Firmus Energy (Distribution) Limited v Northern Ireland Authority for Utility Regulation

Final determination

26 June 2017
Members of the Competition and Markets Authority
who conducted this appeal

Phil Evans
Roger Finbow
Jon Stern

Acting Chief Executive of the Competition and Markets Authority

Andrea Coscelli

The Competition and Markets Authority has excluded from this published version of the report information which the inquiry group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [²]. Some numbers have been replaced by a range. These are shown in square brackets. Non-sensitive wording is also indicated in square brackets.
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1. **Introduction**

1.1 The Northern Ireland Authority for Utility Regulation (UR) is responsible for regulating the electricity, gas, water and sewerage industries in Northern Ireland (NI). As the economic regulator of the gas industry, it is responsible, among other matters, for regulating and granting conveyance licences to the gas distribution network operators (GDNs) in NI. Currently, there are three GDNs in NI: Firmus Energy (Distribution) Limited (FE), Phoenix Natural Gas Ltd (PNGL) and Scotia Gas Networks Natural Gas Limited (SGN).

1.2 On 28 October 2016, the UR published its decision to modify the gas conveyance licences of the three GDNs in NI (the GD17 Decision).¹ These licence modifications set the amount the GDNs would have to run their businesses and invest in the gas network,² from 1 January 2017 to 31 December 2022 (the GD17 Period).³

1.3 On 25 November 2016, FE brought an appeal to the Competition and Markets Authority (CMA) against the GD17 Decision to modify the conditions of its licence. On 28 December 2016, the CMA granted FE permission to appeal to the CMA. This document sets out our final determination on the FE appeal. Under the applicable statutory framework for the appeals process, the CMA must reach its final determination by 27 June 2017.⁴

1.4 In reaching our determination, we have considered FE’s Notice of Appeal (NoA) and related documents (referred to collectively in this document as the Appeal), the UR’s representations and observations on the NoA and related documents (referred to collectively in this document as the Defence) and submissions from the Consumer Council (Northern Ireland) (CCNI) as an Interested Third Party.⁵. We have held hearings with the Parties and with CCNI. We also received representations from the Major Energy Users Council, Manufacturing Northern Ireland (Manufacturing NI) and PNGL.

1.5 In this document, we set out the background to the Appeal before considering each ground of FE’s appeal in detail. In this introductory chapter, we describe the conduct of the appeal process.

³ The next licence modification is due in 2023.
⁴ That is, within the period of six months beginning with the date permission to appeal was granted (Article 14F(1) of the Gas Order).
1.6 In Chapter 2 of this document, we briefly summarise the role of gas distribution networks in the gas supply chain and the structure of the industry in NI. We also describe the regulation of gas distribution and the role of the UR in setting a price control for the GDNs in NI.

1.7 Chapter 3 sets out the legal framework for the appeal, including the applicable standard of review.

1.8 Chapters 4 to 7 address each of FE’s four grounds of appeal in turn, summarising the relevant main submissions and supporting evidence put forward by the Parties before turning to our assessment and determination:

- Ground 1: Operating Expenditure (Opex) Allowance (chapter 4).
- Ground 2: Connection Incentive (chapter 5).
- Ground 3: Under-recoveries (chapter 6).
- Ground 4: Weighted Average Cost of Capital (WACC) and financeability (chapter 7).

1.9 Chapter 8 sets out our decisions on remedies for those grounds in respect of which we have found in favour of the appellant.

1.10 Chapter 9 describes the process for determining the costs to be borne by each party to the appeal.

**Conduct of the appeal**

1.11 This is the first appeal of a licence modification decision under Article 14B of the Gas (Northern Ireland) Order 1996 (Gas Order).\(^6\)

1.12 We are conducting this appeal in accordance with the procedure set out in Schedule 3A to the Gas Order,\(^7\) the *Competition Commission Energy Licence Modification Appeals Rules (CC14)* as adopted by the CMA (the Rules)\(^8\) and

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\(^7\) Schedule 3A has effect pursuant to Article 14C of the Gas Order.

\(^8\) Following a public consultation, the CMA decided in 2015 that it would use the Rules, adapted as necessary to refer to the relevant NI legislation and decisions of the UR, to govern the procedure for appeals against the UR’s energy licence modification decisions.

1.13 Throughout this appeal, we have had regard to the overriding objective of the Rules which is to enable the CMA to dispose of appeals ‘fairly and efficiently’ within the time period prescribed by the applicable sector–specific legislation.10

**Permission to appeal**

1.14 On 25 November 2016, FE sought permission from the CMA to appeal following the GD17 Decision of 28 October 2016 to modify the conditions of FE’s Licence to give effect to the GD17 price control determination.

1.15 After considering FE’s request and the UR’s representations and observations on the application for permission to appeal (UR R&O on NoA),11 on 28 December 2016 the CMA granted FE permission to appeal.

**Submissions from the Parties**

1.16 FE submitted its NoA on 25 November 2016, followed by its Reply (FE R/S) on 14 February 2017.


1.18 The Parties supplied additional information in the course of the appeal when requested by the CMA.

**CMA provisional determination and responses**

1.19 The CMA notified the Parties of our provisional determination on 5 May 2017, and issued an amended chapter 5 (Ground 2) of the provisional determination and supplement to chapter 8 (Remedies) on 6 June 2017.

1.20 The UR and FE each submitted representations and observations on the provisional determination on 22 May 2017 and on the amended and supplemental chapters on 14 June 2017.

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9 Paragraph 11(1) of Schedule 3A to the Gas Order provides that the CMA board may make rules of procedure relating to the conduct and disposal of appeals under Article 14B. The Rules were adopted by the CMA board on 13 February 2014.

10 Rule 4.1 of the Rules.

11 Respondent’s representations and observations on appellant’s application for permission to appeal, December 2016. (UR’s R&O on PtA).
**Site visit and hearings**

1.21 Early in the appeal process, we attended a site visit in NI and held clarificatory hearings with FE and the UR (CCNI attending both hearings in a capacity as observers). We then held main hearings in London over two days in March with FE, the UR and CCNI.

**Transparency**

1.22 We have published various documents, including the NoA and the UR R&O on NoA, on our website.

1.23 In addition, we formed a confidentiality ring including advisers for FE and the UR and representatives from CCNI through which all submissions, hearing transcripts and correspondence between the CMA and the Parties were shared.
2. Background to the appeal

The gas supply chain in NI\textsuperscript{12}

2.1 The gas supply chain in NI includes the following:

- **Import**: gas is brought to NI from Scotland through the Scotland to NI pipeline.

- **Transmission**: gas is conveyed to the distribution systems through four high pressure transmission pipelines in NI. Transmission prices and revenues are regulated by the UR.

- **Distribution**: gas is conveyed through medium and low pressure gas mains to which customers connect. NI has three distribution licence holders (the GDNs), and distribution prices and revenues are regulated by the UR.

- **Supply**: Supply companies procure wholesale gas and bill customers to whom they supply it (note this is not part of the physical supply chain). Prices of former incumbent suppliers for domestic consumers are currently regulated by the UR.\textsuperscript{13}

2.2 The focus of this appeal is on the distribution of gas.\textsuperscript{14}

The GDNs

2.3 NI has three GDNs to cover a total population of approximately 1.8 million.\textsuperscript{15}

2.4 The three GDNs each have exclusive licences for gas distribution in specific geographical areas of NI (Licence Areas):\textsuperscript{16}

- FE operates the distribution network in 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.

- PNGL operates the distribution network in the Greater Belfast and East Down areas.

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\textsuperscript{12} See the website of the UR.

\textsuperscript{13} At the time of publication, the UR explains on its website that SSE Airticicy in the Greater Belfast area and firmus energy (Supply) Ltd in the Ten Towns area are subject to price regulation.

\textsuperscript{14} Firmus also has a licence for gas supply, but that is not the subject of this appeal.

\textsuperscript{15} Notice of Appeal, (NoA) paragraph 1.9.

\textsuperscript{16} See Figure 1 for map provided by FE showing the licence areas.
• SGN is licensed to convey gas within the West of Northern Ireland distribution licensed area.

**FE**

2.5 FE was established in March 2005 when it was awarded a licence to develop a completely new gas distribution network in ten towns across NI. FE has since been awarded extensions for nine additional areas.\(^\text{17}\) FE’s network now comprises approximately 1,100 km of distribution pipeline and serves approximately 31,000 customers. In 2015, FE earned revenues of £26.5 million.\(^\text{18}\)

2.6 FE was originally owned by Bord Gáis Éireann Limited (BGE), the Irish energy company, and was acquired in June 2014 by iCON Infrastructure Partners (iCON).

**PNGL**

2.7 PNGL was awarded a conveyance and supply licence for Greater Belfast in 1996. In 2008, PNGL separated its distribution business from its transmission assets and in 2012 sold its gas supply business to Scottish and Southern Energy (SSE). In December 2015, PNGL was awarded a licence extension to cover the East Down area.

2.8 By the end of 2015, PNGL’s network comprised approximately 3,300 km of distribution pipeline and serves approximately 192,000 customers.\(^\text{19}\) In 2015, PNGL earned revenues of £49.1 million.\(^\text{20}\)

**SGN**

2.9 SGN is owned by SSE. In February 2015, it was awarded a conveyance licence for the West region of NI (as part of the ‘Gas to the West’ project). At the time of the GD17 price control, it was in the design and development phase of the network, but is now operational in some areas.\(^\text{21}\)

**The regulation of GDNs’ revenues**

2.10 The principal objective of the UR is to promote the development and maintenance of an efficient, economic and coordinated gas industry in NI. To

\(^{17}\) NoA, paragraph 1.10.

\(^{18}\) NoA, paragraph 1.12.

\(^{19}\) GD17 Final Determination, paragraph 4.24.

\(^{20}\) FE presentation at CMA site visit, 7 February 2017.

\(^{21}\) UR response to the provisional determination (UR R/PD), 22 May 2017, Appendix A
achieve this, the UR has a range of powers and duties which are described in chapter 3 (The Legal Framework).

2.11 The UR sets the amount the gas distribution companies will have to run their business and invest in the gas network through price controls, which are given effect by modifications to the GDNs’ distribution licences.

2.12 At fixed points in time the UR conducts a price control review in which it sets the revenues or prices for the GDNs over the next price control period. The price control before GD17 was GD14 which set the revenues for a three–year period (2014 to 2016), whereas GD17 set the revenues for a six–year period (2017 to 2022). The next price control is planned for 2023 onwards.

The decision under appeal – GD17

2.13 The licence that is the subject of this appeal is FE’s gas conveyance licence granted under Article 8(1)(a) of the Gas Order.

2.14 By virtue of Article 14 of the Gas Order, subject to the prescribed notice having been provided,22 the UR may make modifications of:

(a) the conditions of a particular licence;

(b) the standard conditions of licences of any type under Article 8(1).

2.15 The price control that is at issue in this appeal was introduced by way of modification to FE’s licence under Article 14 of the Gas Order. The UR commenced its process for setting the GD17 price control on 19 December 2014 with the publication of the GD17 Approach Discussion Paper (see Appendix A for GD17 timeline).

2.16 Key documents published by the UR during the GD17 process were:

- GD17 Draft Determination (16 March 2016).
- GD17 Final Determination (15 September 2016).
- GD17 Decision (28 October 2016), including the modified gas distribution licences for the three NI GDNs.

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22 Article 14(2) and (4) of the Gas Order.
2.17 The GDNs provided the UR with information during the GD17 process, including detailed business plans with projected costs (Business Plan for the GD17 Period).

2.18 The GD17 Period is effective from 1 January 2017 to 31 December 2022. In the GD17 Decision the UR set out the amount the GDNs would have to run their business and invest in the gas network. Key decisions were on operating and capital expenditure allowances, targets for new gas pipelines and connections, rate of return and forecast volumes.

2.19 The GD17 price control is based on a standard RPI–X framework which incentivises the GDNs to control their costs through the setting of efficiency targets and subsequent adjustments of Opex and Capital Expenditure (Capex) and subsequent price controls.

2.20 Relevant details of the GD17 price control are covered in the chapters addressing the grounds of appeal.

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24 GD17 Final Determination, paragraph 2.5.
3. The legal framework for the appeal

The decision under appeal

3.1 As noted at paragraph 1.3 above, the decision that is the subject of the present appeal is the GD17 Decision to proceed with the modification of FE’s licence conditions. The appeal is brought pursuant to Article 14B of the Gas Order, which provides that an appeal lies to the CMA against a decision by the UR to proceed with the modification of a licence condition.26

3.2 The GD17 Decision also modified the licences of two other GDNs, PNGL and SGN, neither of which have appealed.

The UR’s principal objective, powers and duties

3.3 The powers and duties of the UR in relation to gas are set out in the Energy Order27 and the Gas Order.28 The UR’s powers and duties under both Orders are referred to collectively as its ‘gas functions’.29

The principal objective

3.4 In carrying out its gas functions, the UR is subject to a principal objective ‘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 of the objectives set out in Article 40(a) to (h) of Directive 2009/73/EC (the Gas Directive).30

Powers of the UR

3.5 The UR has a range of powers: for example, it may grant licences authorising persons to convey, store, or supply gas;31 and, as noted in paragraph 2.14 above, it may make modifications of licence conditions.32

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26 Article 14B(1) of the Gas Order.
28 Part II of the Gas Order.
29 Article 14(6) of the Energy Order.
31 Article 8(1) of the Gas Order, which also lists the operation of a liquefied natural gas facility as an activity that can be the subject of a licence. The UR is empowered to grant a licence authorising any person to do all or any of the activities listed in Article 8(1) of the Gas Order.
32 Article 14(1) and 14A(3) of the Gas Order. The modification of licence conditions is subject to various procedural requirements, including giving a prescribed notice before making any modifications.
**Duties of the UR**

3.6 The UR is under a primary duty to carry out its gas functions in the manner which it considers is best calculated to further the principal objective, having regard to a number of matters. For example:

(a) the need to ensure a high level of protection of the interests of consumers of gas; and

(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 the Energy Order.

3.7 In performing its primary duty, the UR must have regard to the need to protect the interests of various descriptions of consumer, such as individuals who are disabled or chronically sick, individuals of pensionable age, and individuals with low incomes.\(^{33}\)

3.8 Subject to its primary duty, the UR must carry out its gas functions in the manner which it considers is best calculated towards a range of outcomes. For example:

(a) to promote the efficient use of gas and efficiency and economy in the conveyance, storage or supply of gas;

(b) to secure a diverse, viable and environmentally sustainable long–term energy supply; and

(c) to facilitate competition between persons whose activities consist of or include storing, supplying or participating in the conveyance of gas.\(^{34}\)

**Test on appeal**

3.9 The CMA may allow an appeal only to the extent that it is satisfied that the decision was wrong on one or more of the following grounds:\(^{35}\)

(a) that the UR failed properly to have regard to any matter to which the UR must have regard in carrying out its principal objective under Article 14 of

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\(^{33}\) Article 14(3) of the Energy Order. The list set out is not exhaustive.

\(^{34}\) Article 14(5) of the Energy Order. Article 14(5) also lists the following: to protect the public from dangers arising from the conveyance, storage, supply or use of gas in carrying out its gas functions, the UR must also have regard to the effect on the environment of activities connected with the conveyance, storage or supply of gas.

\(^{35}\) Article 14D(4) of the Gas Order.
the Energy Order and in the performance of its duties under that Article and Article 6B of the Energy Order;\textsuperscript{36}

(b) that the UR failed to give the appropriate weight to any matter falling within (a) above;

(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 as required by Article 14(8)(b) of the Gas Order;\textsuperscript{37}

(e) that the decision was wrong in law.

3.10 In determining an appeal brought under Article 14B of the Gas Order, the CMA is required to have regard, to the same extent as is required of the UR, to the matters to which the UR must have regard in carrying out its ‘principal objective’ and the performance of certain of its duties.\textsuperscript{38} For ease of reference, we have summarised the key provisions in paragraphs 3.4 to 3.8 above.

3.11 The CMA may have regard to any matter to which the UR was not able to have regard in relation to the decision which is the subject of the appeal,\textsuperscript{39} but it must not have regard to any matter to which the UR would not have been entitled to have regard in reaching its decision had it had the opportunity of doing so.\textsuperscript{40}

\textbf{Standard of review}

3.12 As noted in paragraph 1.11 above, this is the first time that an appeal has been brought under Article 14B of the Gas Order since it was amended in 2015. Whilst there is therefore no directly applicable precedent which deals with the approach to be taken in determining the present appeal and in particular the standard of review that the CMA is required to apply, the framework of the Gas Order in relation to appeals is materially the same as applies to other regulatory appeals to the CMA. Therefore, in making our determination, we have drawn on the approach taken in other regulatory

\textsuperscript{36} Article 6B of the \textit{Energy Order} provides that the UR must carry out its functions in the manner that it considers is best calculated to implement, or to ensure compliance with, any binding decision of the Agency for the Cooperation of Energy Regulators or the European Commission made under various instruments of EU legislation, including the \textit{Gas Directive}.

\textsuperscript{37} Article 14(8)(b) of the \textit{Gas Order} provides that the UR must state the effect of the modifications.

\textsuperscript{38} Article 14D(2) of the \textit{Gas Order}.

\textsuperscript{39} However, in our view, that is not a basis for the CMA to engage in a fact–finding task. Rather, it empowers the CMA to take account of relevant information which was not available at the time the decision was made and which is put to it in the appeal as it relates to one or more of the grounds of appeal.

\textsuperscript{40} Article 14D(3) of the \textit{Gas Order}.\textsuperscript{40}
appeals where relevant taking account of the submissions we have received on the statutory framework in the course of this appeal.

3.13 We were invited by FE and the UR to adopt a similar approach to that taken by the CMA in the ED1 Determinations\(^41\) given the analogous statutory appeal provisions applicable in those cases and the fact that the grounds for allowing an appeal are identical in material respects to those applicable in the present appeal.\(^42\)

3.14 We note that the decisions in the ED1 Determinations do not bind the CMA but nonetheless provide helpful guidance as to the approach to take in the present appeal, which was brought under similarly worded statutory provisions.

3.15 FE and the UR both submitted that the CMA’s role is not limited to reviewing the decision on conventional judicial review grounds and both referred to the CMA’s approach in the ED1 Determinations.\(^43\)

3.16 We agree that we are not limited to reviewing the UR’s decision on conventional judicial review grounds. The question for us to determine is whether the decision of the UR under appeal was wrong on one or more of the statutory grounds and in order to do that the merits of the decision must be taken into account.\(^44\)

3.17 The UR submitted that an appeal in which the merits of a decision is taken into account does not enable us to substitute our views for the UR’s view solely on the basis that the CMA would have taken a different view.\(^45\) Both Parties referred to the CMA’s quoting with approval in the ED1 Determinations the Competition Commission’s (CC) understanding of the standard of review and the statutory test in the E.ON decision.\(^46\)

3.18 In that decision the CC stated that:

> [a]s a specialist appellate body charged with considering whether a decision of GEMA is wrong, the function of the CC is to provide accountability in relation to the substance

\(^{41}\) CMA, Northern Powergrid (Northeast) Limited and Northern Powergrid (Yorkshire) plc v the Gas and Electricity Markets Authority (September 2015) (CMA NPg ED1 Determination) and British Gas Trading Limited v The Gas and Electricity Markets Authority (September 2015) (CMA BGT ED1 Determination) (together, the ED1 Determinations).

\(^{42}\) NoA, paragraph 3.28 and UR R&O on NoA, paragraphs 3.19–3.21.

\(^{43}\) NoA, paragraph 3.29 and UR R&O on NoA, paragraph 3.21.

\(^{44}\) CMA NPg ED1 Determination, paragraph 3.42 and CMA BGT ED1 Determination, paragraph 3.42.

\(^{45}\) UR R&O on NoA, paragraph 3.23.

