by UR of projected financial

[326] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.6**.

[327] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.7**.

[328] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.61**.

[329] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.64**.

[330] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.65**.

[331] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.66**. "Investment grade" is understood as a credit rating of BBB- or above (Fitch or Standard & Poor's) or Baa3 (Moody's). PNGL has a licence condition to maintain an investment grade rating but FE does not.

ratios if FE selected a gearing in line with the 55% figure used by the UR in its cost of capital calculations (see Tables 193 and 194 of the GD17 Final Determination).[332]

7.13 The modelling results indicated to the UR that, for PNGL, gearing remains relatively modest throughout GD17 and its post-maintenance interest cover ratio (***PMICR***) was above the 1.4x minimum threshold that two of the rating agencies (as well as the CC in its 2014 report for NIE)[333] consider is normally expected of a company with an investment grade rating. For FE, the UR considered that its modelling results indicated that gearing would also be "modest" but PMICR was "much tighter" against the rating agency minimum threshold of 1.4x. In fact, as can be seen in Table 194 of the GD17 Final Determination, there is no year in the GD17 period in which the UR's modelling predicts that FE would meet or exceed the minimum 1.4x PMICR threshold.

7.14 The UR rejected FE's submissions concerning the measures of interest cover actually used in covenants in FE's agreements with its lenders on the basis that the rating agencies are "comfortable" with the application of the PMICR measure, although it acknowledged that FE would be required to take remedial actions under its agreement with its lenders as a result of the UR's GD17 Decision.[334]

7.15 The UR rejected FE's submission that the weak PMICR (and other) credit ratios for FE indicated that the overall rate of return had been incorrectly calibrated. The UR considered that there may be scope for FE to improve interest coverage ratios on a temporary basis by borrowing at a lower rate than implied by its allowed cost of debt during GD17.[335] In addition, the UR noted that its figures did not take account of additional revenues that FE could receive in the GD17 period from unwinding under-recoveries accrued in prior price control periods.

7.16 The UR sought to illustrate the first of these points by conducting some "sensitivity analysis", which assumed that FE refinanced its debt at nominal rates similar to those observed in the market at the time of the GD17 Final Determination publication. The UR then applied sensitivity analysis to this alternative set of outputs, finding that a 15% overspend in Opex and Capex compared to the GD17 Final Determination resulted in a reduction in the average PMICR for FE to 1.30x (well below the 1.4x minimum threshold). The UR did not present a full set of metrics for its sensitivity analysis, only the PMICR ratio, nor did it present sensitivities around its base case modelling.

7.17 The UR then stated that "with a more modest selection of gearing at, say, 45%" interest cover ratios for FE would achieve threshold values.[336] In the UR's view, this was sufficient to "demonstrate" that the cashflows in the GD17 Final Determination are sufficient to enable an efficient company in FE's position to finance itself through a balanced mix of debt and equity financing.[337]

[332] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.68**.

[333] Competition Commission, Northern Ireland Electricity Price Determination, Final Determination, 26 March 2014, paragraph 17.73 (Table 17.4).

[334] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.71**.

[335] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.73**.

[336] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.78**.

[337] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.78**.

C. UR'S ERRORS IN ITS APPROACH TO WACC AND FINANCEABILITY

7.18 The UR has failed to act in accordance with its principal objective to promote the development and maintenance of an efficient, economic and coordinated gas industry in Northern Ireland and/or has failed to give appropriate weight to its statutory duty to secure that licence holders are able to finance their licensed activities in the manner set out below:

(a) Ground 4A: The UR has set an incorrect asset beta based on a limited comparator set of companies that are not subject to the same degree of systematic risks as faced by FE, as well as being of a significantly greater scale. As a result, the allowed cost of equity understates the actual cost of equity for FE. In particular:

(i) The UR has taken no account of the impact of systematic risk for FE arising from the scale of connections growth combined with the impact of the connections incentive. Other GB and NI utilities do not bear similar risks and therefore the systematic risk arising from FE's connections incentive justifies a premium in the asset beta compared with the comparator set used by the UR.

(ii) The UR has placed insufficient weight on the systematic risk associated with the scale of FE's capital programme.

(b) Ground 4B: The UR has failed to act in accordance with its statutory duty to secure that FE is able to finance its activities by basing its financeability assessment on an incorrect assumption that FE will be able to finance its business on terms consistent with an investment grade credit rating when UR's own notional financeability modelling indicated a sub-investment grade outcome; and when appropriate sensitivity analysis reinforces that FE will not be in a position to secure an investment grade rating for its debt.