\(^{46}\) E.ON UK plc v GEMA: energy code modification appeal: UNC 116. CC Case number: CC02/07 July 2007 (E.ON decision).
of code modification decisions. However, leaving to one side errors of law, it is not our role to substitute our judgment for that of GEMA simply on the basis that we would have taken a different view of the matter were we the energy regulator.\footnote{E.ON decision, at paragraph 5.11.}

3.19 We agree with these previous approaches. In that connection, in our view, the test is not whether there is a better alternative, but whether the regulator’s decision was wrong in the sense that it was not a decision which was lawfully open to the UR.

3.20 We have also drawn guidance from appeals brought under the Communications Act 2003, which requires consideration of appeals on the merits by reference to whether the decision under appeal was wrong. Whilst we acknowledge that there is no direct analogy with the present appeal given some differences in the statutory provisions, we consider the approach taken in these cases by the Competition Appeal Tribunal (the CAT) to be broadly analogous to the approach taken by the CC and CMA in the E.ON decision and the ED1 Determinations and therefore these provide some helpful guidance when determining whether a decision was wrong. The principles we have drawn from those cases can be summarised as follows:

(a) It is for the appellant to marshal and adduce all the evidence and material on which it relies to show that the regulator’s decision was wrong.\footnote{Everything Everywhere Ltd v Competition Commission [2013] EWCA Civ 154, at paragraph 23.}

(b) An appeal is against the decision, not the reasons for the decision. Therefore, it is not enough for the appellant to identify some error of reasoning; the appeal can only succeed if the decision cannot stand in the light of that error.\footnote{Everything Everywhere Ltd v Competition Commission [2013] EWCA Civ 154, at paragraph 24.}

(c) Where the appellant contends that the regulator ought to have adopted an alternative price control measure, it is for the appellant to deploy all the evidence and material it considers will support that alternative.\footnote{Everything Everywhere Ltd v Competition Commission [2013] EWCA Civ 154, at paragraph 23.} It must show that its proposed alternative price control measure should be adopted.\footnote{Everything Everywhere Ltd v Competition Commission [2013] EWCA Civ 154, at paragraph 24.}

(d) Usually an appellant will succeed by demonstrating the flaws in the decision and the merits of an alternative solution. Also, the courts have

\footnotesize{47 E.ON decision, at paragraph 5.11.  
48 Everything Everywhere Ltd v Competition Commission [2013] EWCA Civ 154, at paragraph 23.  
50 Everything Everywhere Ltd v Competition Commission [2013] EWCA Civ 154, at paragraph 23.  
51 Everything Everywhere Ltd v Competition Commission [2013] EWCA Civ 154, at paragraph 24.}
not ruled out the possibility that there could be a case in which an appellant succeeds in so undermining the foundations of a decision that it cannot stand, without establishing what the alternative should be. In such a case, if there is no other basis for maintaining the decision, the CMA would be at liberty to conclude that the decision was wrong but that it could not say what decision should be substituted.\textsuperscript{52} Disposal of the appeal without substituting an alternative decision is not unknown, but is expected to be rare.\textsuperscript{53}

\textit{(e)} If the CMA is satisfied that the regulator’s decision was correct, then the fact that the regulator’s consultation process was deficient ought not to matter, unless that process was so deficient that the CMA cannot be assured that the regulator did indeed get it right.\textsuperscript{54}

\textit{(f)} Where a decision of the regulator requires an exercise of judgment, the regulator will have a margin of appreciation. The CMA should apply appropriate restraint and should not interfere with the regulator's exercise of judgment unless satisfied that it was wrong.\textsuperscript{55}

\textit{(g)} A regulator’s assessment of the adequacy of the evidence and material before it will not be wrong unless it is outwith the range of reasonable conclusions.\textsuperscript{56}

\textit{(h)} If the CMA concludes that the decision can be supported on a basis other than that on which the regulator relied, then the appellant will not have shown that the decision was wrong and will fail.\textsuperscript{57}

3.21 We would note also that an appeal in which the merits must be taken into account does not constitute a rerun of the original investigation or a de novo rehearing of all the evidence.\textsuperscript{58} The CMA must limit its consideration to the statutory grounds of appeal to the extent that such grounds are raised by the appellant. The Rules state that an appellant must state in the notice of appeal

\begin{itemize}
\item \textsuperscript{52} \textit{Everything Everywhere Ltd v Competition Commission} [2013] EWCA Civ 154, at paragraph 25 (see also at paragraph 28 confirming that a conclusion that the regulator’s approach is so defective, whether as to substance or procedure, that the decision cannot stand is a conclusion ‘on the merits’; and in such circumstances there is no obligation to substitute another decision). The Court of Appeal added that in such a case the remedy would be to direct the regulator to make a fresh decision, although such an outcome was expected to be rare given that the CC’s guidance provides for a remedies process.\textsuperscript{53}
\item \textit{Everything Everywhere Ltd v Competition Commission} [2013] EWCA Civ 154, at paragraph 32.\textsuperscript{54}
\item \textit{TalkTalk v Ofcom} [2012] CAT 1, at 78.\textsuperscript{55}
\item \textit{BT v Ofcom} [2014] EWCA Civ 133, at paragraphs 87 and 88.\textsuperscript{56}
\item \textit{Everything Everywhere Ltd v Competition Commission} [2013] EWCA Civ 154 at paragraph 34.\textsuperscript{57}
\item \textit{Everything Everywhere Ltd v Competition Commission} [2013] EWCA Civ 154, at paragraph 24.\textsuperscript{58}
\item See, by analogy, BT v. Ofcom [2010] CAT 17, at [76]: ‘What is intended is the very reverse of a de novo hearing. OFCOM’s decision is reviewed through the prism of the specific errors that are alleged by the appellant. Where no errors are pleaded, the decision to that extent will not be the subject of specific review. What is intended is an appeal on specific points’.
\end{itemize}
the grounds of appeal which are relied upon and must include a statement of facts and reasons supporting each ground of appeal. This underlines that the CMA’s function is to consider whether the UR’s decision was wrong on one or more of the statutory grounds raised by the appellant.

**Materiality**

3.22 It was common ground between the Parties that the CMA should only interfere with a decision of the UR if the error identified was material. Both Parties also quoted from the CMA’s ED1 Determinations in support of the proposition that ‘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’ set by the regulator.

3.23 We agree with this test of materiality, since in relation to a price control decision, an appeal is in respect of the decision to proceed with the modification of a licence condition as regards the level of price control.

3.24 We note also that in the context of a telecoms appeal, the CMA has stated that where the impact of the error as a percentage of the charge control is below 0.1%, the error is unlikely to be capable of producing a material effect on the charge control. In such circumstances, it falls within an acceptable margin of error for a regulator. However, that is not intended to be a ‘bright-line test’; it is but one factor in an overall assessment based on all the circumstances of the case.

3.25 Whether an error is material must be decided on a case–by–case basis taking into account the particular circumstances of each case. Relevant factors would include the impact of the error on the overall price control, whether the error is likely to have an effect on future price controls, and whether the error relates to a matter of economic or regulatory principle. This list is not intended to be exhaustive.

3.26 In case it is of assistance to parties to future appeals to the CMA, we would note the following points made by the CC on the matter of aggregation of errors.

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60 NoA, paragraph 3.33; UR R&O on NoA, paragraph 3.35; CMA Npg ED1 Determination, 29.9.15, paragraph 3.58 and CMA BGT ED1 Determination, 29.9.15, paragraph 3.60.
61 Articles 14B(1) and 14E(7) of the Gas Order.
62 BT v Ofcom and TalkTalk v Ofcom (CMA Final Determination, dated 13.6.16), at paragraph 2.35, referring to paragraph 1.60 of the CC’s determination in Carphone Warehouse (LLU), 31.8.10.
63 CMA Npg ED1 Determination, 29.9.15, paragraph 3.58 and CMA BGT ED1 Determination, 29.9.15, paragraph 3.61.
64 Carphone Warehouse (LLU), 31.8.10, paragraph 1.64.
(a) No formal general approach has been identified that would determine when, if at all, immaterial errors should be aggregated. The CC was mindful that to aggregate immaterial errors would have the effect of converting an error that was in and of itself immaterial into a material error through its combination with other immaterial errors. Those other errors may be unrelated and may lie in different and discrete aspects of the price control.

(b) The CC did not rule out the possibility that there may be cases in which such aggregation was justifiable where the cumulative effect of discrete errors had a highly significant impact on the price control set by the regulator.

(c) However, as a general approach, the CC stated it would be cautious about elevating the immaterial into the material. It observed that aggregation might encourage a scattergun approach on the part of appellants, which was not the purpose of the appeal process.
4. **Ground 1: Opex allowance**

**Introduction**

4.1 FE’s first ground of appeal concerns the UR’s decision on the allowance for operating expenditure (the Opex allowance) that FE is allowed to recover over the GD17 Period.

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. It covers items such as manpower, network operations and maintenance, new connection incentives, advertising and marketing, emergency responses, IT and other business support activities (for example, audit, finance, regulation and professional and legal costs).  

**FE’s grounds of appeal on Ground 1**

4.3 FE submitted that the errors made by the UR in the GD17 Decision have resulted in the Opex allowance being set at a level that does not allow FE to recover its efficient operating costs. It stated that the UR undertook a bottom-up assessment and for the first time applied a top-down benchmark in determining the Opex allowance, and that following its assessment, the UR reduced FE’s Business Plan by 18%.

4.4 FE submitted that the 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 NI, 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;

(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

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65 See, for example, **NoA**, paragraph 2.3.
66 **NoA**, paragraphs 2.17 and 4.5.
67 The **Gas Order**, Article 14D(4)(a) and (b) and the **Energy Order**, Article 14(1). We note that Article 14(1) of the **Energy Order** goes on to add the requirement that the UR must do so in a way that is consistent with the fulfilment by the UR of the objectives in paragraphs (a) to (h) of Article 40 of the **Gas Directive**.
FE cannot recover its efficient costs and will need to overspend to meet its licence obligations;\(^6^8\) 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 [sic] activities’.\(^6^9\)

4.5 FE cited five errors which in its view demonstrated that the GD17 Decision on the Opex allowance was wrong:\(^7^0\)

\((a)\) Ground 1A: the ‘Benchmarking Error’ which concerned the use by the UR of a ‘top–down’ econometric analysis.

\((b)\) Ground 1B: the ‘Maintenance Sparsity Error’ which concerned the UR’s failure to take proper account of the impact of sparsity (ie lower population and customer densities) within FE’s Licence Area in its assessment of the efficiency of FE’s Opex allowances for maintenance.

\((c)\) Ground 1C: the ‘GIS Oversight Error’ which concerned the omission of professional and legal costs associated with the GIS\(^7^1\) mapping software which was essential for the safe and efficient operation of FE’s business.

\((d)\) Ground 1D: the ‘Manpower Scale Error’ which concerned the UR’s failure to take proper account of scale cost drivers in its assessment of the efficiency of FE’s manpower allowance.

\((e)\) Ground 1E: the ‘Omission Error’ which concerned the UR’s failure to take proper account of FE’s efficient costs associated with Audit, Finance and Regulation (AFR), and central services (previously accounted for by a Parental Recharge allowance (Parental Recharge), which has been removed in the GD17 price control).

4.6 The combined effect of these errors, FE submitted, was a £4.43 million (in 2014 prices) reduction in FE’s Opex allowance for the six years of the GD17 Period, broken down as follows:\(^7^2\)

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

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

\(^6^8\) The Gas Order, Article 14D(4)(a) and (b) and the Energy Order, Article 14(2)(b).

\(^6^9\) The Gas Order, Article 14D(4)(d); GD17 Decision, paragraph 2.40.

\(^7^0\) NoA, paragraph 4.4.

\(^7^1\) See paragraph 4.56 and associated footnote for more detail about GIS costs.

\(^7^2\) NoA, paragraph 4.6.
(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 was unquantified. FE submitted it had contributed to each of the errors, other than the GIS Oversight Error, because it was used to ‘reinforce’ and ‘sense check’ the UR’s bottom–up assessment, which gave rise to further downward bias in the UR’s overall assessment of FE’s efficient operating costs.73 Accordingly, in the ensuing analysis we deal with each of those grounds before turning to Ground 1A.

4.8 By way of background, we consider it helpful to outline the usual practice of regulators when setting an Opex allowance.

**Background on setting an Opex allowance**

4.9 Regulators ordinarily set the Opex allowance for regulated utilities using a combination of a bottom–up and top–down assessment, the aim being to establish the efficient level of costs for maintaining the assets and activities of the business.

4.10 Top–down benchmarking consists of comparing the operating costs of different firms in a market, while controlling for factors that affect costs. Such benchmarking involves the statistical estimation of multivariate econometric models. The aim of the analysis is to identify the ‘efficiency frontier’74 and the savings that a firm could achieve if it reached the efficiency levels of the most efficient firms in the market. The aggregate Opex estimated from this approach is then used to set (or cross–check, depending on the overall approach of the regulator) the Opex allowance for the regulated utility.

4.11 A bottom–up assessment, on the other hand, involves collecting evidence on the costs needed to carry out particular activities, based on market evidence, engineering assessments and evidence from the firm itself. The costs required for each activity considered are then summed to get the aggregate Opex allowance.

4.12 In undertaking a bottom–up assessment, the primary source data is often the historical financial and management information from the regulated firm. More specifically, the firm’s historical costs and certain cost drivers such as the

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73 NoA, paragraph 4.7.
74 The ‘efficiency frontier’ represents the minimum cost or resource that is required to distribute different gas volumes or service different numbers of customers (GD17 Final Determination), Annex 4, page 6).
number of employees or mandatory asset maintenance cycles are used. These costs can then be used to create benchmarks to inform the analysis.

4.13 In some cases regulators will consider average costs over a given period as the basis for setting the figure for particular cost lines in a bottom–up assessment. An alternative approach involves setting a base year for costs, which is rolled forward and used as a proxy for future costs. Essentially, the base year approach assumes that past costs for an activity are reflective of future efficient costs.

4.14 Where a base year is used to set particular cost lines, this base year is the regulator’s default position on what the cost will be in the forecast period covered by the charge control. However, adjustments can be made where:

(a) costs for a given activity in the base year are atypical; and

(b) there is robust evidence that an efficient level of costs over the charge control period is materially different to the costs in the base year.

4.15 The regulator’s approach to a bottom–up assessment of Opex is ordinarily guided by the proportionality principle: that is, expending more time and resource to set the level of larger cost items than the lower cost items.

Ground 1B: ‘The Maintenance Sparsity Error’

4.16 Ground 1B concerns the Opex allowance for maintenance costs in the GD17 Decision.

Summary of grounds of appeal

4.17 FE’s grounds of appeal in respect of Ground 1B are subsumed within its grounds of appeal in respect of Ground 1 as a whole – see paragraphs 4.4 and 4.5 above.

4.18 FE submitted that 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 failing to take proper account of the impact of sparsity (ie lower population and customer densities) within FE’s Licence Area in its assessment of the efficiency of FE’s Opex allowances for maintenance.75

75 NoA, paragraph 4.4(b)(i).
4.19 FE submitted that the error in respect of maintenance costs had resulted in its Opex allowance being understated by £0.97 million.76

The UR’s Decision

4.20 In order to reach its decision on FE’s GD17 allowance for network maintenance costs, the UR benchmarked FE’s variable unit costs for this activity against those of PNGL.77 The benchmark showed that PNGL’s adjusted costs per weighted connection were 21% lower than those of FE. On the basis of this result, the UR set FE’s GD17 allowance for network maintenance at a level 15% lower than FE’s Business Plan.78

Table 1: FE GD17 allowance for network maintenance

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>FE Business Plan total costs (£k)</td>
<td>869</td>
<td>925</td>
<td>898</td>
<td>1,013</td>
<td>1,176</td>
<td>1,441</td>
</tr>
<tr>
<td>Final Determination allowance (£k)</td>
<td>758</td>
<td>805</td>
<td>782</td>
<td>872</td>
<td>1,012</td>
<td>1,242</td>
</tr>
</tbody>
</table>

Source: GD17 Final Determination, Table 44.

4.21 In its submissions to the UR, FE objected to the use of PNGL as a benchmark and submitted that the UR should take account of ‘special factors’, in particular the fact that a more sparsely populated area (relative to PNGL) could make it more expensive for FE to maintain its network on a per–customer basis (a ‘sparsity effect’).79 FE provided an analysis (the ‘DNV.GL analysis’) which used anonymised operational data to show the impact of sparsity on unit costs. FE submitted that these sparsity effects would explain all of the gap identified by the UR’s benchmark calculations.80

4.22 The UR reviewed the analysis and concluded that, depending on the treatment of outliers, the analysis could support a range of adjustments from as low as 3% to the 25% proposed by FE.81 In addition, the UR also noted that Ofgem in RIIO–GD182 considered sparsity in its determination of GDN costs in Great Britain (GB), but concluded that ‘it should only be applied to emergency call out costs to reflect the high proportion of standby cover inherent in this type of work.’83 The UR treated this as a ‘precedent’84 and in

76 NoA, paragraph 4.56.
77 GD17 Final Determination, paragraph 6.206.
78 GD17 Final Determination, paragraphs 6.212 and 6.214.
79 GD17 Final Determination, paragraph 6.213.
80 Ibid.
81 Ibid.
82 See Ofgem’s RIIO-GD1 Price Control.
83 GD17 Final Determination, paragraph 6.213.
84 Ibid.
view of that, it did not apply a sparsity adjustment to its benchmark costs for FE.

FE’s submissions

4.23 FE submitted that the UR had failed to take proper account of the impact of sparsity within FE’s Licence Area in its assessment of the efficiency of FE’s Opex allowances for maintenance costs.85

4.24 FE submitted that the UR:

(a) approached its bottom–up assessment of FE’s maintenance costs with a presumption that FE was inefficient compared with PNGL;86

(b) did not justify the 15% reduction to the variable costs estimated by FE;87

(c) disregarded or failed to take proper account of the evidence FE had provided on network sparsity, and provided no proper justification for rejecting its impact on FE’s allowance for maintenance costs.88

4.25 In its submissions, FE stressed the differences between FE and PNGL. FE defined itself as a ‘small GDN’ operating in a ‘sparsely populated and largely rural area’ and PNGL as a ‘more mature GDN’ operating in a ‘more heavily populated urban area’.89 To support these statements, FE submitted:

(a) Maps (one of which is reproduced below in Figure 1) to show the difference in the size and coverage of FE’s Licence Area in comparison with PNGL’s Licence Area;90

(b) Statistics comparing FE’s Licence Area to PNGL and Northern Gas Networks91 on a number of related measures. These statistics show that the number of customers and population densities are lower in FE’s Licence Area than in, for example, PNGL’s.92

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85 NoA, 4.4 (b) (i).
86 NoA, paragraph 4.40.
87 Ibid.
88 NoA, paragraph 4.45.
89 NoA, paragraph 4.40.
90 NoA, paragraph 4.43.
91 A distributor of gas to homes and businesses across northern England
92 NoA, paragraph 4.44.
4.26 FE submitted that a small customer base spread across a largely rural licence area with low population density made it more expensive for the company to maintain its network on a per–customer basis. In support it referred to evidence previously submitted to the UR that emphasised the unusual sparsity of FE’s network, which may have implications for its unit costs of maintaining the network.

4.27 FE also submitted that the UR was ‘at odds with its own consultants’ who had concluded that FE’s bottom–up estimates were broadly reasonable with some exceptions. FE acknowledged that the UR’s consultants had highlighted opportunities for synergies and efficiencies. However, FE submitted that the UR’s consultants had not recommended the specific benchmarking approach the UR had adopted, nor the 15% efficiency reduction that the UR ultimately applied.