Ground 4A: The asset beta error

7.19 The UR has adopted an approach to calculating the asset beta for FE for the purposes of setting FE's WACC which did not take sufficient account of the specific characteristics and risk associated with FE's business. In doing so, the UR has applied an incorrect asset beta in its WACC calculation, leading it to adopt a rate of return for FE which is insufficient. This decision was, therefore, not in accordance with UR's statutory duties to promote the development and maintenance of an efficient, economic and co-ordinated gas industry in Northern Ireland or to act in accordance with its duty to secure that FE is able to finance its licensed activities.

7.20 As the UR recognised,[338] FE (and PNGL) are not listed companies and therefore an empirical estimate of the asset beta cannot be obtained directly from stock market data. In estimating the asset beta the UR examined the betas that other regulators applied to other regulated utilities and sought "to position PNGL and FE logically against these comparators."[339] The UR also took into account the beta that SGN identified in its successful application for the "Gas to the West" Licence in Northern Ireland. The UR also obtained a report from First Economics as a "cross-check" on its assessment.

[338] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.26**.

[339] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.26**.

7.21 The UR then sought to compare FE to the comparators it had identified. The UR considered that "in many respects the networks are very similar".[340] The UR noted, in particular, that most regulated companies nowadays have revenues caps like the caps that the UR is putting in place for PNGL and FE, which limit companies' in-period exposure to unforeseen changes in volumes. The UR noted that there were also "*similarities across sectors between the overall strength of Opex/capex/totex incentives and the amounts of money that are tied to output or service quality schemes across different price controls, even if the detailed design of such incentives differs from industry to industry*."[341]

7.22 Two potential areas of difference were identified by the UR:

(a) the relative maturity of FE's business and the atypical uncertainty of customer numbers and growth faced by FE; and

(b) the fact that FE manages comparatively low amounts of ongoing expenditure in comparison to the capital that investors put into the business (operational leverage).[342]

7.23 In relation to operational leverage, the UR concluded that FE's comparatively low totex-to-TRV ratios indicated a lower exposure to systematic risk compared with GB GDNs. It considered whether to make an explicit downward adjustment for this factor but found it difficult to produce a robust and defensible quantification of the effect. [343]

7.24 In relation to the relative maturity of FE's business, the UR sought to undertake an analysis of the circumstances in which unanticipated shocks to connections growth or volumes could result in risks to the return of FE's TRV. UR considered that FE has "passed the point in its development where the recovery of shareholders' investments is dependent on the companies acquiring new customers" and did not take this factor into account in its assessment.[344]

7.25 The UR therefore concluded that "there is no material difference in the riskiness of the Northern Ireland gas networks in comparison to other regulated utilities" and therefore the asset beta should logically sit within the 0.38 to 0.40 range that it derived from Ofgem's RIIO-GD1 and RIIO-ED1 decisions and the Competition Commission's decision in Northern Ireland Electricity.

7.26 The UR's chosen point estimate was 0.40, which took into account that there are differences with PNGL and FE's regulatory model from the "standard model", e.g. the Profile Adjustment.[345]

7.27 FE has sought the expert opinion of Mr Nicholas Forrest of PwC to review the approach of the UR to the estimation of the asset beta. In his expert witness statement and accompanying report (the ***PwC Report***), Mr Forrest concludes, for the reasons set out in his statement and the PwC Report that:

(a) having reviewed the available evidence, an asset beta of 0.4 fails to capture specific beta risks associated with FE which arise from the connections incentive

[340] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.29**.

[341] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.29**.

[342] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.33**.

[343] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.33**.

[344] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.32**.

[345] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.39**.

and the scale of FE's capital programme for GD17. Nor would an asset beta of 0.40 capture the non-CAPM risks facing FE through the GD17 capital programme, the potential mis-calibration of the Opex allowance and non-additionality assumption and the increased inflation forecasting error risk borne by FE as a result of the introduction of the cost of debt adjustment mechanism.

(b) A bottom up quantification of the beta risks and non-CAPM risks associated with FE's business suggests that FE's asset beta could be as high as 0.5. This is comprised of an approximate 0.06 asset beta uplift linked to the connections incentive and an approximate 0.04 asset beta uplift linked to the scale of the capital programme.