4.28 Furthermore, FE submitted that the key differences between the networks run by FE and PNGL, and their Licence Areas, brought into question the validity of the UR’s decision to use PNGL as the sole comparator for FE’s maintenance costs without making adjustments to account for the impact of...
sparsity. FE said that it did not consider that the UR was wrong to undertake benchmarking for its maintenance costs, but rather that the UR was wrong in failing to take proper account of the impact of sparsity in its assessment of FE’s allowances for maintenance.

4.29 FE submitted that the DNV.GL analysis concerning the effect of sparsity on maintenance costs (which it had provided to the UR after the GD17 Draft Determination) drew the following conclusions regarding the effect of sparsity on maintenance costs within FE’s Licence Area:

(a) The maintenance team travel time associated with FE’s dispersed networks would be 15% higher than for PNGL’s urban network.

(b) The comparatively low asset concentration within FE’s networks resulted in unit maintenance costs that were 24% higher than PNGL’s.

4.30 In its Reply to the UR R&O on NoA, FE submitted a travel time analysis showing that both the average and median travel time between postcodes in FE’s Licence Area were substantially greater than in PNGL’s Licence Area. The analysis also showed that the impact of congestion was slightly higher in PNGL’s Licence Area but this did not offset the longer travel times in FE’s Licence Area.

4.31 FE submitted that the impact of sparsity on network operating costs was acknowledged by a number of UK regulators. FE cited past regulatory determinations which had accepted that there was a relationship between sparsity and the costs associated with travel times, emergency and repair responses, and staffing requirements. These examples included determinations in the water sector by the UR and the Water Industry Commission for Scotland, and Ofgem’s determinations in the energy market.

4.32 FE also challenged the UR’s decision to apply sparsity adjustments only to emergency costs following the approach taken by Ofgem. FE submitted that

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98 FE R/S, paragraphs 3.54 and 3.55.
99 FE R/S, paragraph 3.53.
100 NoA, paragraph 4.47.
101 FE R/S, Annex A, paragraph 2.3 (a).
102 FE R/S, Annex A, paragraph 2.3 (b).
103 PC15.
105 DCP5, RIIO-GD1, and ‘RIIO-ED1 regulatory instructions and guidance: Annex C – Revenue and Financial Issues.’ (RIIO-ED1).
106 NoA, paragraph 4.48.
Ofgem's approach was based on information from GB–only GDNs, and did not recognise the marked difference between FE and the GB GDNs.107

4.33 FE submitted that its maintenance activities were performed by a specialist contractor, McNicholas,108 who was awarded the contract following a tender process concluded in 2014.109 FE submitted a set of documents relevant to this contract, which it had submitted to the UR during the GD17 process. These included:

(a) McNicholas Proposal – Technical Information (McNicholas Proposal), and


4.34 We have summarised the relevant points from the first document, McNicholas Proposal, in our assessment section below.

4.35 In the Period Contract Overview, FE outlined the main observations made by its contractor McNicholas, and submitted that the difference in overall network length in the Licence Areas for PNGL and FE led to a difference in average distance between services. According to FE, this led to a construction team productivity of [□□□] jobs per day for FE teams and [□□□] jobs a day for PNGL teams.110 FE told us that McNicholas had indicated that ‘sparsity – topography, productivity, ie drive times and so forth – was definitively the principal driver behind the rates proposed within that tender’.111 FE also told us that McNicholas’ [□□□] were [□□□] for FE than PNGL due in part to sparsity.112

4.36 In response to the UR’s point that ‘urbanity’ could also lead to increased costs, for example, due to congestion costs associated with high population and customer density (see the next section below), FE submitted that:

(a) there was no indication that the UR had weighed sparsity against urbanity in its determination;

(b) there was no evidence that Ofgem’s decision to apply urbanity adjustments applied to the specific circumstances of FE; and

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107 NoA, paragraph 4.49.
108 FE R/S, paragraph 3.42.
109 FE R/S, paragraph 3.43.
110 FE R/S, paragraph 3.45.
sparsity and urbanity were not offsetting factors.\textsuperscript{113}

\textbf{The UR’s submissions}

4.37 The UR submitted that it rejected FE’s statement that no justification was provided for the UR’s 15% adjustment and that, by strictly applying the benchmarking analysis, it would have been justified in reducing FE’s proposed cost allowances by 21%.\textsuperscript{114} The UR therefore considered the final adjustment of 15% to be a ‘conservative’ application of the benchmarking data.\textsuperscript{115}

4.38 The UR submitted that there was no basis for concluding that FE faced materially higher costs than PNGL for similar activities.\textsuperscript{116} The UR submitted that FE’s arguments on sparsity had been fully considered and rejected by the UR in the GD17 Final Determination.\textsuperscript{117} The UR stated that it did not contest that FE’s Licence Area had a comparatively low population density, but submitted that the significance of that factor was overstated by FE,\textsuperscript{118} and noted that FE’s network was being developed only in the more populous parts of its area, which existed along linear transport corridors.\textsuperscript{119} In addition, the UR submitted that any analysis that considered the potential costs of different population densities ought to consider both congestion (‘urbanity’) and sparsity costs.\textsuperscript{120}

4.39 In relation to the regulatory decisions cited by FE, the UR submitted that in RIIO–GD1 Ofgem made no sparsity adjustment in relation to maintenance Opex, concluding that sparsity affected only emergency and repair activities, and not maintenance costs.\textsuperscript{121} Moreover, the UR submitted that the adjustments Ofgem made for urbanity were much larger than those it made for sparsity:\textsuperscript{122} £19.4 million for urbanity compared with £3.5 million for sparsity across all GB GDNs.\textsuperscript{123} As regards the other decisions cited by FE, the UR submitted that they were all related to other types of utilities (for

\textsuperscript{113} FE R/S, paragraph 3.57 and Annex A, paragraphs 1.1–1.6.
\textsuperscript{114} UR R&O on NoA, paragraph 6.20.
\textsuperscript{115} Ibid.
\textsuperscript{116} UR R&O on NoA, paragraph 4.25.
\textsuperscript{117} UR R&O on NoA, paragraph 6.4.
\textsuperscript{118} UR R&O on NoA, paragraph 6.2.
\textsuperscript{119} Ibid.
\textsuperscript{120} UR R&O on NoA, paragraph 6.39, and UR Hearing Transcript, 14 March 2017, page 25, line 2.
\textsuperscript{121} UR R&O on NoA, paragraph 6.55.
\textsuperscript{122} UR R&O on NoA, paragraph 6.58.
\textsuperscript{123} Ibid.
example, electricity distribution, water or sewerage) and therefore were not comparable to gas distribution.  

4.40 The UR submitted that the DNV.GL analysis was ‘highly unreliable’ for the following reasons:

(a) The assumptions on maintenance staff starting and finishing work at the depot were ‘unrealistic’.  

(b) The model failed to account for costs associated with urbanity by failing to take account of the impact of the time of the day and road traffic conditions on travel time, which particularly for PNGL had led to travel times that were ‘highly unrealistic’.  

(c) The report was based on the costs associated with maintaining a gas transmission network rather than a distribution network and the two were not comparable.  

(d) The UR could not give weight to the report since it was based on limited and anonymised data.  

4.41 The UR submitted that the evidence in the Period Contract Overview regarding the contractor McNicholas was ‘second–hand, hearsay, anecdotal and unsupported by any data’ and related to construction team productivity and Capex, rather than maintenance Opex.  

Our assessment

4.42 FE presented evidence during the course of this appeal to show that its Licence Area is larger and less densely populated (referred to broadly as ‘sparsity’) than PNGL’s but did not in our view provide persuasive evidence of whether and to what extent these differences affect FE’s maintenance costs.  

4.43 FE submitted evidence of other regulatory determinations, but we note that most of these concerned different utility sectors. The only precedent concerning gas distribution is Ofgem’s RIIO–GD1, in which the regulator

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124 UR R&O on NoA, paragraphs 6.60–6.68.  
125 UR R&O on NoA, paragraph 6.42.  
126 UR R&O on NoA, paragraph 6.45(a).  
127 UR R&O on NoA, paragraph 6.47.  
128 UR R&O on NoA, paragraph 6.45(c).  
129 UR R&O on NoA, paragraph 6.46.  
130 UR R&O on NoA, paragraph 6.49.  
131 UR R&O on NoA, paragraph 6.52.  
132 UR R&O on NoA, paragraph 6.70.
made an adjustment for sparsity only for emergency and repair, and not for maintenance costs.

4.44 We reviewed the evidence presented by FE that assessed the link between sparsity (in terms of travel time and asset concentration) and maintenance costs. This consisted of the McNicholas Proposal, the Period Contract Overview, and the DNV.GL analysis.

4.45 The McNicholas Proposal presented technical information on how FE’s contractor intended to fulfil its maintenance activities. For the purpose of this appeal, we considered two points to be the most relevant:

(a) The McNicholas Proposal acknowledged a link between travel time and productivity in carrying out maintenance activities, and recognised the importance of having a mobile workforce, and flexible personnel able to cover the whole licence area. However, we found that the discussion of this link was only descriptive in nature, and there was no quantification of how differences between PNGL’s and FE’s Licence Areas drove maintenance costs.

(b) McNicholas stated that it would use teams and depots scattered throughout FE’s Licence Area. In our view, that is a key element in the assessment of the DNV.GL analysis (see paragraph 4.49), as it contradicts one of the main assumptions of this analysis.

4.46 FE submitted that since McNicholas was awarded the contract after a competitive tender, and that as the tender was awarded to [ bidder with extensive experience in NI], there was no justification for the UR to consider this cost element to be inefficient. During the hearing FE submitted that McNicholas [ bidder with extensive experience in NI].

4.47 We do not accept FE’s submissions. In our view, a competitive tender does not in and of itself imply an efficient cost estimate; whatever the experience and the nature of the contractor, the UR is entitled to challenge efficiency claims. Furthermore, in our view, evidence of the fact that one contractor for FE and PNGL is not sufficient to establish the existence of an impact of sparsity on maintenance costs.

133 McNicholas Proposal, page 48, 156 and 175.
134 McNicholas Proposal, page 47, 156 and 173.
135 FE Hearing Transcript, 14 March 2017, page 34, line 11.
The Period Contract Overview reports the view of FE’s contractor on the activities it carried out for FE (see paragraph 4.35). The UR stated that it had rejected this document on the basis that it dealt only with Capex and not with maintenance costs. However, our review of the document has shown that it concerned maintenance costs as well, although the reference to maintenance activities concerned Industrial and Commercial (I&C) works only, and not maintenance as a whole. This report did not in our view provide evidence on the existence of a link between the geographic differences between FE’s and PNGL’s Licence Areas and their maintenance costs.

The DNV.GL analysis concluded that maintenance teams’ travel time in FE’s Licence Area would be 15% higher than in PNGL’s Licence Area. This conclusion was based on the crucial assumption that all teams’ journeys started and finished in a central depot in Antrim. In light of the evidence provided as part of McNicholas Proposal, in our view this assumption is unrealistic and not supported. Consequently, in our view, the DNV.GL analysis is not evidence that FE’s maintenance costs are higher than those of PNGL due to longer travel times.

The DNV.GL analysis also concluded that low asset concentration in FE’s network resulted in unit maintenance costs that were 24% higher than for PNGL. This conclusion was based on the analysis of gas transmission data. The UR submitted that differences between gas transmission and distribution networks precluded any such comparison. FE did not present us with any evidence that refuted this and in our view the DNV.GL analysis is not evidence that FE’s maintenance costs are higher than those of PNGL due to lower asset concentration.

We gave limited weight to other evidence submitted by FE on this matter. In particular, the extended travel time analysis described in paragraph 4.30 above is descriptive in nature and does not demonstrate how longer travel time affects maintenance costs. Overall, we are of the view that the evidence submitted by FE does not prove the existence of a link between the geographic difference between FE’s and PNGL’s Licence Areas and their maintenance costs.

FE submitted that it was not appropriate for the UR to have set FE’s maintenance costs on the basis of an untested assumption that the unadjusted costs of PNGL were an appropriate proxy for the efficient

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137 UR R&O on NoA, paragraph 6.70.
139 NoA, paragraph 4.47.
140 UR R&O on NoA, paragraph 6.49.
maintenance costs of FE. In particular, FE submitted that the UR had not demonstrated that FE’s bottom–up estimates of costs were inefficient or that PNGL’s costs were an appropriate benchmark, and that FE was not in a position to do the latter as it had not been given access to PNGL’s costs.

4.53 We do not agree. In our view, it is appropriate for a regulator to undertake benchmarking of costs, without needing to demonstrate by other means that the cost estimates provided by the regulated company are inefficient. In our view, it is not necessarily the case that the regulated company would need to have access to the cost data of another company in order to demonstrate the existence of differences in companies’ circumstances and how they impact on their costs. During the course of this appeal, FE had the opportunity to demonstrate that differences between its Licence Area and that of PNGL had an impact on its maintenance costs. As set out above, we have not found the evidence provided by FE to be persuasive. We agree with the UR that PNGL represents a sensible starting point for benchmarking FE’s costs. We note the UR made an adjustment to set FE’s GD17 allowance for network maintenance at a level 15% lower than FE’s Business Plan on the basis of the benchmarking analysis. In our view, the evidence provided by FE did not provide a persuasive basis for concluding that the UR was wrong in having done so.

Our conclusion on Ground 1B

4.54 For the reasons given above, we have concluded that the UR was not wrong in its determination of FE’s Opex allowance for maintenance costs in the GD17 Decision.

Ground 1C: ‘The GIS Oversight Error’

4.55 Ground 1C concerns the absence of an allowance for legal and professional costs associated with geographic information systems (GIS)\textsuperscript{141} in the Opex allowance in the GD17 Decision.

\textsuperscript{141} GIS is computerised mapping software used by GDNs for network operations, maintenance and planning. It provides detailed maps showing the location of gas mains and gas supply points (NoA, paragraph 4.57). The fees in question were associated with support and maintenance, GIS licences, GIS development, software licences for other smaller IT systems, and Landweb fees (collectively referred to as ‘GIS costs’) (UR R&O on NoA, paragraph 7.2).
**Summary of grounds of appeal**

4.56 FE’s grounds of appeal in respect of Ground 1C are subsumed within its grounds of appeal in respect of Ground 1 as a whole – see paragraphs 4.4 and 4.5 above.

4.57 FE submitted that the omission of GIS costs in the GD17 Final Determination was an error by the UR and the failure to correct that error required FE to enter the GD17 Period with no ability to recover those costs, nor any certainty about what element of those costs the UR might decide to allow in the future.  

4.58 FE submitted that the error in respect of GIS costs had resulted in its Opex allowance being understated by £1.11 million.

**The UR’s Decision**

**The GD17 Draft Determination**

4.59 In the GD17 Draft Determination, the UR addressed GIS costs under ‘Network Maintenance’ expenditure.

4.60 The GD17 Draft Determination noted initially that FE had shown these costs in its GD17 Business Plan under the ‘Customer Management – Emergency Call Centre’ cost category. The UR noted in its evidence that FE subsequently informed the UR that ‘these costs should be allocated under Customer Management (Including Non–Emergency Customer Call Centre) & Network Support (Including System Mapping)’. The UR considered that this was not the appropriate category and noted that the other GDNs did not have ‘professional and legal costs’ under the Customer Management cost category.

4.61 The UR noted that a review of the detailed bottom–up estimate for Network Maintenance Expenditure prepared by FE revealed that there were four major drivers for network maintenance, one of which was ‘[f]ixed costs related to the management of the business with a weak link to the level of activity. For example GIS and mapping licence costs’.

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142 NoA, paragraphs 2.12 and 4.62.
143 NoA, paragraph 4.63.
145 GD17 Draft Determination, paragraph 6.106.
146 GD17 Draft Determination, paragraph 6.123.
4.62 The UR allocated the bottom–up estimate for network maintenance prepared by FE into seven cost categories and calculated unit rates for each category based on appropriate cost drivers. Under the cost category entitled ‘Fixed costs’, it allowed £165,219 per annum for ‘GIS costs, software licences and fees for base maps’.\textsuperscript{147}

The GD17 Final Determination

4.63 Following a benchmarking exercise against the projected costs for PNGL, the UR made a number of corrections to its analysis of FE’s Network Maintenance expenditure.\textsuperscript{148} It noted that, for the GD17 Draft Determination, GIS and mapping licence costs were one example of fixed costs related to the management of the business with a ‘weak link’ to the level of activity (being Network Maintenance).\textsuperscript{149} The correction made in respect of GIS costs in the GD17 Final Determination was the ‘removal of items covered elsewhere in [FE’s Business Plan] submission under legal and professional services including GIS costs, software licences and fees for base maps’.\textsuperscript{150} As a result, the UR removed the allowance for GIS costs from Network Maintenance, citing the reason that FE had ‘identified GIS costs, software licences and fees for base maps separately as legal and professional services’.\textsuperscript{151}

4.64 The GD17 Final Determination included allowances for legal and professional fees in relation to IT and Telecoms, HR & Ops Training, Audit, Finance and Regulation, Procurement, and CEO & Group Management.\textsuperscript{152} Professional and legal costs were not accepted for Training & Apprentices as the UR concluded the expenditure was not justified.\textsuperscript{153}

4.65 Following the GD17 Final Determination, FE queried with the UR where GIS costs had been allocated, as no allowance for those costs was made under the Network Maintenance category. Various rounds of correspondence between the UR and FE ensued which concentrated on the allocation of GIS costs.\textsuperscript{154} As part of that process, the UR requested further information from FE on FE’s historical reporting of GIS costs (including the cost line to which

\textsuperscript{147} GD17 Draft Determination, paragraph 6.124 and Table 33: FE Network Maintenance Benchmarking Cost Drivers.
\textsuperscript{149} GD17 Final Determination, paragraph 6.209.
\textsuperscript{151} GD17 Final Determination, paragraph 6.211 and Table 43: FE Network Maintenance Benchmarking Cost Drivers.
\textsuperscript{153} GD17 Final Determination, paragraph 6.279.
\textsuperscript{154} FE’s R/S, paragraphs 3.73 and 3.74.
they were allocated) in past price controls.\textsuperscript{155} The matter remained unresolved when the GD17 Decision was made.\textsuperscript{156}

The GD17 Decision

4.66 In the GD17 Decision, the UR stated that as part of the GD17 process it had scheduled a ‘lesson learnt review’ and would consider all of FE’s comments where appropriate.\textsuperscript{157} It noted FE’s comment that ‘legal and professional fees [had] been inadvertently removed from the [Final Determination]’ and responded that they were ‘correctly removed from maintenance costs’.\textsuperscript{158} The UR then stated that its ‘initial view [was] that an element of these costs, which largely relate to standard IT costs, may be included within the price control mechanisms’\textsuperscript{159} and that it ‘[would] continue to engage with FE on these costs for GD17 and [would] make a determination on what amount should be included within the Opex Uncertainty Mechanism’.\textsuperscript{160,161} The UR explained that the matter would be covered in future consultations as the Uncertainty Mechanism would be applied and updated and that it did not require any changes to GD17 values.\textsuperscript{162} Consequently, the UR decided to make no amendments to the licence modifications proposed.\textsuperscript{163} The UR proceeded with the modification of the Opex Determination Value in the licence without making an allowance for GIS costs.