(c) Accordingly, the UR was wrong to set FE's asset beta as low as 0.40, and there is evidence to support an asset beta of 0.50.

(d) A more reasonable range for the asset beta applicable to FE is 0.45 to 0.50 and a more reasonable point estimate from the available evidence would be 0.47, towards the middle of the range.

7.28 Mr Forrest identifies a number of errors in the approach adopted by the UR to its estimation of the asset beta for FE.

7.29 *First*, given the importance attached by the UR to its benchmarking against other regulatory determinations for utility companies in Great Britain, forming a proper understanding of the relative characteristics of FE compared with the benchmark companies was critical to the appropriateness of the UR's estimate.

7.30 The key characteristics of FE compared with PNGL and the GB GDNs are summarised in Table 2.2 of the PwC Report. These indicate that across all dimensions there are significant differences not only between FE and the GB GDNs but also between FE and PNGL and that FE is fundamentally different to the GB GDNs.

7.31 The UR did not take sufficient account of any of these fundamental differences in characteristics and has inappropriately assumed that it could simply rely on the results of exercises conducted by Ofgem in relation to businesses with a wholly different character.

7.32 Furthermore, there is no indication anywhere in the GD17 Final Determination that the UR sufficiently considered the differences in characteristics between FE and PNGL. The UR's analysis therefore seeks to compare "PNGL and FE" against the benchmarks in Ofgem decisions without properly considering whether an asset beta that might be appropriate for PNGL is also appropriate for FE. This crucial step in the UR's analysis for FE is simply missing as the UR has considered the asset beta for "the Northern Ireland gas networks" together without drawing any distinction between them.[346]

7.33 *Second*, the UR has not sufficiently taken into account the different aspects of risk that affect the asset beta calculation and how each of those factors applies to FE specifically. As can be seen from the PwC Report,[347] there are five categories of risk and one additional factor – operational leverage – which can magnify relevant risks. These are:

(a) revenue/demand risk;

[346] See GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.38**.

[347] PwC Report, **NF-1 / Tab 1 / Para 2.35**.

(b) input price risk;

(c) connections incentive risk;

(d) asset stranding risk; and

(e) capex risk.

7.34 In relation to revenue/demand risk, input price risk and asset stranding risk, Mr Forrest concludes that the risks applicable to FE are similar to the GB GDNs.[348]

7.35 However, in relation to connections incentive risk and capex risk, Mr Forrest concludes that FE faces increased risk compared to the GB GDNs.[349]

7.36 In relation to capex risk, the PwC Report notes that systematic risks associated with capex are likely to be magnified for FE relative to GB GDNs as the size of FE's capital programme relative to its asset base is larger than that of the GB GDNs.[350] As a newer distribution network operator, the composition of FE's capex is almost exclusively new or enhancement capex, as opposed to replacement capex, where risks are typically lower.[351]

7.37 In relation to the risk arising from connections growth, Mr Forrest finds that the UR's analysis in the GD17 Final Determination focused solely on asset stranding risk, and in doing so failed to take account of the risk to returns on capital associated with the connections incentive.[352]

7.38 In relation to connections risk, the PwC Report notes that GB GDNs do not bear similar risks to those of FE which arise from the connections incentive. The connections incentive risk is distinct from the outcome incentives and penalties which occur under Ofgem's RIIO regime as the risks associated with ODIs under that regime are typically company or area-specific, whereas the connections incentive risk is affected by macroeconomic factors (e.g. household growth and incomes) and because a significant proportion of the costs intended to be recovered through the connections incentive are likely to be fixed.[353] The UR was therefore wrong to conclude that no relevant distinction should be drawn between the incentives regimes applicable to GB GDNs and FE.[354]

7.39 In relation to operational leverage, the PwC Report finds that limited weight can be placed on the comparison of FE's totex:TRV ratio with the totex:RAV of the GB GDNs that was relied upon by the UR. First, as the TRV includes the effect of regulatory commitments such as under-recoveries and the NI specific profile adjustment, the Depreciated Asset Value (***DAV***) could offer a more direct comparison to the conventional RAVs of the GB GDNs. On that basis, the operational leverage of FE is greater than that of the GDNs, suggesting that the UR's rationale for concluding that FE was no more risky than the GB GDNs on the basis of operational leverage was questionable at best. Second, any comparisons using totex also need to be treated carefully as the composition

[348] PwC Report, **NF-1 / Tab 1 / Para 2.83** to **2.41** and **2.45** to **2.47**.

[349] PwC Report, **NF-1 / Tab 1 / Para 2.42 to 2.44** and **2.48** to **2.50**.

[350] PwC Report, **NF-1 / Tab 1 / Para 2.48**.

[351] PwC Report, **NF-1 / Tab 1 / Para 2.49**.

[352] PwC Report, **NF-1 / Tab 1 / Para 2.44**.

[353] PwC Report, **NF-1 / Tab 1 / Para 2.42** to **2.43**.

[354] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10 .29**.

of FE's totex is different to more mature utilities (FE has less replacement capex and less maintenance Opex).[355]

7.40 Furthermore, although the First Economics report on the cost of capital for GD17 prepared for the UR[356] indicated that FE had a totex:TRV ratio that was lower than the typical level for GB companies, this analysis was on the basis of the proposed allowed totex in the UR's GD17 *Draft* Determination. There was a significant increase in the level of totex between the GD17 Draft Determination and the GD17 Final Determination. Updating the analysis to take account of the allowances in the GD17 Final Determination (rather than the GD17 Draft Determination) indicates that FE has a similar totex:asset ratio to GB companies.[357] No reliance should therefore have been placed by the UR on the First Economics comments concerning this aspect of risk.

7.41 Had the UR considered each of the relevant risks affecting FE's asset beta with proper regard to the specific characteristics of FE's business it would have concluded that the systematic risks faced by FE are higher than those of the GB GDNs. The UR's failure to conduct such an analysis resulted in an erroneous estimation of FE's asset beta which has been set too low to take account of the real level of risk faced by FE.

7.42 *Third*, in addition, as noted at paragraphs 2.59 to 2.62 of the PwC Report, there are relevant risk differences outside the CAPM framework that should have been taken into account in the UR's assessment of the relative riskiness of FE's business for the purposes of estimating its asset beta. The PwC Report considers there to be three non-CAPM risks relevant to the UR's assessment:

(a) *Asymmetric capex risk*: there are three elements of capex risk presented by FE's large capital programmes which are not effectively captured by CAPM, including (i) FE's mandatory investment in growth of the gas industry in Northern Ireland; (ii) penalties indirectly arising from missing connections targets; and (iii) the asymmetric cash flow profile for equity investors arising from FE's large amount of capex for GD17.

(b) *Non-additionality risk*: the UR set the connections incentive allowance on the assumption that 25% of customers would connect with zero marketing or sales effort. This assumption has been challenged by FE under Ground 2 above. However, this also gives rise to a high risk of Opex overspend in order to achieve the target number of connections.

(c) *Opex benchmarking*: there is more limited scope for outperforming Opex allowances compared with underperforming Opex allowances as a result of the UR having informed its Opex assessment by reference to a top-down benchmarking exercise against the "upper quartile" of GB GDN performance.

7.43 It is important to note that these risks are not merely theoretical. FE anticipates ending the GD14 price control period with (i) approximately £1.6 million (nominal) in "stranded" capex as a result of retrospective adjustments made by the UR to FE's capex allowances mid-way through the period; and (ii) as noted elsewhere in this Notice of Appeal, material overspending on its Opex allowances and advertising and marketing costs associated with its attempt to meet its GD14 connections target.

[355] PwC Report, **NF-1 / Tab 1 / Para 2.54 to 2.55**.

[356] First Economics, *An Estimate of the GD17 Costs of Capital* (2016), prepared for the UR, **NOA-1 / Tab 6G**.

[357] PwC Report, **NF-1 / Tab / Para 2.53**.

7.44 The UR has also introduced increased RPI forecast risk through its proposed cost of debt uncertainty mechanism. Regulated utilities are traditionally not significantly exposed to RPI forecasting risk, through the indexation of both revenues and capital values and the allowance of a real rate of return. However, because the RPI assumption set at the time of GD17 will not be updated when the allowed real cost of debt assumption is updated, FE will become exposed to significant inflation forecasting error.[358]

7.45 These non-CAPM risks mean that a higher overall equity return beyond that suggested by CAPM alone would be appropriate.[359]

7.46 The PwC Report quantifies the impact of the connections risk as justifying an uplift of 0.06 to FE's asset beta.[360] The impact of the capex risk, informed by the CC's Report concerning Heathrow's Terminal 5 capex risk, justifies an uplift of 0.04 to the asset beta set by the UR.[361]