Developments after the GD17 Decision

4.67 In its representations on FE’s application for permission to appeal, the UR stated that it was minded to grant an allowance for GIS costs of £836,000 (post–efficiency) pursuant to the Uncertainty Mechanism.\textsuperscript{164} However, during the course of the appeal, the UR abandoned the proposal to use the

\textsuperscript{155} UR R&O on NoA, paragraph 7.18; UR R&O on NoA, W/S McHugh, paragraphs 9.14 and 9.15.
\textsuperscript{156} NoA, Martindale W/S, paragraphs 9.12 and 9.13.
\textsuperscript{157} GD17 Decision, paragraph 2.15.
\textsuperscript{158} GD17 Decision, paragraph 2.17.
\textsuperscript{159} Ibid.
\textsuperscript{160} GD17 Decision, paragraph 2.18.
\textsuperscript{161} The uncertainty mechanism is a mechanism used as part of a price control process to manage risk by adjusting determined allowances relating to a price control period (eg price control period 1) for differences between actual and allowed costs or outputs on which these allowances were based. The adjustments are typically made at the time of price control review for the next price control period (eg price control period 2). At this stage, the actuals for the years that form part of the then current price control period (price control period 1) are known or, for the year or two directly preceding the next price control period (price control period 2) can be estimated on a more reliable basis than was the case at the time the determination was made. If estimates are used when establishing an uncertainty mechanism adjustment, a further adjustment can then be made at the time of the price control review for the subsequent price control period (eg price control period 3). GD17 Decision, paragraph 7.1.
\textsuperscript{162} GD17 Decision, paragraph 2.18.
\textsuperscript{163} GD17 Decision, paragraph 2.19.
\textsuperscript{164} UR’s R&O on PTA, paragraphs 28 and 30.
Uncertainty Mechanism in favour of making a licence modification. On 31 January 2017, the UR launched a consultation to modify FE’s licence to make an allowance within Opex of £853,000 for GIS costs (the GIS Consultation). FE’s submission in response was for the £1.11 million as detailed in its Business Plan to the GD17 process. On 24 March 2017, the UR published its decision (GIS Decision) making an allowance of £853,000 (in December 2014 prices) over the six year GD17 Period for GIS costs.

**FE’s submissions**

4.68 FE’s appeal focuses on the omission from the GD17 Final Determination of an allowance for GIS costs and the UR’s proposal in the GD17 Decision that GIS costs be addressed through the Opex Uncertainty Mechanism rather than through a licence modification.

4.69 FE submitted that the omission of GIS costs from the GD17 Opex allowance was an error. In reply to the UR’s submission that there was no decision on GIS costs, FE submitted that the decision by the UR to omit GIS costs from the Final Determination and from cost recovery during the GD17 Period was an appealable decision.

4.70 As regards the UR’s proposal to address the omission of GIS costs through the Uncertainty Mechanism, FE submitted that the UR failed to recognise that (i) its approach would require a further licence modification (since the Uncertainty Mechanism was not designed for that purpose) and (ii) doing so would involve a deferral of FE revenue for no legitimate reason.

4.71 FE provided the following further explanation of its objection to the use of the Uncertainty Mechanism:

(a) FE submitted that it was ‘a mechanism to deal with matters for which there was inherent uncertainty at the time of the GD17 Final Determination. However, there was no uncertainty about the omitted GIS costs, as those costs were certain to arise’.

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165 UR R&O on NoA, paragraph 7.23.
166 Licence Modification Decisions on Professional and Legal services in relation to GIS for firmus energy Decision Paper 24 March 2017 (GIS Decision), paragraph 2.56.
167 NoA, paragraphs 4.58 and 4.62.
168 NoA, paragraphs 4.4(b)(ii) and 4.62.
169 FE R/S, paragraphs 3.79–3.80.
170 NoA, paragraph 4.62.
171 FE R/S, paragraphs 3.75.
(b) The Uncertainty Mechanism would apply at the time of the next price control (commencing in 2023) and would spread FE’s ability to recover GIS costs over a period even further into the future.

4.72 FE explained that its challenge was to the omission of the GIS costs element for the period of the GD17 price control which had already commenced.

4.73 FE further submitted that as a result of the CMA’s granting permission to appeal the GD17 Decision, the issue fell within the jurisdiction of the CMA. According to FE, the GIS Consultation was a ‘very unfortunate and unhelpful precedent for future appeals’; it was procedurally unfair in potentially exposing FE to the possibility of third party appeals and also in terms of additional costs in respect of a further appeal; and it was not Parliament’s intention that price control decisions would be subject to a series of separate appeals ‘issue by issue’.

The UR’s submissions

4.74 The UR submitted that it accepted that an allowance for GIS costs was not included within the GD17 Opex allowance, but said it had not made a substantive decision to disallow those costs, so there was no decision that FE could appeal.

4.75 It submitted that Article 14B(1) of the Gas Order provided that only a decision by the Authority to proceed with a modification of a condition of a licence was capable of being appealed to the CMA and since there had been no decision to modify FE’s licence ‘in respect of GIS costs’, no appealable decision had been made.

4.76 The UR reiterated this position at the hearing on 14 March 2017 and went on to state:

Here the decision that was made was a recognition that the licence modifications as they were being made did not contain all of the allowances that were needed because there was this one thing, GIS costs, that we were not in a position to decide at this stage and that we would determine later.

172 FE R/S, paragraph 3.90.
173 FE R/S, paragraph 3.91.
174 FE R/S, paragraph 3.93.
175 FE R/S, paragraph 3.92.
176 UR R&O on NoA, paragraphs 7.3–7.5.
177 UR Rejoinder, 21 February 2017, paragraphs 6.5 and 6.6.
[W]e say there is nothing wrong with a decision by the Regulator which says these are the things we can determine now and we modify the licence in respect of them and here is something we lack the information to determine that and we will have to take it forward separately later. It was explicitly excluded and that does not make the rest of the decision wrong.

4.77 The UR submitted that the circumstances in which it was unable to determine an allowance for GIS costs as part of the GD17 Decision arose from FE’s changes as to the correct cost category for allocating GIS costs. It submitted that because it had insufficient information at the time it made the GD17 Decision, it was unable to determine an allowance for those costs.  

4.78 The UR further submitted that the GIS Consultation would enable the UR to make a substantive decision regarding the allocation for GIS costs and that it would be appropriate for the CMA to make an early decision that it need not consider the issues raised by FE unless and until one of a range of potential events occurred (for example, the UR were to inform the CMA that it would not proceed to make the proposed licence modification).

Our assessment

4.79 It is not disputed that the GIS software was necessary for the operation of the gas network and an allowance for the GIS costs was a proper component of FE’s Opex allowance. What is disputed is whether the UR made an appealable decision in October 2016 and, if so, whether that decision was wrong.

Did the UR make an appealable decision?

4.80 FE’s case is that the UR erroneously omitted GIS costs from the GD17 Final Determination and that as a result no allowance was made for those costs in the GD17 Decision.

4.81 The UR’s case is that no decision was made in the GD17 Decision to modify the licence in respect of the relevant component of Opex, namely GIS costs. The UR stated that it was not in a position to make a decision as regards those costs because FE’s repeated changes in allocation of those costs made
it difficult for the UR to determine what allowance should be given. The UR said it had made clear that it would make a determination on the issue in due course following further engagement with FE. Therefore, in the UR’s view, no appealable decision in terms of Article 14B(1) of the Gas Order was made regarding GIS costs in the GD17 Decision.\textsuperscript{183}

4.82 As noted at paragraph 4.62 above, the GD17 Draft Determination allocated under the Network Maintenance cost category an amount of £165,219 per annum for GIS costs, which was some but not all of the GIS costs claimed by FE. However, these costs were removed from this category in the GD17 Final Determination and were not subsequently reinstated elsewhere.

4.83 FE had therefore indicated to the UR the sums which it claimed in respect of GIS costs and the UR understood the substance of the claim well enough to make a draft allowance for most of the sum claimed. FE’s claim to these costs had therefore crystallised by the stage of the GD17 Draft Determination and the principle of the claim was provisionally accepted. Whilst questions may have remained as to matters of allocation and/or quantum, the UR was in a position to conclude, and did provisionally conclude, that a specific and quantified allowance should be made for GIS costs in the price control.

4.84 At some time between the GD17 Draft Determination and the GD17 Final Determination, GIS costs were removed by the UR from the Network Maintenance category. The reasons given in the GD17 Final Determination were that the relevant costs were covered elsewhere in FE’s Business Plan. However, that was not in fact the case.

4.85 It therefore appears that the UR removed the GIS costs previously allowed in the GD17 Draft Determination because it formed the view (apparently incorrectly) that the costs had already been allowed elsewhere and not because it disputed the substance of the claim nor because it lacked information as to whether the amount claimed (or previously allowed) was appropriate. In our view, the UR had sufficient opportunity to address the issue of GIS costs in the GD17 price control.

4.86 There followed further discussions between FE and the UR concerning the allocation of these costs. Following those discussions, the UR acknowledged in the GD17 Decision that it would give further consideration to an allowance for these costs. However, the practical effect of the GD17 Decision was that the price control established by the UR did not include an allowance for GIS costs. The UR reached that decision even though, by the time of the GD17

\textsuperscript{183} UR R&O on NoA, paragraph 7.3.
Final Determination, it had reverted to an ‘initial view’ that some allowance should be made for these costs.

4.87 The UR’s submission is, in effect, that the GD17 Decision contained a series of individual decisions on whether to modify FE’s licence in respect of each component part of the total Opex allowance. Thus the UR argues whilst it did determine the amount to be allowed for all other cost components, it consciously made no decision regarding GIS costs so that there was no basis for FE’s appeal. Following the same logic, the UR’s position is that, now that its GIS Decision has been published, it has made an appealable decision in relation to GIS costs.

4.88 We do not agree with these propositions. The UR made an appealable decision in its GD17 Decision to modify FE’s licence in respect of the determination value used in the calculation of the Opex allowance. That decision took into account the individual cost categories used to determine the value of Opex for each price control year. On the face of it, in order to determine the amount of Opex allowed, the UR had to decide whether to accept or reject the various categories of Opex claimed by FE. As regards GIS costs in particular, we do not accept that the UR was not in a position to make an allowance for those costs in the GD17 Decision, and we do not therefore accept that the GD17 Decision did not amount to a rejection of the claim made by FE. Although the GD17 Decision indicated that the UR remained willing to consider the claim, it was in practice a decision to set an Opex allowance which did not include any of the amount claimed by FE for GIS costs. This in our view is an appealable decision in terms of Article 14B(1) of the Gas Order as it constitutes ‘a decision … to proceed with the modification of a condition of a licence under Article 14’.\(^{184}\)

4.89 It was put to us in the UR’s hearing that it was a proper exercise of a regulator’s discretion to decide on the bulk of a matter such as Opex and to ‘park’ a component for a decision at a later date if further information is required. We do not dispute that proposition as a matter of principle. However, as explained above, we do not accept that that is what happened in the present case.

4.90 A decision to defer a particular issue inevitably means that a regulated company cannot recover those costs pending a further decision. As a result, if and when a decision is made to ‘park’ an issue in a price control determination, there should be clarity as to the reasons given for the deferral of the matter in question and the proposed way forward, including the time

\(^{184}\) Article 14B(1) of the Gas Order.
frame, to resolve the outstanding issues. Where the regulated company is unable to recover the relevant costs in the interim, the position should be resolved promptly – particularly when there is no dispute in principle that the costs are to some degree recoverable.

4.91 It is undesirable that issues should be deferred when, as in the present case, they have been the subject of lengthy and detailed consideration by the regulator, and there has been sufficient opportunity for a thorough exchange of views between the regulator and the regulated company. Such an approach may lead to a potential proliferation of regulatory decisions (and related appeals) as well as fluctuations in regulated prices. The risk of inefficiency in the appeals process is well illustrated by the UR’s contention that having already brought an appeal against the GD17 Final Determination on this issue, it was incumbent on FE to prepare another Notice of Appeal in respect of the GIS Decision, which appeal would be consolidated with its existing appeal.

Was the UR’s decision wrong?

4.92 It is not disputed that GIS costs form a legitimate part of FE’s Opex. This is reflected in the allowance for GIS costs made in the GD17 Draft Determination, the UR’s responses to FE regarding the omission of those costs from the Opex allowance and its attempt to remedy the omission first by proposing the use of the Uncertainty Mechanism and (following the commencement of the appeal) by proceeding to make another licence modification correcting the earlier omission.

4.93 In our view, GIS costs were legitimate operating costs which FE should be able to recover through the GD17 Opex allowance. An allowance for GIS costs should have been made, both in the GD17 Final Determination and as a result of the GD17 Decision, but that did not happen.

4.94 We accept FE’s submissions\(^{185}\) that the proposal to address the omission of GIS costs from the GD17 Opex allowance through the Uncertainty Mechanism was not an appropriate substitute for a decision to include the costs in the charge control. FE would certainly incur GIS costs and it was uncertain what ‘element’ of those costs it could recover. Moreover, recovery would be delayed under the Uncertainty Mechanism. In any event, the UR subsequently resiled from the suggestion that the issue could be addressed.

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\(^{185}\) FE R/S, paragraph 3.79(b).
through the Uncertainty Mechanism, which further indicates that the position it took in the GD17 Decision was in error.

4.95 Accordingly, in our view, the UR’s decision to omit GIS costs from the licence modification and to determine the matter through the Uncertainty Mechanism was wrong.

4.96 We note in the GD17 Decision, the UR stated that the ‘overarching reason’ for modifying the designated parameters and determination values in the licences of the GDNs (including FE) was that they were required by the GDN licence formulae in order to produce a set of revenues and prices to drive the tariffs set by the GDNs to operate their businesses. The ‘overall effect’, as stated by the UR, of the modifications would be to ‘allow the GDNs to charge tariffs consistent with the maintenance and operation of a growing gas network whilst financing its [sic] activities’. In our view, the UR’s decision to omit GIS costs from the licence modification (and thereby set the Opex allowance at a level which means that FE cannot recover its efficient costs and/or support the expansion and efficient operation of its gas network) and to determine the matter through the Uncertainty Mechanism was inconsistent with the ‘overarching reason’ and failed to achieve, in whole or in part, the stated ‘overall effect’. Moreover, in making that decision, the UR failed properly to have regard to and/or to give appropriate weight (a) to its principal objective to promote the development and maintenance of an efficient, economic and coordinated gas industry in NI, and/or (b) to the need to secure that licence holders are able to finance their licensed activities.

Our conclusion on Ground 1C

4.97 For the reasons given above, we conclude that the GD17 Decision in relation to the Opex allowance was wrong to the extent that it omitted an allowance for GIS costs and sought to determine the matter through the Uncertainty Mechanism. Accordingly, we conclude that, by omitting to make an allowance for GIS costs and thereby setting the Opex allowance at a level which means that FE cannot recover its efficient costs and/or support the expansion and efficient operation of its gas network, and by deciding to determine the matter

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186 Operating expenditure is listed in the GD17 Decision as one of the determination values in question (GD17 Decision, Table 9 in respect of FE).
187 GD17 Decision, at paragraph 2.39.
188 GD17 Decision, at paragraph 2.40.
189 Article 14D(4)(d) Gas Order.
190 Article 14D(4)(a) and (b) Gas Order and Article 14(1) Energy Order.
191 Article 14D(4)(a) and (b) Gas Order and Article 14(2)(b) Energy Order.
192 Article 14D(4) of the Gas Order provides that the CMA may allow the appeal only to the extent that it is satisfied that the decision appealed against was wrong.
of that omission through the Uncertainty Mechanism, the GD17 Decision on the Opex allowance was wrong on the following grounds (taken individually, or in any combination):

(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 NI;¹⁹³

(b) the UR failed properly to have regard to and/or to give appropriate weight to the need to secure that licence holders are able to finance their licensed activities;¹⁹⁴

(c) the Opex allowance modifications failed 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 [sic] activities’.¹⁹⁵

**Observations on the GD17 process**

4.98 We note that the omission of GIS costs previously allowed in the GD17 Draft Determination from the GD17 Decision appears to have occurred because the UR formed the view (apparently incorrectly) that the costs had already been allowed elsewhere. We would expect the UR in the future to make sure that there are effective internal controls in place to reduce the risk of such avoidable errors.

**Ground 1D: ‘The Manpower Scale Error’**

4.99 Ground 1D concerns the manpower Opex allowance in the GD17 Decision.

**Summary of grounds of appeal**

4.100 FE’s grounds of appeal in respect of Ground 1D are subsumed within its grounds of appeal in respect of Ground 1 as a whole – see paragraphs 4.4 and 4.5 above.

4.101 FE submitted that the UR had failed to take proper account of scale cost drivers in its assessment of the efficiency of FE’s operating costs and, as a consequence, had not adjusted FE’s manpower allowance to properly account for the significant growth in its business over GD17.¹⁹⁶ FE further stated that

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¹⁹³ Article 14D(4)(a) and (b) Gas Order and Article 14(1) Energy Order.
¹⁹⁴ Article 14D(4)(a) and (b) Gas Order and Article 14(2)(b) Energy Order.
¹⁹⁵ Article 14D(4)(d) Gas Order and GD17 Decision, paragraph 2.40.
¹⁹⁶ NoA, paragraphs 2.14 and 4.64.
by setting a manpower allowance at 58.3 equivalent number of full–time employees (FTEs) for the entire duration of GD17, the UR had failed to take proper account of the efficient costs that FE would necessarily incur as it attempted to achieve the connection requirements that had been set by the UR.\textsuperscript{197}

4.102 FE submitted that the error in respect of manpower had resulted in its Opex allowance being understated by £1.20 million.\textsuperscript{198}

**The UR’s Decision**

4.103 The GD17 Decision adopted the analysis and decisions regarding the GD17 Opex allowance that were presented in the GD17 Final Determination.

4.104 The UR did not set a general manpower allowance as a separate cost line for GD17. Instead, it considered the manpower requirements of the activities included in each cost line of the Annual Cost Reporting Template (ACRT), for example asset management, operations management, etc. It then computed the corresponding staff costs by multiplying the relevant salary by the FTEs. Salaries were not part of the appeal and therefore we do not cover them further here. Staff costs thus calculated were then added to non–staff costs to calculate the overall amount of each cost line in the Opex bottom–up analysis.

4.105 Although manpower was not considered as a separate cost category, in its GD17 Final Determination the UR reported the overall manpower resulting from the aggregation of cost line–specific FTEs, and considered the number of FTEs necessary to run an efficient business.\textsuperscript{199}

4.106 The UR based the levels of FTEs on actual 2014 levels submitted by FE, with increases in a number of cost lines.\textsuperscript{200} In Table 2 below we reproduce the manpower allowance requested by FE, the manpower allowance granted by UR in the GD14 and GD17 Final Determinations, and FE’s actual FTEs for 2014 to 2016 as reported in the GD17 Final Determination.

\textsuperscript{197} NoA, paragraph 4.73.
\textsuperscript{198} NoA, paragraph 4.77.
\textsuperscript{199} GD17 Final Determination, paragraph 6.103.
\textsuperscript{200} GD17 Final Determination, paragraph 6.109; UR R&O on NoA, Table 3.
Table 2: FE FTEs Requested, Actuals, GD14 Final Determination and GD17 Final Determination.

<table>
<thead>
<tr>
<th>Manpower (FTEs)</th>
<th>GD14</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FE requested allowance</td>
<td>57.1</td>
<td>59.1</td>
<td>59.1</td>
<td>65.7</td>
<td>65.7</td>
<td>65.7</td>
<td>65.7</td>
<td>65.7</td>
<td>65.7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>UR Final Determination</td>
<td>54.4</td>
<td>55.9</td>
<td>55.5</td>
<td>58.3</td>
<td>58.3</td>
<td>58.3</td>
<td>58.3</td>
<td>58.3</td>
<td>58.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FE actual</td>
<td>53.7</td>
<td>56.0</td>
<td>60.0*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* 2016 is a forecast.

Source: GD17 Final Determination, Table 28 and paragraph 6.105.

4.107 In response to the GD17 Draft Determination, FE submitted to the UR that the UR’s approach had failed to take account of the FTEs required to realise FE’s network growth plans201 and its use of 2014 actuals resulted in the manpower allowance being understated by 1.4 FTEs. FE had argued against the use of GD14 actuals in its GD17 submissions on the grounds that these did not accurately reflect actual manpower requirements during the GD17 period. It also argued that the UR’s analysis did not take account of the additional uplift of two FTEs allowed by the UR in 2015 for system control as a result of market opening.202

4.108 In the GD17 Final Determination, the UR stated that it considered that it had allowed a sufficient increase in FTEs which accounted for the projected growth in FE’s network.203 It further stated that the 2014 FTEs it had used were not understated since they reflected the FTEs recorded by FE in its 2014 ACRT. It also stated that it recognised that FE required resources to manage its customer switching operations, and had allowed for an additional 1.35 FTEs within system control and 0.4 FTEs within customer management.204

**FE’s submissions**

4.109 FE submitted that the UR had failed to take proper account of scale cost drivers in its assessment of the efficiency of FE’s manpower allowance and in doing so, the UR:

(a) had underestimated the efficient level of manpower required to deliver the significant growth in FE’s business projected over the GD17 Period;

and/or

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201 GD17 Final Determination, paragraph 6.112.
202 Ibid.
203 GD17 Final Determination, paragraph 6.113.
204 Ibid and 6.114.
(b) was requiring FE to achieve economies of scale over the GD17 Period which were not realistic or achievable having regard to the projected size of FE’s business and the characteristics of its Licence Area.205

4.110 FE further stated that the UR was wrong to:

(a) ignore FE’s manpower data for 2015 when 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 was (i) in the build phase of its network rollout; and (ii) required to achieve significant connection increases within a sparsely populated licence area.206

4.111 It added that any attempt to justify FE’s manpower allowance by reference to the UR’s top-down benchmarking analysis would have been wrong for the reasons appealed under Ground 1A.207

The relationship between FE’s manpower allowance and its projected business growth

4.112 FE clarified that its position was not that the relationship between manpower and scale was linear, but that a relationship existed between scale cost drivers and manpower expenditure and the UR had not taken proper account of this relationship in setting FE’s GD17 manpower allowance.208

4.113 FE submitted that one of the main conclusions of UR’s Opex top-down econometric modelling was that one of the main drivers of variation in costs over time and across GDNs was scale. It added that the UR’s own consultants’ analysis indicated that a 1% increase in the scale of a GDN would be expected to increase costs by 0.69% to 0.81%.209 FE submitted that,

205 NoA, paragraph 4.64.
206 NoA, paragraph 4.73.
207 NoA, paragraph 4.74.
208 FE R/S, paragraphs 3.107 and 3.108.
applying this logic, the projected increase in network size would imply a material increase in FE’s operating costs over the GD17 Period.210

4.114 FE stated that the GD17 Decision anticipated a material growth in the scale of FE’s operations over the GD17 Period, including an increase of 65% in its network size (by network kilometres) and an increase of 100% in the number of connections.211 FE further submitted that the manpower allowed by the UR was insufficient to achieve this growth.212

4.115 FE presented a graph that showed the projected evolution during the GD17 Period of FE’s number of connections, total Opex allowance and manpower allowance. For ease of reference, we reproduce the graph in Figure 2 below. FE stated that the graph showed a disconnect between the growth in properties passed and new connections for GD17, and FE’s overall Opex allowance and manpower allowance which would be necessary to support this growth.213

Figure 2: UR determined growth for Opex, Manpower and Connections in GD17

FE challenged the merit of the comparison presented by the UR of manpower and growth in the network sizes of PNGL and FE in the period 2010 to 2015,214 and stated that no reliable conclusion could be drawn from that

210 NoA, paragraphs 4.67 and 4.68.
211 NoA, paragraph 4.67.
212 NoA, paragraph 4.70.
213 NoA, paragraph 4.75.
214 UR R&O on NoA, paragraphs 8.20–8.22.
4.117 FE presented two graphs showing PNGL’s manpower expenditure, number of connections and domestic owner–occupied (OO) connections in its first ten years of operations, showing an increasing trend for all three measures in the period. FE submitted that this comparison demonstrated the extent of the manpower needs of a rapidly growing GDN, and that this was particularly relevant to FE having regard to the expected growth in its business during the GD17 Period.216

4.118 FE disagreed with the UR’s representation of the costs underlying the manpower allowance as ‘central business services’ which were not associated with the physical construction, connection or maintenance of assets (all which were subject to a separate allowance),217 and that it considered it unusual that the UR sought to characterise costs that related to field service activities as such. It also submitted that the term ‘central business service’ had not been used previously by the UR in the GD17 Draft Determination, GD17 Final Determination or GD17 Decision.218

4.119 FE submitted that the UR’s position during the appeal that there was ‘no real or direct correlation’ between business growth and ‘central business functions’219 was inconsistent with positions the UR had previously adopted.220 In support, FE presented a number of quotes from the GD17 Final Determination concerning cost lines included in the manpower allowances under dispute, for example: ‘we [that is, the UR] consider that as the business expands, additional resources will be required to manage the business. We therefore have allowed additional resources to reflect this issue’.221

4.120 In response to the UR’s submissions (see paragraph 4.128 and 4.129 below), FE presented a table setting out the number of FTEs for the cost items that constitute the overall manpower allowance, including information on the 2014 and 2015 actuals, the allowance requested by FE and the allowance stated in the GD17 Final Determination. Table 3 below summarises the information regarding the specific costs in respect of which FE sought an increase in its FTEs.

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216 FE R/S, paragraphs 3.117 and 3.118.
217 UR R&O on NoA, paragraph 8.2.
218 FE R/S, paragraph 3.98.
219 UR R&O on NoA, paragraph 8.2; UR R&O on NoA, W/S McHugh, paragraph 10.8.
220 FE R/S, paragraph 3.113(a), citing Annex 13 of the GD17 Final Determination.
221 FE R/S, paragraph 3.113(a); GD17 Final Determination, Annex 13, page 9.
### Table 3: Manpower breakdown (FTEs)

<table>
<thead>
<tr>
<th>Opex cost line</th>
<th>2014 actual</th>
<th>2015 actual</th>
<th>FE GD17 submission</th>
<th>GD17 Final Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Management</td>
<td>1.8</td>
<td>2</td>
<td>3.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Operations Management</td>
<td>11.6</td>
<td>12.9</td>
<td>16.6</td>
<td>13.8</td>
</tr>
<tr>
<td>IT &amp; Telecoms</td>
<td>0.8</td>
<td>1.5</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Audit, Finance &amp; Regulation</td>
<td>7.4</td>
<td>9.1</td>
<td>8.5</td>
<td>7.4</td>
</tr>
<tr>
<td>Trainees and Apprentices</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total disputed FTEs</strong></td>
<td><strong>22.6</strong></td>
<td><strong>26.5</strong></td>
<td><strong>32.2</strong></td>
<td><strong>24.8</strong></td>
</tr>
<tr>
<td><strong>Total manpower</strong></td>
<td><strong>53.7</strong></td>
<td><strong>56</strong></td>
<td><strong>65.7</strong></td>
<td><strong>59.3</strong></td>
</tr>
</tbody>
</table>

Source: CMA analysis using information provided in FE R/S, paragraph 3.104.

4.121 FE provided further details on the reasons for requesting further FTEs in each cost line under dispute:

(a) **Asset Management:** FE submitted that due to the extensive network build programme planned for the GD17 Period, it expected its Asset Management workload to increase, resulting in an increase in FTEs for this activity.\(^{222}\) At the main hearing, FE further stated that it had achieved ISO accreditation asset management 55001 (as the UR had asked it to\(^{223}\)), and that associated with this there was a new ongoing activity of continual improvement for GD17 and beyond.\(^{224}\)

(b) **Operations Management:** FE stated that due to the extensive network building programme planned for the GD17 Period, FE had requested a less than proportionate increase in Operations Management activities.\(^{225}\) FE presented a detailed list of the numerous activities these additional FTEs would assist with, including planning, training, supervising contractors, network design to new areas, etc.\(^{226}\)

(c) **IT & Telecoms:** FE submitted that it operated an outdated and bespoke IT asset management and works scheduling system, and it needed to replace it.\(^{227}\) FE stated that this IT upgrade was necessary to allow for the significant growth of connections expected in GD17 and the increase in the quantity and complexity of asset management. FE noted that it had included within its Business Plan forecast IT cost savings as a result of this upgrade.\(^{228}\) FE also stated that it took on additional IT responsibilities following the transition from BGE to a stand–alone business.\(^{229}\)

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\(^{222}\) FE R/S, paragraph 3.105 (a).

\(^{223}\) Ibid.

\(^{224}\) Ibid.

\(^{225}\) Ibid.

\(^{226}\) Ibid.

\(^{227}\) FE R/S, paragraph 3.105 (c).

\(^{228}\) Ibid.

\(^{229}\) FE R/S, paragraph 3.105 (c).
(d) **Audit, Finance & Regulation:** FE stated that it needed more FTEs for two reasons. First, FE’s business would grow and so would its regulatory reporting requirements (including the introduction by the UR of a new ‘resource–intensive’ reporting template).\(^{230}\) Second, FE stated that the remaining uplift in FTEs covered staff (already in place) processing payments and receipts, managing treasury, reporting financial performance and working with internal and external auditors.\(^{231}\)

(e) **Trainees and Apprentices:** FE stated that this additional FTE would provide engineering assistance and enable FE to promote training and development. FE further submitted that an additional apprentice/trainee under FE’s Graduate Engineering Programme would be a cost–effective method to meet the projected increase in engineering activities.\(^{232}\)

*The use of 2014 manpower data as the basis for the manpower allowance*

4.122 FE submitted that the UR was wrong to ignore the 2015 data where FE had more FTE employees than its manpower allowance, a position which, FE stated, had continued in 2016.\(^{233}\) FE added that, based on actual FTE employee numbers at November 2016, FE would have needed to achieve its projected 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. FE stated that this was ‘unrealistic’ and ‘unachievable’.\(^{234}\)

4.123 FE challenged the UR’s criticism that FE did not justify its use of more FTEs than its allowance.\(^{235}\) FE stated that there was no reason why FE would employ more FTEs than it required.\(^{236}\) FE presented a list of the factors which contributed to the gradual increase in manpower throughout GD14:

(a) increased engineers required to design, plan and manage FE’s growing network rollout;

(b) the impact of full market opening in April 2015, where two additional FTEs were allowed by the UR in 2015 for market opening to new gas suppliers;

\(^{230}\) FE R/S, paragraph 3.105 (d).
\(^{231}\) *Ibid.*
\(^{232}\) FE R/S, paragraph 3.105 (e).
\(^{233}\) *NoA*, paragraph 4.73 (a).
\(^{234}\) *NoA*, paragraph 4.70.
\(^{235}\) UR R&O on *NoA*, paragraph 8.26.
\(^{236}\) FE R/S, paragraph 3.121.
(c) additional manpower required to design, plan and supervise an increasing volume of maintenance activities due to the lifecycle of network assets; and

(d) a need to contract additional staff/manpower to replace services previously provided under Parental Recharges from BGE.237

The UR’s submissions

The relationship between FE’s manpower allowance and projected business growth

4.124 The UR submitted that manpower allowance relates to activities that might be best described as 'central business services'.238 The UR further stated that the areas covered by manpower allowance did not concern field staff working on network construction, maintenance or connections.239

4.125 The UR submitted that the staff requirements of the activities within the manpower allowance may be expected gradually to increase over time as FE's network and customer base expanded, but FE had failed to show there was a relationship between scale and the manpower it sought.240 It stated that the relationship between business growth and manpower requirements was more tentative and limited and did not have 'the linear relationship' that, according to the UR, FE sought to imply.241 The UR added that historic data did not support the existence of a 'linear relationship' between business growth and manpower requirements for these central services.242

4.126 The UR presented a set of tables and graphs regarding FE’s and PNGL’s cumulative growth in manpower, network size and connections for the period 2010 to 2015. The UR stated that this evidence showed that for both FE and PNGL significant increases in network size and/or connections had not been associated with significant increases in manpower.243

4.127 The UR explained that it had conducted a bottom–up analysis of the needs of each of the central business functions in order to assess FE’s manpower requirements.244 It further stated that this had involved a full process of engagement with FE, and had led to a material increase in FE’s manpower

237 FE R/S, paragraph 3.121.
238 UR R&O on NoA, paragraphs 8.2 and 8.7.
239 Ibid.
240 UR R&O on NoA, paragraph 8.19.
241 UR R&O on NoA, paragraphs 8.20 and 8.30.
242 UR R&O on NoA, paragraphs 8.2 and 8.30.
243 UR R&O on NoA, paragraph 8.22.
244 UR R&O on NoA, paragraph 8.3.
allowance for the GD17 Period that was reasonable in relation to FE’s needs.\textsuperscript{245}

4.128 The UR added that the GD17 price control did not make a general cost allowance for manpower, but that instead the manpower requirements for each of the activities represented by the individual cost lines in the ACRT had been considered by the UR as part of its bottom–up assessment of the needs of FE in respect of each activity.\textsuperscript{246}

4.129 The UR presented a table setting out the number of FTEs for which allowance had been made in each cost category. For ease of reference, we reproduce the table in Table 4 below. The UR stated that it had provided for increases in manpower allowances across almost all of the cost lines for which FE was considered to have requirements for central staff.\textsuperscript{247}

**Table 4: Manpower breakdown (FTEs)**

<table>
<thead>
<tr>
<th>Opex cost item</th>
<th>2014</th>
<th>2017</th>
<th>Increase/ (decrease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Management</td>
<td>1.8</td>
<td>1.8</td>
<td>-</td>
</tr>
<tr>
<td>Operations Management</td>
<td>11.6</td>
<td>13.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Customer Management</td>
<td>8.9</td>
<td>9.3</td>
<td>0.4</td>
</tr>
<tr>
<td>System Control</td>
<td>3.1</td>
<td>4.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Emergency</td>
<td>0.3</td>
<td>0.55</td>
<td>0.25</td>
</tr>
<tr>
<td>Metering</td>
<td>0.5</td>
<td>0.85</td>
<td>0.35</td>
</tr>
<tr>
<td>PRE Repairs</td>
<td>0.9</td>
<td>1.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Maintenance</td>
<td>1.0</td>
<td>2.05</td>
<td>1.05</td>
</tr>
<tr>
<td>IT &amp; Telecoms</td>
<td>0.75</td>
<td>0.75</td>
<td>-</td>
</tr>
<tr>
<td>Property Management</td>
<td>1.0</td>
<td>1.0</td>
<td>-</td>
</tr>
<tr>
<td>HR &amp; Non–Ops Training</td>
<td>0.6</td>
<td>1.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Audit, Finance and Regulation</td>
<td>7.4</td>
<td>7.4</td>
<td>-</td>
</tr>
<tr>
<td>Procurement</td>
<td>0.2</td>
<td>0.33</td>
<td>0.13</td>
</tr>
<tr>
<td>CEO &amp; Group Management</td>
<td>0.6</td>
<td>0.8</td>
<td>0.2</td>
</tr>
<tr>
<td>Advertising &amp; Market Development (OO)</td>
<td>8.1</td>
<td>8.35</td>
<td>0.25</td>
</tr>
<tr>
<td>Advertising &amp; Market Development (Non–OO)</td>
<td>5.9</td>
<td>3.4</td>
<td>(2.5)</td>
</tr>
<tr>
<td>Trainees &amp; Apprentices</td>
<td>1.0</td>
<td>1.0</td>
<td>-</td>
</tr>
</tbody>
</table>

**Total manpower**

| 53.7 | 58.3 |

Source: UR R&O on NoA, Table 3.

4.130 The UR clarified that although it considered arguments at a cost line level, its approach to manpower was ‘to look at the overall picture, not just the detailed picture’.\textsuperscript{248} It further submitted that it would not ‘claim every number was precisely the right number in the right place’\textsuperscript{249} and that for the UR ‘the most important thing [was] the overall level of manpower and what [had] happened historically’.\textsuperscript{250} The UR explained that there was a debate on specific cost

\textsuperscript{245} Ibid.
\textsuperscript{246} UR R&O on NoA, paragraph 8.5.
\textsuperscript{247} UR R&O on NoA, paragraph 8.9.
\textsuperscript{248} UR Hearing transcript, 14 March 2017, page 31, lines 7–8.
\textsuperscript{249} UR Hearing transcript, 14 March 2017, page 31, lines 9–10.
\textsuperscript{250} UR Hearing transcript, 14 March 2017, page 32, lines 5–6.
lines, but ‘when it comes to [the] final decision, [the UR] very much look[s] at the total’.251

The use of 2014 manpower data as the basis for the manpower allowance

4.131 The UR stated that it was ‘not credible’ for FE to assert that it had 61 actual FTEs as at November 2016 and that this demonstrated FE’s need for more manpower than it had been allowed for GD17.252

4.132 The UR submitted that FE’s GD14 manpower allowance for 2016 had been 55.5 FTEs, and that FE had not challenged that allowance.253 The UR added that FE had provided no explanation as to why its FTEs spiked in 2016, far above both that allowance and the actual number of FTEs for 2015, and in which activities those staff were engaged.254

4.133 Additionally, the UR submitted that in September 2015 FE had provided a figure of 59.1 for its 2015 FTEs, and the actual number had transpired to be 56.255 The UR concluded that this suggested either significant short–term variability in the numbers or the unreliability of a snapshot picture.256

Our assessment

4.134 There are two underlying components to FE’s appeal on Ground 1D:

(a) The relationship between FE’s manpower allowance and its projected business growth, and the alleged failure of the UR to take proper account of that relationship; and

(b) The UR’s use of 2014 data as the basis for the manpower allowance and the alleged failure of the UR to take into account the 2015 manpower data.

The relationship between FE’s manpower allowance and projected business growth

4.135 It is not disputed by the Parties that there is a relationship between manpower and business scale, a position with which we agree following our review of the evidence submitted to us on this point. However, it has not been possible to conclude on the exact nature of this relationship and whether the GD17

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253 UR R&O on NoA, paragraph 8.27.
254 Ibid.
255 UR R&O on NoA, paragraph 8.28.
256 Ibid.
allowances were insufficient for FE to meet its projected business growth from this evidence alone.

4.136 In our view, it is appropriate to determine the cost allowance at the overall manpower level. In the present case, in order to examine these issues further and in view of the submissions made to us by the UR, we have unusually also undertaken an assessment of the manpower allocations at a cost line level. The purpose of that assessment was to reach a conclusion on the overall level of FE’s manpower allowance in so far as it was relevant to the dispute between the Parties. We reviewed the submissions made by FE during the appeal regarding specific cost lines (see paragraphs 4.120 and 4.121 above) and the relevant information provided by the UR in its published documents, in particular the GD17 Draft Determination and GD17 Final Determination.

4.137 Overall, our review indicated that there was not an error in the UR’s approach and conclusions on manpower. We found that the UR had taken into consideration FE’s submissions and had provided sound justifications for rejecting FE’s requests for additional FTEs in relation to the Asset Management and Operations Management cost lines.257 In our view, the further evidence provided by FE during the appeal was not persuasive. We are also of the view that in relation to the Audit, Finance & Regulation and Trainees and Apprentices cost lines FE had not provided persuasive evidence that the FTEs granted by UR were insufficient to meet FE’s requirements.

4.138 In relation to the IT & Telecoms cost line, we noted that the UR rejected FE’s request for an extra 1.25 FTEs on the basis that FE should not be allowed to pass on the costs of its change in ownership to consumers.258 We have concluded that the UR was within its margin of appreciation in exercising its regulatory judgment to do so. However, the UR did not provide sufficient reasons for rejecting FE’s submission that it needed an IT upgrade to achieve the connections growth expected in GD17.259 Notwithstanding this point, we note that this issue concerns one cost line of many within the aggregate assessment of manpower carried out by the UR. Moreover, it is the overall assessment of manpower that has been appealed by FE under Ground 1D. Therefore, we conclude that the dispute between FE and the UR in respect of

257 The UR’s reasons for rejecting FE’s requests in relation to these cost lines were as follows:
   • Asset Management: The UR had allowed FE to retain the increase in FTEs that it had allowed during GD14 for the implementation of an appropriate asset management system so that FE could use those resources for other activities.
   • Operations Management: The UR increased the manpower allowance for Operations Management by two FTEs for the GD17 period, compared to the additional five requested by FE, in recognition of FE’s need for additional FTEs due to its accelerated network development.