7.47 Mr Forrest and the PwC Report conclude that an asset beta of 0.40, as set by the UR, does not capture FE-specific risks. Mr Forrest's quantification of beta risks and non-CAPM risks suggests that the asset beta for FE could be 0.50.[362] A point estimate within the range 0.45 to 0.50 would be appropriate and a figure of 0.47 would be consistent with the full range of evidence on the balance of risk faced by FE.[363]

Ground 4B: The financeability error

7.48 In its financeability assessment, the UR applied a "notional gearing" assumption of 55%.[364] This is distinct from FE's actual capital structure. This figure was selected by the UR on the basis of past regulatory determinations which the UR found were in the range 45% to 65%.[365] The UR also emphasised the importance of FE maintaining investment grade credit quality.[366]

7.49 There are several errors in the UR's approach to assessing FE's financeability.

7.50 *First*, the UR has proceeded on an incorrect assumption that FE would be in a position to obtain an investment grade rating for its debt with a 55% gearing structure.[367] Mr Forrest's evidence and the PwC Report apply the Moody's ratings methodology to FE.[368] The PwC Report finds that, in relation to the qualitative "grid factors" and "non-grid factors" applied by Moody's, FE is positioned negatively compared to GB comparators that are not undertaking significant network enhancements and who, unlike FE, have large and stable customer bases.[369]

[358] PwC Report, **NF-1 / Tab / Para 2.62**.

[359] PwC Report, **NF-1 / Tab / Para 2.63**.

[360] PwC Report, **NF-1 / Tab / Para 2.91**.

[361] PwC Report, **NF-1 / Tab / Para 2.81**.

[362] PwC Report, **NF-1 / Tab / Para 2.91**.

[363] PwC Report, **NF-1 / Tab / Para 2.94**.

[364] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.67**.

[365] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.20**.

[366] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.66**.

[367] GD17 Final Determination, **NOA-1 / Tab 7 / Para 10.74**.

[368] PwC Report, **NF-1 / Tab 1 / Para 3.48** to **3.50**.

[369] PwC Report, **NF-1 / Tab 1 / Para 3.52**.

7.51 Furthermore, FE's quantitative financeability metrics are inconsistent with the minimum thresholds required for a BBB rating. This is illustrated in Table 3.6 of the PwC Report, reproduced below:

Credit ratio	FE GD17 Average	Target minimum threshold for BBB	Threshold met?
PMICR (with deferred revenue)	1.35 x	1.4 x	No
PMICR (without deferred revenue)	1.31 x	1.4 x	No
Gearing	55.7%	60%	Yes
FFO/interest cover	2.37 x	2.8 x	No
FFO/net debt	7.5%	11%	No
RCF/capex	0.25 x	n/a	n/a

7.52 Mr Forrest and the PwC Report therefore conclude that a qualitative and quantitative comparison of FE's position to Moody's rating methodology indicates that the UR's analysis of financeability was not capable of supporting its assumption that FE should be able to finance itself at an investment grade level.[370]

7.53 Two important consequences flow from Mr Forrest's finding that FE is unlikely to be in a position to obtain an investment grade credit rating.

(a) The UR's assumption that FE will be able to borrow at interest rates consistent with an investment grade rating appears to be unsupported by the facts. As a result, the assumptions underpinning the cost of debt allowance for GD17 are incorrect.

(b) Investment grade companies have access to a broader range of sources of finance (including bank debt, bond markets, the inflation-linked bond market, private placements, etc) and on better terms than are available to sub-investment grade companies, leading to greater overall financial flexibility and the ability to manage dislocations arising in the financial markets over time. For example, investment grade companies can obtain longer maturing debt with more favourable loan agreements, less stringent covenants and reduced lender protections.

7.54 *Second*, the UR did not draw any meaningful distinction between the financeability positions of FE and PNGL in circumstances where the financeability metrics for FE are consistently less favourable than those of PNGL (with the exception of the FFO/net debt ratio metric, which is the same for both companies).[371] In fact, as the PwC Report concludes, FE is consistently at a financeability disadvantage relative to its peers. The UR should have taken proper account of the less favourable position of FE in its assessment but failed to do so.