258 GD17 Final Determination, paragraphs 6.221 and 6.222.
259 GD17 Final Determination, paragraphs 6.223 and 6.224.
this cost line is not sufficient to put into question the UR’s overall approach when conducting its aggregate assessment of the manpower allowance.

4.139 Also, consistent with our conclusion regarding the use of 2014 as the base year (see paragraph 4.140 below), we have found that the UR was not wrong in basing the manpower allowance on the 2014 data. We have rejected FE’s submission that additional FTEs were necessary to account for new staff in place in 2015 and 2016 because FE’s submission did not provide sufficient evidence for us to conclude on the efficiency of the additional manpower in those two years.

The use of 2014 manpower data as the basis for the manpower allowance

4.140 As a matter of principle, and consistent with our assessment in Ground 1E (see paragraphs 4.170 to 4.177), we note that the setting of a single base year to determine Opex is a matter of judgment by the UR and by selecting 2014, the UR was within its margin of appreciation in doing so. Further, our review of the evidence has shown that, with the exception of a small discrepancy in one cost line, the UR has adjusted the data where FE provided evidence that manpower allowance based on 2014 data did not provide sufficient FTEs to meet its requirements. Consequently, we have concluded that the UR was not wrong in using the data from 2014 as the basis to set FE’s manpower allowance.

Our conclusion on Ground 1D

4.141 For the reasons given above, we have concluded that the UR was not wrong in its determination of FE’s manpower allowance in the GD17 Decision.

Ground 1E: ‘The Omission Error’

4.142 Ground 1E concerns the Opex allowance for AFR and central services costs in the GD17 Decision.

Summary of grounds of appeal

4.143 FE’s grounds of appeal in respect of Ground 1E are subsumed within its grounds of appeal in respect of Ground 1 as a whole – see paragraphs 4.4 and 4.5 above.

4.144 FE submitted that the UR’s bottom-up assessment failed to take proper account of its efficient costs associated with AFR and central services
previously accounted for by a Parental Recharge removed in GD17.\textsuperscript{260} FE submitted that the Omission Error resulted in its Opex allowance being understated by £1.15 million.\textsuperscript{261}

4.145 FE submitted that the use of 2014 data as the base year contributed to both the Parental Recharge and external AFR costs errors because:

\((a)\) 2014 was the last year in which FE was owned by BGE and therefore the last year in which a Parental Recharge was incurred;\textsuperscript{262} and

\((b)\) 2014 was the start of the GD14 charge control (2014 – 2016) and FE would expect the costs associated with the next charge control to be incurred towards the end of the current charge control period.\textsuperscript{263}

4.146 Given that FE submitted that the UR's decision to use 2014 as the base year was a precursor for both alleged errors under Ground 1E, we will address the base year issue first before turning to the specific errors.

\textit{The UR's Decision}

\textit{The base year}

4.147 As noted at paragraphs 4.134 to 4.140 above, the UR submitted that it relied on its bottom–up assessment of Opex in order to set FE’s Opex allowance and chose 2014 as a single base year, to set a number of the cost categories.

4.148 In the GD17 Decision, the UR stated that it used 2014 as its base year for setting Opex in its bottom–up analysis because it was the last year for which it had actual figures available for the GDNs. The UR further stated that it did consider other evidence where appropriate.\textsuperscript{264}

4.149 The UR stated in the GD17 Final Determination that it did not use 2015 in order to generate an average cost over 2014 and 2015 for the purposes of setting Opex, because that data was not available to it in a timely or detailed manner.\textsuperscript{265}

4.150 For example, in respect of the AFR legal and professional fees (one of the alleged omissions under Ground 1E) the UR set the allowance for GD17

\begin{itemize}
\item \textsuperscript{260} NoA, paragraph 4.6(iv).
\item \textsuperscript{261} NoA, paragraph 4.102.
\item \textsuperscript{262} NoA, paragraph 4.98.
\item \textsuperscript{263} NoA, paragraph 4.94.
\item \textsuperscript{264} GD17 Decision, paragraph 2.12.
\item \textsuperscript{265} GD17 Final Determination, paragraph 6.89.
\end{itemize}
using the 2014 actual figure. In practice, the UR took the 2014 financial data from FE and identified the legal and professional fees required for financial and regulation activities, which was £20,000. The UR then projected this £20,000 per annum fee forward for the GD17 Period, such that the allowance for AFR legal and professional fees was £20,000 per year in FE’s GD17 Opex allowance.

Parental Recharge

4.151 Prior to June 2014, when FE was owned by BGE, BGE provided certain central services for which FE paid BGE a fee. In the GD14 Final Determination, the UR allowed £266,000 per annum in the charge control (ie for each of the years 2014 to 2016) for these central services ie the Parental Recharge.

4.152 Following the sale to iCON in June 2014, FE was managed on a stand–alone basis.

4.153 Although the UR set out how it would treat one–off costs associated with the sale in the GD17 Final Determination, it did not set out explicitly how it dealt with the Parental Recharge.

External AFR costs

4.154 In the GD17 Final Determination, the UR set FE’s total AFR allowance at £462,500 per year with an allowance for external fees at the 2014 figure of £20,000.

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266 GD17 Final Determination, paragraph 6.247.
267 The precise figure is £19,979, according to the UR’s Opex spreadsheet for FE ‘2016–09–19 Opex Matrix for fe GD17 FD final to fe’ but in the GD17 Final Determination this is rounded to £20,000 (paragraph 6.247) so we use £20,000.
268 This is evident both from the GD17 Final Determination, paragraphs 6.247 and 6.248 and the UR’s Opex spreadsheet for FE ‘2016–09–19 Opex Matrix for fe GD17 FD final to fe’.
269 See paragraph 2.6.
271 GD17 Final Determination, paragraph 6.85.
272 GD17 Final Determination, paragraphs 6.86 and 6.222.
273 GD17 Final Determination, paragraphs 6.246–6.250 and Table 49.
FE’s submissions

The base year

4.155 FE submitted that the UR’s reliance on 2014 data as its base year for the purpose of its bottom–up assessment of operating costs had contributed to the Omission Error.274

4.156 FE submitted that the use of data from a single year (2014) to set the base year for GD17 was problematic as costs were not evenly distributed in the three years covered by GD14.275 In addition, the use of a single year did not properly reflect the actual costs incurred by FE for the period covered by GD14.276

4.157 In support of its submission, FE cited the CMA’s approach to establishing a base year in Bristol Water, where an average over more than one year was used, as opposed to a single year.277

Parental Recharge

4.158 FE submitted that the UR had not provided any allowance for the central services that were previously provided by BGE.278

4.159 FE explained that central services costs were genuine and necessary business costs, which, following the change in ownership, FE needed to undertake internally or outsource to third parties. FE stated that, it would have been appropriate to allow for an efficient level of these central service costs within the GD17 Opex allowance.279

4.160 In its NoA, FE submitted that the UR’s failure to include any allowance for these activities was a ‘clear omission’.280 In a later submission in this appeal, FE submitted that the UR had failed to make an appropriate adjustment for the Parental Recharge.281

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274 NoA, paragraph 4.80.
275 NoA, paragraph 4.82.
276 NoA, paragraph 4.83.
277 NoA, paragraph 4.90.
278 NoA, paragraphs 4.100 and 4.101.
279 NoA, paragraph 4.100.
281 FE R/S, paragraph 3.136.
4.161 In its NoA, FE submitted that by using 2014 as the base year, the UR had omitted costs associated with FE’s engagement with the charge control process. This was because 2014 was the first year of the GD14 charge control period and FE would expect the costs associated with the next charge control to be incurred towards the end of the current charge control period. FE submitted that engaging with the charge control process was an unavoidable cost that it had to meet and in taking 2014 as the base year, the UR did not provide it with an appropriate allowance for this process.282 FE submitted that if the UR had taken into account the 2015 data these additional expenses would have been clear.283

4.162 In a later submission in this appeal, FE provided more detail with regards to the alleged error, stating that it was the external fees associated with engaging with the charge control process that had been omitted.284

The UR’s submissions

The base year

4.163 The UR submitted that there was regulatory precedent to support the use of a single base year as part of the bottom–up assessment of Opex.285

4.164 The UR set out the timelines associated with the availability of 2015 data and the publication of the GD17 Final Determination, to support its approach of relying on the 2014 data.286 More specifically, the UR submitted that it had committed to publish the Final Determination by 15 September 2016287 and that, if it had undertaken the same detailed review of 2015 data as it did for the 2014 data (and therefore spent the same amount of time reviewing the data), it would not have completed its review until October/November 2016.288

4.165 The UR concluded that it was within its legitimate regulatory discretion to determine that it should not change the base year in between the GD17 Draft

282 NoA, paragraph 4.94 and 4.95.
283 NoA, paragraph 4.96.
284 FE R/S, paragraphs 3.144(b) and 3.146.
285 UR R&O on NoA, paragraph 9.28.
286 UR R&O on NoA, paragraph 9.33.
287 Ibid.
288 UR R&O on NoA, W/S McHugh, paragraph 11.13.
Determination and the GD17 Final Determination and that it was appropriate to select 2014 as the base year for the determination of Opex allowances.\textsuperscript{289}

**Parental Recharge**

4.166 The UR submitted that FE’s appeal on central services costs was based on a ‘fundamental error of fact’, as the UR did provide an allowance for the activities previously captured under the Parental Recharge.\textsuperscript{290}

4.167 The UR stated that it had acknowledged that FE would need to incur costs in relation to the central services previously provided by BGE. The UR submitted that it had identified the cost lines relevant to the Parental Recharge and considered appropriate increases to these cost lines between the 2014 actuals and the GD17 allowances.\textsuperscript{291} The UR provided a table which summarised the uplifts provided, which is reproduced below.\textsuperscript{292}

**Table 5: Parental Recharge cost lines in GD17**

<table>
<thead>
<tr>
<th>ACRT reporting line</th>
<th>GD17 allowance/year</th>
<th>Increase between 2014 actuals and GD17 allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR</td>
<td>462,533</td>
<td>43,772</td>
</tr>
<tr>
<td>IT &amp; Telecoms</td>
<td>245,350</td>
<td>72,349</td>
</tr>
<tr>
<td>CEO and Group</td>
<td>157,323</td>
<td>67,152</td>
</tr>
<tr>
<td>HR and Non-ops training</td>
<td>98,478</td>
<td>32,318</td>
</tr>
<tr>
<td>Procurement</td>
<td>21,416</td>
<td>3,005</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>985,100</strong>*</td>
<td><strong>218,596</strong></td>
</tr>
</tbody>
</table>

\* Total added as not presented in Table 6 of the UR R&O on NoA. Source: Table 6 of the UR’s R&O on the NoA.

4.168 On the basis of Table 5 above, the UR submitted that the uplift of £218,596 exceeded six months’ worth of the GD14 allowance for the Parental Recharge, being £141,000 (in 2014 prices).\textsuperscript{293} The UR concluded that it was therefore factually inaccurate for FE to claim that there was an omission.\textsuperscript{294}

**External AFR costs**

4.169 In response to FE’s submission that external AFR fees were omitted, the UR stated that 2014 did include external fees.\textsuperscript{295} Given that it used 2014 as the base year for its bottom–up assessment of FE’s operating costs, the UR

\textsuperscript{289} UR R&O on NoA, paragraph 9.36.

\textsuperscript{290} UR R&O on NoA, paragraph 9.41.

\textsuperscript{291} UR R&O on NoA, paragraph 9.46.

\textsuperscript{292} UR R&O on NoA, Table 6, page 62.

\textsuperscript{293} UR R&O on NoA, paragraph 9.48.

\textsuperscript{294} UR R&O on NoA, paragraph 9.49.

\textsuperscript{295} UR R&O on NoA, paragraphs 9.15–9.17.
concluded that its allowance for external AFR fees did include costs in relation to engaging with the price control process.  

Our assessment

The UR’s approach to setting a base year

4.170 For activities other than metering and maintenance, our understanding of the UR’s bottom–up methodology is as follows:

(a) The UR estimated the manpower allowance in FTEs.

(b) It then converted the FTE estimate into a cost allowance in pounds, using an estimate of the ‘cost per employee’.

(c) For each cost category, the UR then estimated the other costs which are ‘non–internal–personnel costs’, for example professional and legal fees, stationery etc based upon 2014 actual costs submitted by FE, uplifted for inflation.

(d) Finally, the UR made manual adjustments for any atypical requirements under the particular cost category.

4.171 The UR set 2014 as its base year for a number of cost categories and did not take an average over more than one year, for example 2014 and 2015.

4.172 It is not unusual for a regulator to set a cut–off point, where the financial data from future periods cannot be taken into account to the same level of detail as data that has been available for much longer. This is a commonly used approach, given both the time constraints faced by the regulator and the level of scrutiny required of submissions from the regulated businesses.

4.173 We also note that a single representative base year is a viable alternative to taking an average over more than one year when setting a charge control and indeed such an approach has been taken in past cases.

4.174 FE has referred to the CMA’s decision in the Bristol Water case, in which more than one year was used. However, in our view, the fact that a different approach was taken in another case is not sufficient to prove that the UR was wrong in the present case. There is a range of options open to the

296 UR R&O on NoA, paragraphs 9.15–9.17.
297 This is based on the CMA’s understanding of the ‘2016–09–19 Opex Matrix for fe GD17 FD final to fe’, which was provided by the UR.
299 NoA, paragraph 4.90.
UR in selecting its base period, for example a single base year or a combination of different years. The option which is most appropriate will depend on the circumstances of the case.

4.175 Therefore, as a matter of regulatory principle, we do not find issue with using a single base year to set Opex and consider that in doing so the UR was within its margin of appreciation in exercising its regulatory judgment.\(^{300}\)

4.176 Turning to whether 2014 was an appropriate selection for the single base year, we agree with the UR that 2014 was the appropriate selection. This is because it was the most up to date information that the UR had sufficient time to scrutinise in the level of detail required, when setting a charge control. Further, the UR was open to adjusting the base year figure where FE provided persuasive evidence that the 2014 data was atypical.\(^{301}\) For example, the UR made an adjustment to the insurance Opex allowance, based on an insurance benchmarking report provided by FE during the GD17 consultation process.\(^{302}\)

4.177 In any case, we note that FE has not appealed the use of 2014 as the base year for setting Opex more generally but it has appealed, in Ground 1E, the outcomes of that process in respect of just two items.\(^{303}\)

4.178 We therefore consider below whether the Opex allowance calculated using 2014 as the base year, was wrong for the two items specified in Ground 1E: Parental Recharge and external AFR fees.

**Parental Recharge**

4.179 From the evidence submitted to us by the UR and FE we have found that FE received an uplift between GD14 actuals and the GD17 Final Determination across the central services line items (excluding the Parental Recharge) previously captured by the Parental Recharge.\(^{304}\) This uplift totalled (approximately) £219,000.\(^{305,306}\)

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\(^{300}\) UR R&O on NoA, paragraph 9.36.
\(^{301}\) UR R&O on NoA, paragraphs 9.22 and 9.37.
\(^{302}\) GD17 Final Determination, paragraph 6.258
\(^{303}\) Note, FE has submitted that the UR’s choice of a base year has contributed to other errors under different sub–grounds of 1E but we do not address that here.
\(^{304}\) FE R/S, table on page 52 and UR R&O on NoA, Table 6, page 62.
\(^{305}\) Ibid. and CMA analysis – which simply subtracts 2014 actuals from UR GD17 FD across central services, rounded to the nearest 1,000.
\(^{306}\) In its response to our provisional determination, FE submitted that we had made an error of fact, as it had not received an uplift from its 2014 actuals but rather a reduction in £28,000 (FE R/PD response, paragraphs 2.49 and 2.50).
4.180 The sale to iCON occurred approximately half way through the year, in June 2014. It follows that FE’s 2014 actual central services costs in 2014 were funded by the parental recharge until June and thereafter in–house. FE’s 2014 central services costs therefore included six months–worth of costs required to provide the services previously provided by BGE.

4.181 One approach to adjusting FE’s 2014 central services costs in the base year would therefore be to uplift FE’s 2014 figures, by half the annual parental recharge allowance. The GD14 allowance for the Parental Recharge was £266,000 for the full year, which means an uplift of £133,000 would have been required under this approach. The UR provided evidence showing an uplift of £219,000 between 2014 actuals and the GD17 allowance. We were satisfied therefore the uplift was sufficient to make the 2014 base year costs reflective of the annual central services costs that FE would have to incur on a stand–alone basis, ie absent the BGE parental support.

4.182 FE submitted that the uplift was insufficient and evidenced this by providing its 2015 data, the first year where no services were provided by BGE. The 2015 costs for central services were (approximately) £617,000 higher than the GD17 allowance. However, there are a number of reasons why FE’s costs were higher in 2015. For example, we noted from the evidence submitted to us from both Parties that some of the difference in costs could be attributed to one–off costs arising from the sale to iCON.

4.183 However, the evidence presented by FE to demonstrate that the allowance for the Parental Recharge was insufficient did not include a breakdown of the costs into the one–off costs of the sale to iCON and the ongoing costs of running the business. As a matter of regulatory principle the Opex allowance should reflect ongoing costs of the business only. We were therefore not persuaded by the evidence FE submitted that these ongoing costs reflected an efficient level of costs for GD17.

4.184 Based on data submitted by both FE and the UR, FE received an increase in central services costs previously provided by BGE (between its 2014 actuals, excluding the Parental Recharge, and the GD17 Final Determination). This uplift is sufficient to cover the Parental Recharge that was provided in GD14, prior to the sale. We are therefore not persuaded by FE’s evidence that the uplift provided by the UR was insufficient. We therefore conclude that

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307 UR R&O on NoA, paragraph 9.48. We note that £282k is slightly higher than the allowance of £266k stated at Table 46 of the GD14 Final Determination. It is unclear how the two figures reconcile but in our view it does not affect the merits of the arguments.
308 FE R/S, table on page 52.
309 Ibid (£901,776+£766,786)–(£462,533+588,972) approximately £617k.
310 FE R/S, table on page 52 and UR R&O on NoA, Table 6, page 62.
there was no omission and that FE has failed to demonstrate that the UR’s allowance was insufficient. On that basis, the UR was not wrong as regards central service costs, previously accounted for in the Parental Recharge.

External AFR fees

4.185 As noted at paragraph 4.140 above, the choice of a single base year to set Opex is a matter of judgment by the UR and by selecting 2014, the UR was within its margin of appreciation (see paragraph 4.168 above). The particular relevance of a single base year to this ground of appeal is whether the UR was required to adjust the 2014 costs for the disparities identified by FE in one cost line.

4.186 In our opinion, it cannot be consistent with a bottom–up approach that the UR is required to adjust each line item in the reference year, whenever the regulated firm provides a rationale for the regulator to do so. In fact this would provide an incentive for a firm to systematically increase its Opex allowance and likely to result in a level of total costs higher than necessary for the efficient operation of the business. Instead, we agree with the UR that adjustments to the base year figure should only be undertaken where there is persuasive evidence that the costs will be higher in the price control period and that this higher cost is efficient.

4.187 In the case of AFR external fees, the evidence before us has been ambiguous. There has been some debate around whether FE incurred external fees associated with engaging with the charge control process in 2014 (see, for example, paragraphs 4.167 and 4.169 above) and therefore whether the 2014 figure was representative of likely external fees for the GD17 Period. We note that:

(a) FE’s evidence was ambiguous with regards to whether it incurred external fees in its 2014 actuals both during the GD17 consultation process and during the course of this appeal. It was only at the hearing where it

311 ie given the incentive of the firm to ask for an increase in costs, the effect on costs would be asymmetric in that such an approach to adjusting the base year figures would serve to systematically increase the Opex allowance.
312 See, for example, UR R&O on NoA, paragraphs 9.22 and 9.37.
313 See, for example, FE’s Business Plan, dated October 2015, section 2.2.6, where FE uses a qualitative statement to explain an increase in its costs, which was unclear; paragraph 3.148 of FE’s Reply also suggested that approximately £50,000 was incurred in relation to the GD14 re–opener within 2014. Further, FE’s 2014 figures were produced on a different basis to its historical Opex figures, prior to 2013, see GD17 Final Determination, paragraph 6.241, which would have made it more difficult for the UR to make like for like comparisons between 2014 costs and historical data. We do note, however, that one of the examples of FE’s conflicting evidence provided by the UR is not valid – the point made at paragraph 9.15 of the UR R&O on NoA. Here, the UR references a statement by FE, stating that it had incurred costs of £584k (in 2014) in connection with the GD17 price control process. The UR appeared to misunderstand the use of the term ‘(in 2014), which
became clear to us that FE’S 2014 data did not include external fees for engaging with the charge control process.314

(b) The costs under consideration are not a separate line item within the bottom–up cost model used by the UR,315 rather they are a constituent part of an individual line item. In our view, there was not an ‘omission’ in the sense of there being a zero balance in a line item within the ACRT. Rather, the UR made an allowance of £20,000 per year for AFR legal and professional fees. We also consider that when figures are below the level of detail of the ACRT, it is harder for the UR to determine whether one constituent item is sufficiently anomalous to warrant departure from the 2014 base year, without clear and persuasive evidence from FE.

4.188 Given FE’s ambiguity over its data,316 we consider that the UR was within its margin of appreciation in exercising its regulatory judgment at the time of the GD17 Decision in determining that FE’s evidence fell short of the standard required to adjust the base year figure.

4.189 Further, during the course of this appeal, FE has not provided persuasive evidence that its spend on external consultants to engage with the charge control process in 2015 was efficient. FE commissioned a number of reports from external consultants during the GD17 consultation process. In our view the onus is on FE to provide persuasive evidence that this spend represented an efficient level of costs for engaging with the GD23 charge control process and should therefore be included in the underlying cost base for GD17. We were not persuaded by FE’s evidence that the costs claimed were efficient.

4.190 We therefore conclude that the UR was not wrong to set the external AFR fees at the 2014 level, consistent with its overall approach to setting Opex.

Our conclusion on Ground 1E

4.191 For the reasons given above, we have concluded that the UR was not wrong in its determination of the Opex allowance for central services costs and external AFR costs in the GD17 Decision.

FE pointed out at paragraph 3.147(a) of its FE R/S, should have read ‘(in 2014 prices)’ and was actually included in the 2015 costs.
315 The ACRT template does not split out external fees specifically for engaging with the charge control process – rather, there is one line for legal and professional fees within the AFR cost category.
316 This may be in part due to the level of granularity of the underlying costs subject to the analysis.
Ground 1A: ‘the Benchmarking Error’

4.192 Ground 1A concerns the econometric top–down efficiency benchmarking performed by the UR to inform its view of FE’s efficient Opex.

Summary of grounds of appeal

4.193 FE’s grounds of appeal in respect of Ground 1A are subsumed within its grounds of appeal in respect of Ground 1 as a whole – see paragraphs 4.4 and 4.5 above.

4.194 More specifically, FE submitted that the UR’s top–down model was fundamentally flawed and unsuitable for assessing FE’s efficient costs and therefore the UR was wrong to:

(a) have had regard to its top–down benchmarking analysis in setting or testing FE’s Opex allowance for GD17; and

(b) allow its top–down benchmarking assessment to influence its bottom–up cost line assessment.\(^{317}\)

4.195 FE did not seek any monetary relief in respect of Ground 1A,\(^{318}\) but stated that the alleged errors under Ground 1A contributed to each of the errors in Grounds 1B, 1D and 1E because the top–down benchmarking assessment was used to ‘reinforce’ and ‘sense check’ the UR’s bottom–up assessment, which gave rise to further downward bias in the UR’s overall assessment of FE’s efficient operating costs.\(^{319}\) Consequently, FE submitted that the CMA should quash what FE considered to be erroneous findings from the UR’s benchmarking assessment in the GD17 Decision and GD17 Final Determination.\(^{320}\)

The UR’s Decision

4.196 The GD17 Decision did not address in detail the UR’s analysis and decisions regarding the GD17 Opex allowance. These were presented in the GD17 Final Determination.

4.197 In addition to the bottom–up cost line approach that it had used in previous price controls, the UR performed a top–down multivariate statistical analysis to benchmark firms’ Opex costs. The UR benchmarked the costs of PNGL

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\(^{317}\) NoA, paragraphs 2.6 and 4.18.

\(^{318}\) NoA, paragraph 4.6.

\(^{319}\) NoA, paragraph 4.7.

\(^{320}\) FE Hearing transcript, 14 March 2017, page 62, lines 15 – 18; FE response to PD, paragraph 2.85.
and FE to those of GB GDNs using data provided by Ofgem. The UR identified the 'efficiency frontier' as the third best GB GDN (upper quartile) and used this to forecast efficient Opex levels for NI GDNs up to 2022.

4.198 GD17 was the first gas price control where a top–down Opex analysis had been undertaken by the UR.321 UR first commissioned CEPA322 and later Deloitte to develop this analysis prior the GD17 Draft Determination.323 Following further consultation with NI GDNs, the UR carried out some additional refinements of the analysis and published its final version in the GD17 Final Determination.324

4.199 In the GD17 Final Determination, the UR stated that it had decided to apply the results of the bottom–up Opex assessment to set the GD17 Opex allowance, but that the top–down econometric analysis had 'informed' the GD17 Final Determination and provided a 'sense check' of the bottom–up results.325 It further stated that the results of the top–down analysis indicated that there was scope to reduce FE’s Business Plan Opex costs by up to 25.3% ‘to reach what has been assessed as efficient operational costs’.326 Additionally, the UR performed a comparison of the results of the top–down econometric analysis and the GD17 allowance computed on the basis of the bottom–up approach. For ease of reference, we reproduce the UR’s comparison in Figure 3 below.

4.200 The UR stated that FE was a ‘clear outlier’ in terms of scale compared with PNGL and the GB GDNs in the dataset and that therefore the top–down results for FE should be used for ‘indicative purposes only’.327

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321 GD17 Final Determination, paragraph 6.25.
322 GD17 Final Determination, paragraph 6.29.
323 GD17 Final Determination, paragraph 6.30.
324 GD17 Final Determination, paragraph 6.33.
325 GD17 Final Determination, paragraph 6.27.
326 GD17 Final Determination, paragraph 6.45.
327 GD17 Final Determination, paragraph 6.46.
4.201 In the GD17 Decision, the UR noted that following the GD17 Final Determination, FE had submitted that the UR’s benchmarking had not taken account of the fundamental differences between NI and GB GDNs due to ‘scale, maturity and sparsity of costs’. The UR responded to this criticism as follows:

We consider that our top–down benchmarking analysis is in line with best practice, and takes into account a range of operational characteristics and relative differences between the GDNs. It made a number of data exclusions and adjustments to enable as like–for–like a comparison where possible between NI and GB GDNs ... In addition, we interpreted the results from a number of econometric models, which gave us a likely efficiency range, rather than relying upon one point estimate to ascertain any efficiency gap.

These steps, along with a number of other methodological approaches ensured that our benchmarking was as fair and

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328 GD17 Decision, paragraph 2.10.
robust as possible in assessing the relative efficiency of the Northern Ireland GDNs. The top–down estimates were notably in line with the allowance from the bottom–up analysis.329

**FE’s submissions**

4.202 FE submitted that UR’s top–down benchmark analysis was ‘wholly unsuitable and unreliable’330 on the basis that the UR had failed to take account of characteristics of FE’s Licence Area which made it ‘wholly different’ to the GB GDNs.331 In particular, these characteristics included:

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

(b) the limited reach and much smaller scale of FE’s network;

(c) the largely rural and very sparsely populated licence area within which FE operates;

(d) FE’s small customer base;

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

(f) the lower average gross disposable income levels which make consumers very sensitive to the upfront cost of switching to gas.332

4.203 FE sought the expert opinion of Mr Alan Horncastle from Oxera to assess the validity of the UR’s approach. Oxera’s report concluded that the UR’s econometric analysis suffered from ‘fundamental flaws’,333 including the failure to account for differences between FE and the GB GDNs as well as specific errors in the data adjustments and the implementation of the econometric analysis.334 Oxera’s report also concluded that the errors in UR’s top–down analysis had led to ‘upwardly biased inefficiency estimates’ for FE.335

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329 GD17 Decision, paragraphs 2.13 and 2.14.
330 NoA, paragraphs 2.6 and 4.4(a).
332 NoA, paragraph 4.17.
333 NoA, paragraphs 2.7 and 4.23; Oxera OPEX report, E/R Horncastle 1, paragraph 3.1.
334 NoA, paragraph 4.23; Oxera OPEX report, E/R Horncastle 1, sections 2C to 2J.
335 NoA, paragraphs 2.7 and 4.24; Oxera OPEX report, E/R Horncastle 1, paragraph 1.16.
4.204 FE added that the report by the UR’s own consultants, Deloitte, highlighted the differences between FE’s and the other GDNs included in the datasets, and quoted passages from Deloitte’s report as evidence, for example:

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.

4.205 In addition to this, FE submitted that the UR had adopted a different efficiency range to that set out in Deloitte’s analysis. FE submitted that this was due to the UR’s selection of two particular model specifications from the four suggested by Deloitte, and its focus on the results of the analysis using the GB-only dataset. FE further stated that the UR had made a ‘deliberate choice’ in selecting these specific models and that a different approach would have caused it to question the results of its bottom-up results.

4.206 FE submitted that, given the errors identified, the UR’s top-down benchmarking analysis should have been left out of consideration entirely. FE also submitted that, at the very least, the analysis could not have been used to inform the UR’s assessment of FE’s efficient costs without detailed consideration of how to mitigate the challenges identified by Deloitte.

4.207 FE stated that it had sought to draw the UR’s attention to these issues during the GD17 process, and that the UR had not taken those concerns as seriously as it should have had and instead had used the results of the top-down analysis to create an ‘illusion of reliability’ in its bottom-up assessment.

4.208 FE clarified that it was not opposed to top-down benchmarking in general, but it was the specific way in which the UR had conducted its top-down analysis in GD17, and the use the UR made of those results to affect FE’s Opex allowance, which formed the basis of its appeal under Ground 1A.

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337 NoA, paragraphs 4.29–4.31.
339 NoA, paragraph 4.32.
340 FE R/S, paragraph 3.21.
341 NoA, paragraph 4.37.
342 FE R/S, paragraph 3.31.
344 NoA, paragraph 3.33.
4.209 FE submitted that the UR allowed the results of its top–down benchmarking analysis to 'influence' its bottom–up cost line assessment. FE stated that:

(a) the text of the GD17 Decision and GD17 Final Determination 'confirm' that the top–down benchmarking had an influence on the bottom–up analysis, and cited specific paragraphs of these documents supporting this view, including:

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.

... the top–down benchmarking review reinforced our bottom–up approach.

(b) the UR had used the results of its top–down benchmarking analysis as an 'indication' that there was scope to reduce FE’s Business Plan Opex costs by up to 25.3%.

(c) the Witness Statement of Mr Brian McHugh showed that the UR had had regard to the outputs of its top–down benchmarking analysis in testing and verifying its bottom–up assessment. In particular, FE highlighted Mr McHugh’s statement which indicated that, had the UR found a difference between the top–down and bottom–up approaches, it would have caused the UR to 'ask questions about whether something was fundamentally wrong' either with the top–down or bottom–up approaches.

4.210 FE added that the UR’s reliance on the top–down analysis had given it ‘false comfort’ and had caused it to overlook serious errors with its bottom–up analysis.
4.211 FE challenged the UR’s explanation that the comparison between the results of the bottom–up and top–down assessments was carried out at the ‘very end of the process’. FE stated that:

(a) the development of the top–down analysis ‘took place in parallel with, and not after, or separately from, the UR’s bottom–up cost line assessment’ (emphasis as in the original);

(b) the top–down analysis was covered at length in the GD17 Draft Determination, and that document included the same Deloitte report, containing the main results of its top–down analysis, that was later annexed to the GD17 Final Determination; and

(c) in the GD17 Draft Determination the UR had drawn conclusions from the results of the top–down analysis. According to FE, in its GD17 Draft Determination, the UR had used the results of the top–down analysis to conclude that it was ‘likely that opportunities for efficiency lie within the 12 to 30% range’ and that ‘this top–down analysis supports the findings of the bottom–up approach’.

4.212 On this basis, FE stated that the UR had had regard to its top–down benchmarking analysis during the ‘formative stages’ of the GD17 process and, at the very least, reassured itself that the reductions proposed by its bottom–up assessment correlated with the catch–up efficiencies identified by its top–down analysis.

4.213 During the appeal, we asked FE to clarify its position regarding the claimed materiality of Ground 1A and its relationship with the remainder of Ground 1. In its response, FE confirmed our understanding that FE did not contend that Ground 1A provided a basis for challenging the level of the Opex assessment in the event that the UR’s Defence succeeded on all or part of Grounds 1B to 1E. As to materiality, FE stated that Ground 1A raised an error which was, by itself, material to the level of FE’s Opex allowance. However, FE stated that it did not rely on the top–down benchmarking on a separate basis to increase FE’s Opex allowances if all of its other challenges in Grounds 1B to 1E were not upheld. FE also stated that it expected the CMA to consider the process followed by the UR in conducting its top–down benchmarking exercise and the insights that were drawn from this analysis.

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353 FE R/S, paragraph 3.15.
354 Ibid.
355 FE R/S, paragraph 3.16.
356 Ibid; GD17 Draft Determination, Annex 5, paragraph 4.9 and 4.10.
357 FE R/S, paragraph 3.17.
358 Email from Freshfields Bruckhaus Deringer LLP, dated 27 January 2017.
4.214 FE also clarified its concerns regarding the use of the top–down analysis for future price controls in terms of regulatory precedent. FE told us that the UR had concluded that FE was 10 to 25% inefficient on the basis of the top–down analysis, and those findings were not appropriate, as the UR had no basis for making them. FE stated further that the UR had made this point regarding FE’s efficiency in the GD17 Decision and that should be corrected.

The UR’s submissions

4.215 The UR rejected FE’s contention that the top–down benchmarking exercise was fundamentally flawed. However, it did not engage with the details of that point in its submissions. Rather, the basis of UR’s Defence was that the UR had decided not to use the top–down exercise for the purpose of setting the GD17 Opex allowance and that the allowance had been based on the results of the bottom–up approach alone. As a consequence, it submitted that Ground 1A was based on an error of fact and, for that reason, it was unsustainable.

4.216 The UR’s GD17 Final Determination stated that the top–down analysis provided a ‘sense check’ for the bottom–up analysis. The UR submitted a witness statement by Mr Brian McHugh who clarified what ‘sense check’ meant in that context. Mr McHugh stated that:

(a) The UR had relied ‘entirely’ on the bottom–up assessment of costs to set FE’s GD17 Opex allowance, both at the GD17 Draft Determination and the GD17 Final Determination.

(b) The ‘sense check’ consisted of the UR asking itself whether there were any significant differences between the outputs of the top–down and bottom–up approaches.

(c) If the UR had found a difference between the two approaches, Mr McHugh stated that ‘it might have been an indicator of one of two things – either a problem with the econometric models themselves … or a problem

361 UR R&O on NoA, paragraph 5.1.
362 UR R&O on NoA, paragraph 5.2.
363 UR R&O on NoA, paragraph 5.5.
365 UR R&O on NoA, W/S McHugh, paragraph 7.33.
366 Ibid.
with the output of the bottom–up assessment (which would have needed to be investigated for the purposes of GD17).\textsuperscript{367}

\textit{(d)} The UR found ‘no significant contradiction’ between the two sets of results. On that basis, the UR concluded that: (i) the top–down benchmarking was proceeding in the right direction, and (ii) there was no reason to believe that there were any major problems with the bottom–up assessment.\textsuperscript{368}

\textit{(e)} The UR did not expect there to be any major problem with the bottom–up assessment, as it was a ‘well–tested methodology’, but it considered it appropriate to subject it to that challenge, given that the results from the top–down analysis were available.\textsuperscript{369}

\textit{(f)} The ‘sense check’ was a relatively cursory exercise carried out at the very end of the process.\textsuperscript{370}

4.217 The UR further stated that the ‘sense check’ had taken place ‘only as the last act in the GD17 process.’ It submitted that no mention was made of it in the GD17 Draft Determination. Instead it was applied to the ‘results’ of the bottom–up assessment at the GD17 Final Determination stage and none of the allowances were adjusted because of it.\textsuperscript{371} The UR acknowledged that the top–down and bottom–up analyses had been developed in parallel, but explained that the two analyses had been performed by two separate teams working independently from each other.\textsuperscript{372}

4.218 The UR also clarified the reasons why it did not rely on the output of the benchmarking exercise for the purposes of GD17 Opex allowance:\textsuperscript{373} The UR stated that:

\begin{itemize}
\item[(a)] the analysis was the first comprehensive attempt at top–down benchmarking in the context of the NI gas industry, and therefore subject to uncertainties and challenges of undertaking such an exercise for the first time;\textsuperscript{374}
\item[(b)] extensive consultation with GDNs had brought to the attention of the UR several observations and criticisms on the different econometric models
\end{itemize}

\textsuperscript{367} UR R&O on NoA, W/S McHugh, paragraph 7.34.
\textsuperscript{368} UR R&O on NoA, W/S McHugh, paragraph 7.35.
\textsuperscript{369} \textit{Ibid.}
\textsuperscript{370} UR R&O on NoA, W/S McHugh, paragraph 7.36.
\textsuperscript{371} UR R&O on NoA, paragraph 5.20.
\textsuperscript{372} UR Hearing transcript, 14 March 2017, page 50, lines 20–23.
\textsuperscript{373} UR R&O on NoA, W/S McHugh, paragraph 7.25.
\textsuperscript{374} UR R&O on NoA, W/S McHugh, paragraph 7.25(a).
and led the UR to conclude that it was ‘not yet ready’ to rely on those results;\(^{375}\)

(c) the UR considered the top–down analysis was likely to require ‘a few more years of refinement, analysis and data’ before it could be used to set allowances;\(^{376}\)

(d) the UR had the option to rely on the bottom–up assessment, which provided an ‘established and trusted method for setting allowances’;\(^{377}\) and

(e) by relying on the bottom–up assessment, the UR was able to ‘lessen the burden’ on NI GDNs.\(^{378}\)

4.219 During the appeal, we asked the UR to clarify its position regarding Ground 1A and its relationship with the remainder of Ground 1. In its response, the UR confirmed our understanding that in the event that FE succeeded on any of Grounds 1B to 1E, the UR did not seek to defend the level of the Opex assessment by having regard to the top–down benchmarking exercise. In other words, the benchmarking exercise did not provide a further basis of defence to Grounds 1B to 1E. The UR added that it had made clear in previous submissions that it had set the Opex allowances in GD17 by reference to a bottom–up assessment alone, and that those allowances were unaffected by the top–down benchmarking exercise. As a consequence, it did not seek to rely on that top–down benchmarking in defending Grounds 1B to 1E.\(^{379}\)

**Our assessment**

4.220 There are two underlying components to FE’s appeal on Ground 1A:

(a) The reliability of the top–down benchmarking analysis carried out by the UR; and

(b) FE’s contention that the UR had relied on the results of this analysis to draw conclusions regarding FE’s Opex costs and used the results to inform the UR’s bottom–up assessment of FE’s Opex allowance.

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\(^{375}\) UR R&O on NoA, W/S McHugh, paragraph 7.25(b).

\(^{376}\) UR R&O on NoA, W/S McHugh, paragraph 7.25(c).