7.55 *Third*, the UR failed to conduct a properly calibrated sensitivity analysis. The sensitivity analysis set out in the PwC Report illustrates the impact of Opex being either 10% or 20% higher than the GD17 Final Determination allowance.[372] The baseline level of FE's PMICR is already below the 1.4x minimum threshold referred to by the UR as important to the rating agencies. The PMICR would be significantly lower if actual Opex was 10%

[370] PwC Report, **NF-1 / Tab 1 / Para 3.55**.

[371] PwC Report, **NF-1 / Tab 1 / Table 3.7**.

[372] PwC Report, **NF-1 / Tab 1 / Table 3.8**.

greater than the GD17 Final Determination allowance and lower still at 20% greater (a realistic prospect given the level of Opex allowances set by the UR in GD17). Similarly, FE's FFO interest coverage and FFO to net debt ratio would also be significantly below the relevant minimum thresholds. [373]

7.56 Despite carrying out its financeability analysis at a lower notional gearing assumption and demonstrating that this assumption provided results which better supported an investment grade cost of debt assumption, the UR did not choose to use a 45% notional gearing assumption in calculating the WACC. This effectively means that the company - even on a notional basis - is being forced to fund the difference between the 55% and 45% debt financing assumption by using equity while only earning a return sufficient to recover the cost of debt.

7.57 The result of the above errors, individually and cumulatively, is that the UR's GD17 Decision is not in accordance with its statutory duty to secure that FE can finance its licensed activities.

7.58 Mr Forrest concludes that the application of a lower gearing assumption for FE to 45% would have improved FE's financeability metrics such that they would be more consistent with an investment grade rating. The implication of this is that a debt beta of 0.05 would be appropriate.[374] Applying a 45% notional gearing assumption and debt beta of 0.05 (while maintaining the asset beta at 0.4) increases the allowed rate of return for FE by 0.12% over and above the increase implied by the adjustment to asset beta under Ground 4A.

D. RELIEF SOUGHT

7.59 The GD17 Decision in relation to the asset beta and FE's financeability was wrong under the statutory grounds identified in paragraph 7.18.

7.60 For the reasons outlined above, FE requests that the CMA quash the GD17 Decision under Article 14E(2)(a) of the Gas Order and substitute its own which:

(a) Provides an increase in asset beta to within the range 0.47 to 0.50 to reflect systematic risks faced by FE.

(b) Consistent with the higher-risk nature of FE's business, applies a reduction in notional gearing to 45% and a corresponding reduction in debt beta to 0.05 to reflect reduced risk to debt investors associated with reduced gearing.

(c) Taking into account the cumulative effect of the above decisions, sets an allowed rate of return for FE correcting for the above errors at 4.90% (assuming an asset beta of 0.47).

[373] PwC Report, **NF-1 / Tab 1 / Para 3.66**.

[374] PwC Report, NF-1 / **Tab 1 / Appendix C**.

Section 8: Chronology

Date	Event
19 December 2014	GD17 Approach Discussion Paper published
10 February 2015	FE Response to GD17 Approach Discussion Paper.
17 April 2015	GD17 Final Approach Document published
5 May 2015	FE Response to GD17 Final Approach Document
14 May 2015	UR Business Plan Template and RIGS published
18 June 2015	UR publishes Consultation Paper on price control modification for FE from a price cap regime to a revenue cap regime.
29 June 2015	FE submit FE June 2015 GD17 Supplementary Papers to UR in response to GD17 Final Approach Document and to supplement upcoming Business Plan Submission
13 August 2015	FE provides response to Consultation Paper on form of price control change
16 September 2015	UR publishes outcome of consultation on price control regime change.
30 September 2015	FE provide Business Plan and Business Plan Submission to UR, with accompanying FE September 2015 GD17 Supplementary Papers
16 March 2016	GD17 Draft Determination published
10 May 2016	UR workshop to discuss GD17 Draft Determination.
31 May 2016	FE Response to GD17 Draft Determination
15 September 2016	GD17 Final Determination and GD17 Licence Modification Consultation Paper published.
14 October 2016	FE Response to GD17 Licence Modification Consultation Paper
28 October 2016	GD17 Decision
1 January 2017	Proposed start date for GD17 Price Control

Section 9: Statement of Truth

The Appellant believes that the facts stated in this Notice of Appeal are true.

Signature of Authorised Representative

Name of Authorised Representative

Date

for and on behalf of Firmus Energy (Distribution) Limited