\(^{377}\) UR R&O on NoA, W/S McHugh, paragraph 7.25(d) and (e). The UR also submitted that ‘it had never been in its contemplation to rely on the benchmarking exercise for the purposes of GD17’. However, in our view, that statement contradicted the UR’s submission that in December 2014 it had issued a GD17 Approach Document, indicating that it intended to perform a top–down and a bottom–up analyses and combine them in a ‘triangulation approach’ (UR R&O on NoA, paragraph 5.7).

\(^{378}\) The UR further pointed out that PNGL had made very few comments on the top–down analysis in response to the Draft Determination, focusing instead on the bottom–up. (UR R&O on NoA, W/S McHugh, paragraph 7.25(f)).

\(^{379}\) Email from Gowling WLG (UK) LLP, dated 27 January 2017.
Reliability of the top–down benchmarking analysis

4.221 Although the UR did not accept FE’s contention that the top–down analysis was fundamentally flawed, it did not comment on the specific points raised by FE. The basis of UR’s Defence was that the top–down analysis had not been used to set the Opex allowance, and that it had not had any influence on the results of the bottom–up approach on which it was based. The UR submitted that the analysis had not been used because it was ‘not yet ready’ and that it was likely to require ‘a few more years of refinement, analysis and data’ before it could be used to set the allowance.380

4.222 Although the Parties disagreed on the degree of reliability of the top–down analysis,381 they did not dispute that it was not sufficiently reliable at the time of the GD17 Final Determination and GD17 Decision for it to be used as a basis for setting the Opex allowance. Therefore, we have taken the view that, in order to reach a conclusion on Ground 1A, it was not necessary for us to conclude on the extent to which the top–down analysis was or was not sufficiently reliable at the time of the GD17 Decision.

4.223 As a consequence, in assessing Ground 1A we have focused on analysing whether the UR relied on the results of the top–down analysis and the alleged influence it had on the Opex allowance.

The UR’s reliance on the results of the top–down analysis

4.224 The top–down analysis was not used directly to set the specific numbers for FE’s Opex allowance. The actual numbers were computed on the basis of the bottom–up approach alone. This is clearly stated in the GD17 Final Determination and is not disputed by the Parties. However, in its GD17 Final Determination and GD17 Decision, the UR made various explicit references to the top–down analysis, which included the following:

(a) It concluded from the results of the top–down analysis that there was scope to reduce FE’s Business Plan Opex costs by at least 10.2% and by as much as 25.3% to reach an efficient level.382

380 UR R&O on NoA, W/S McHugh, paragraph 7.25.
381 FE submitted that the analysis was ‘fundamentally flawed, wholly unsuitable and unreliable’ for assessing FE’s costs (NoA, paragraph 2.6), whereas the UR stated that the analysis was not ready to be used and was likely to require further refinement, analysis and data (UR R&O on NoA, W/S McHugh, paragraph 7.25).
382 GD17 Final Determination, paragraph 6.45 and Table 24.
(b) It indicated that the top–down ‘informed’ the final determination and was used as a ‘sense check’ of the bottom–up results.383

(c) It carried out a direct comparison of the results of the two approaches and concluded that the Opex allowance was in line with the efficiency levels suggested by the top–down approach.384

(d) It stated that the top–down benchmarking review ‘reinforced’ its bottom–up approach,385 and added that its ‘benchmarking was as fair and robust as possible in assessing the relative efficiency of the NI GDNs’.386

4.225 On the basis of our assessment of the texts of the GD17 Final Determination and GD17 Decision taken in the round, we have found that the UR relied to some extent on the results of the top–down analysis as part of the evidence base used in determining the Opex allowance.

4.226 We found some inconsistencies between the UR’s contemporaneous documents and its submissions in this appeal. First, there was an inconsistency between the way the top–down analysis was presented in the text of the GD17 Final Determination and GD17 Decision – as having ‘informed’ the bottom–up approach387 – and the UR’s position during the appeal that it did not rely on the results of this analysis:

The situation is clear. The UR relied solely on the bottom–up assessment to propose allowances in its Draft Determination. It relied solely on the bottom–up assessment to set allowances in the Final Determination. It did not rely on the outputs of the top–down benchmarking.388

4.227 Moreover, the text of the GD17 Final Determination dedicated an extensive section to the description of the top–down analysis. Neither the GD17 Final Determination nor the GD17 Decision included any explicit statement that the top–down analysis was ‘not yet ready’ to be relied upon, as characterised by the UR during the appeal.389 In fact, in the GD17 Decision the UR stated that it was ‘in line with best practice’.390

383 GD17 Final Determination, paragraph 6.27.
384 GD17 Final Determination, paragraph 6.51.
385 GD17 Decision, paragraph 2.12.
386 GD17 Decision, paragraphs 2.13 and 2.14.
387 See, for example, GD17 Final Determination, paragraph 6.27 and GD17 Decision, paragraph 2.12.
388 UR R&O on NoA, paragraph 5.28.
389 UR R&O on NoA, W/S McHugh, paragraph 7.25(b).
390 GD17 Decision, paragraph 2.13.
4.228 It appears to us from the evidence that there were two ways in which the top–down analysis could have influenced the GD17 Opex allowance:

(a) The UR’s conclusion that there was scope to reduce FE’s Business Plan Opex costs within a range of 10.2 to 25.3% to reach an efficient level; and

(b) The ‘sense check’ between the top–down and bottom–up approaches that led the UR not to make corrections to the bottom–up approach.

4.229 On the first point, our assessment of the GD17 Final Determination and GD17 Decision shows that the UR relied on the top–down analysis to state that there was scope to reduce FE’s Business Plan Opex costs within a range of 10.2 to 25.3% to reach an efficient level. It is our view that the UR made an error in relying on the top–down analysis to reach this conclusion as the analysis was not sufficiently reliable, a matter that was not in dispute between the Parties.

4.230 On the second issue, the UR used as a sense check an analysis that was not sufficiently reliable to test its bottom–up approach. We have therefore found that the UR made an error, since the top–down analysis was not capable of delivering the sense check to the bottom–up analysis that the UR was seeking to achieve. The UR itself accepted that reliance could not be placed on the top–down benchmarking.391 We do not accept the distinction that the UR sought to draw between the benchmarking being sufficiently reliable for a ‘sense check’ and not being sufficiently reliable to base the Opex number on it. However, the evidence has shown that in practice, the sense check that was carried out did not in itself result in changes to the figures coming out of the bottom–up analysis and the resulting Opex allowance.

**Our conclusion on Ground 1A**

4.231 We agree with the Parties that the top–down analysis was not used directly to set the specific numbers for FE’s Opex allowance, which were computed on the basis of the bottom–up approach. This point was not disputed by the Parties.

4.232 However, we have concluded that the UR made an error in relying on the top–down analysis to conclude that there was scope to reduce FE’s Business Plan Opex costs by at least 10.2% and up to 25.3% to reach an efficient level, as

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391 For example, in UR R&O on NoA, W/S McHugh, paragraph 7.19, the UR stated that ‘by early 2016 we were not satisfied that this [i.e. the use of the top–down benchmarking together with a bottom–up estimation] was an approach that we ought to follow for the purposes of the Draft Determination’. Also, in paragraph 7.22 of the same document, the UR stated that ‘although we had given a lot of further thought to the issue of top–down benchmarking,… we were not satisfied that we ought to place reliance on it for the purpose of setting the Opex allowances of FE (or PNGL)’. 

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this analysis was not sufficiently reliable at the time of the GD17 Decision. We have also concluded that the UR made an error in relying on the top-down analysis to ‘sense check’ the results of the bottom-up approach.

4.233 Nonetheless, as noted in paragraph 4.195 above, FE did not seek any monetary relief in respect of Ground 1A, but stated that the alleged errors under Ground 1A contributed to each of the errors in Grounds 1B, 1D and 1E.\(^{392}\) We note that we have not found errors in the bottom-up analysis itself on the basis of Grounds 1B, 1D or 1E, and consequently we have not found the UR wrong in respect of Grounds 1B, 1D or 1E. Therefore, we have concluded that there were no errors in FE’s Opex allowance created by Ground 1A or to which Ground 1A contributed. In other words, the error we have found in respect of Ground 1A did not affect the overall level of the price control. We have concluded, therefore, that under Ground 1A the GD17 Decision was not wrong as to the Opex allowance.

4.234 Notwithstanding the above conclusion, we note that since the top-down analysis was not sufficiently reliable at the time of the GD17 Decision, we would expect the UR to conduct further work on any top-down approach that it may decide to use for future price control decisions, whether by way of a ‘sense check’ or otherwise to inform or determine the overall charge control.

**Observations on the GD17 process**

4.235 It is good regulatory practice to share the underlying data and workings of top-down benchmarking analysis with the firms in question in order to ensure that they have the opportunity to make properly informed representations. During this appeal it has come to our attention that the UR did not do so due to the confidentiality of the data relating to GB GDNs.

4.236 The UR submitted that it was not authorised to disclose the information and that it tried to encourage the GDNs to approach both Ofgem and their GB counterparts with a view to establishing data sharing arrangements. We acknowledge the difficulties involved, but we believe that, given the crucial importance of this information, sharing the necessary data is key to the development of a robust methodology and well tested outputs.

4.237 In future price controls, if the UR decides to use a top-down benchmarking analysis, it should make sure that it follows good regulatory practice. This includes providing firms with appropriate access to the methodology, data and the implementation of the analysis, and timely opportunity to comment at each

\(^{392}\) NoA, paragraph 4.7.
relevant stage of the work. In particular we would expect it to make
arrangements to ensure that it provides firms or their external advisers
appropriate access to the data and analysis while at the same time protecting
the confidentiality of the data in question.393

Conclusion on Ground 1

4.238 For the reasons given above, we have concluded that the GD17 Decision as
to the Opex allowance was wrong in respect of GIS costs and we allow the
appeal to that extent.394

4.239 We have not found the GD17 Decision to have been wrong under any of
Grounds 1B, 1D or 1E and we have concluded that there were no errors in
FE’s Opex allowance created by Ground 1A or to which Ground 1A
contributed. Accordingly, we do not allow the appeal, and we confirm the
GD17 Decision, to that extent.395

4.240 Chapter 8 (Remedies) sets out our proposed next steps following this
conclusion.

393 For example, this could involve organising data rooms.
394 Article 14D(4) of the Gas Order provides that the CMA may allow the appeal only to the extent that it is
satisfied that the decision appealed against was wrong.
395 Article 14D(5) of the Gas Order provides that to the extent that the CMA does not allow the appeal, it must
confirm the decision appealed against.
5. Ground 2: Connection incentive

Introduction

5.1 FE’s second ground of appeal concerns the connection incentive in the GD17 Decision.

5.2 The connection incentive is a mechanism through which the UR incentivises FE to drive connections to the gas network. In the GD17 Final Determination, the UR described the connection incentive as a per connection allowance to encourage the connection of domestic OO properties. The UR stated that this was unique to NI and was created due to initial difficulties in driving gas connections.\(^{396}\)

FE’s grounds of appeal on Ground 2

5.3 FE has submitted that the GD17 Decision on the connection incentive was wrong on the following grounds:\(^{397}\)

(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 NI, by setting OO connection targets at a level which cannot be achieved using the connection allowance provided for in GD17;\(^{398}\)

(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 OO 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;\(^{399}\)

(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 OO connection targets at a level which cannot be achieved using the connection allowance provided for in GD17;\(^{400}\) and/or

\(^{396}\) GD17 Final Determination, paragraph 6.115.
\(^{397}\) NoA, paragraph 2.25; some of those grounds are repeated at NoA, paragraph 5.9.
\(^{398}\) Article 14D(4)(a) and (b) Gas Order and Article 14(1) Energy Order. We note that Article 14(1) Energy Order goes on to add the requirement that the UR must do so in a way that is consistent with the fulfilment by the UR of the objectives in paragraphs (a) to (h) of Article 40 of the Gas Directive.
\(^{399}\) Article 14D(4)(a) and (b) Gas Order and Article 14(2)(b) Energy Order.
\(^{400}\) Article 14D(4)(a) and (b) Gas Order and Article 14(5)(a) Energy Order.
(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 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’. 401

5.4 More specifically, FE submitted that the UR had made the following errors in setting the connection incentive in GD17: 402

(a) Ground 2A: the ‘Connection Target Error’: FE submitted that the UR had used the unjustified assumption that 15% of OO properties passed would not connect in the long run (the 15% Assumption) 403 to set annual connection targets that FE was required to achieve for new OO 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) was unachievable having regard to the true efficient costs of OO connections in FE’s Licence Area; and

(b) Ground 2B: the ‘Non–Additionality Error’: FE submitted that the UR had arbitrarily determined, without any evidential basis and ignoring compelling evidence put forward by FE, that 25% of new customers would connect to FE’s network in the absence of any direct marketing or selling activities by FE, which meant that no connections allowance would be recoverable in respect of those connections.

5.5 FE submitted that the combined effect of the UR’s errors was a £1.67 million (in 2014 prices) reduction in its Opex allowance for GD17. 404

Background on setting the connection incentive

5.6 In GD17, the UR removed certain categories of cost from FE’s Opex allowance, including sales and marketing costs. Rather than making an allowance for those costs as part of FE’s Opex allowance, the amount that FE can recover for this type of cost depends on the level of OO connections it

401 Article 14D(4)(d) Gas Order and GD17 Decision, paragraph 2.40.
402 NoA, paragraph 5.8
403 We note that in some places FE and the UR referred to the assumption that 85% of OO properties passed would connect in the long run. This is exactly the same assumption, expressed differently. We refer to this as the 15% Assumption throughout to avoid confusion.
404 NoA, paragraph 5.10
makes during each year of the GD17 Period.\textsuperscript{405} FE’s total amount of allowable revenue therefore depends on its performance, in terms of the actual number of connections it makes to OO properties.

5.7 The UR set the amount of the connection allowance FE could receive for each OO property it connects. We do not go into the details of how the UR set the level of allowance per connection, since it did not form part of FE’s appeal. Table 6 below sets out the per connection allowance for GD17.

| Table 6: Level of per connection allowance for GD17 |
|-----------------|------------|------------|------------|------------|------------|------------|
|                 | 2017 £     | 2018 £     | 2019 £     | 2020 £     | 2021 £     | 2022 £     |
| Total allowance per connection | 700        | 670        | 650        | 620        | 600        | 570        |

Source: GD17 Final Determination, paragraph 6.141 and Table 31 (figures in 2014 prices)

5.8 The UR submitted that FE should not receive the per connection allowance for all OO properties that connect during GD17, since in its view there would be a certain number of OO connections that would occur in any event without any direct marketing or selling to those customers.\textsuperscript{406} It referred to those connections as ‘non–additional’, and did not allow FE to receive a per connection allowance for them.\textsuperscript{407}

5.9 The UR set a connection target for each year of GD17, based on its assumption of the number of connections FE could reasonably be expected to achieve. It set the number of non–additional connections at 25% of this connection target each year, meaning that FE would not receive any connection allowance for 25% of its target number of connections each year.

5.10 The UR also set a ‘collar’, such that where a GDN underperformed the annual connection target by more than 50%, it would receive only 25% of the per connection allowance for any OO property connected (above the number of connections for which FE would not receive an allowance under the non–additional connections condition).\textsuperscript{408} The collar does not form part of this appeal, so in the ensuing analysis it is only addressed where it is relevant to a particular point in question.

**Ground 2A – ‘The Connection Target Error’**

5.11 As noted in paragraph 5.9, the UR set a connection target for each year of GD17 as part of the connection incentive. The connection target was used to

\textsuperscript{405} GD17 Final Determination, paragraph 6.156.
\textsuperscript{406} GD17 Final Determination, paragraph 6.157.
\textsuperscript{407} Ibid.
\textsuperscript{408} GD17 Final Determination, paragraph 6.162.
calculate two aspects of the connection incentive: first, the number of non–additional properties that are not remunerated is set at 25% of the connection target; and second, the collar (described in paragraph 5.10) is triggered when FE achieves less than 50% of its connection target. The connection target is therefore a significant driver of the connection incentive.

**The UR’s Decision**

5.12 The GD17 Decision does not refer to the connection incentive in any detail beyond noting that the GD17 Final Determination included a connection incentive mechanism.409

**Level of the GD17 connection target**

5.13 In the GD17 Final Determination, the UR stated that it had set the GD17 connection target at 20,450 OO connections. For ease of reference, Table 7 below reproduces the connection target for each year of GD17 as set out in the GD17 Final Determination.

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>GD17 connection target</td>
<td>2,600</td>
<td>2,950</td>
<td>3,300</td>
<td>3,600</td>
<td>3,900</td>
<td>4,100</td>
</tr>
</tbody>
</table>

Source: GD17 Final Determination, paragraph 6.149

**Methodology for calculating the GD17 connection target**

5.14 The UR did not set out its methodology for calculating the connection target in the section of the GD17 Draft Determination relating to the connection target (in the Opex section).410

5.15 In the section of the GD17 Draft Determination relating to Capex, the UR stated that it had assumed that 85% of properties would connect to the network in the long run at a rate of 5% per annum of properties passed but not connected. The UR added that this was generally in line with the long-term connection rate that it had observed to that point in time.411 However, it was unclear from the GD17 Draft Determination whether this was also the methodology that was used for calculating the connection target for OO properties.

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409 See, for example, GD17 Decision, paragraph 3.42.
410 GD17 Draft Determination, paragraphs 6.69–6.75.
411 GD17 Draft Determination, paragraph 7.13.
5.16 The GD17 Final Determination did not set out explicitly the UR’s methodology for calculating FE’s connection target for OO properties. The section on Capex repeated the statement in the GD17 Draft Determination to the effect that the UR had assumed that 85% of properties would connect to the network in the long run at a rate of 5% per annum of properties passed but not connected.\textsuperscript{412}

5.17 In the section relating to the connection incentive, the UR cited the criticism by FE of how its connection target had been calculated and then responded to that criticism. In summary, FE had submitted to the UR that benchmarking against other utility networks demonstrated that the annual growth rate was likely to be less than 5% in the post GD17 Period and the modelling by the UR on the basis of an arbitrary 85% penetration figure was therefore unsupported.\textsuperscript{413}

5.18 The GD17 Final Determination responded to that criticism by stating that the 5% connection rate (of properties passed and not yet connected) was supported by an analysis of historical connection rates in both FE’s and PNGL’s areas and reflected local experience; and the 85% figure was an assumption that 15% of OO properties passed would not opt to connect in the long term – it was not a penetration rate.\textsuperscript{414}

5.19 This is the extent of the explanation in the GD17 Draft Determination and Final Determination of the UR’s methodology for calculating the connection target.

5.20 The UR did not set out, in the GD17 Draft Determination or the GD17 Final Determination, the rationale for its choice of the 5% annual connection rate and its assumption that 15% of OO properties passed would not connect in the long run.

\textit{FE’s submissions}

5.21 FE set out a number of matters in respect of which it submitted the UR had made errors. In our view, five matters raised by FE are key to our assessment and FE’s submissions on those matters are summarised below. FE also set out a number of other matters in relation to Ground 2A and we address those briefly in paragraph 5.102 below.

\textsuperscript{412} GD17 Final Determination, paragraph 7.21.
\textsuperscript{413} GD17 Final Determination, paragraph 6.148.
\textsuperscript{414} GD17 Final Determination, paragraph 6.149.
The 15% Assumption

5.22 As noted above, the UR’s connection target model assumed that 15% of OO properties passed would not connect to the gas network in the long run. FE’s main challenges to this are summarised below. We note that FE’s submissions were made by reference to the UR’s assumption that 85% of OO properties passed would connect in the long run. However, for ease of presentation in the ensuing analysis, we refer to the flipside, being an assumption that 15% of OO properties passed would not connect in the long run.

5.23 FE submitted that the UR did not explain how it had formulated its assumption415 and that there was an absence of objective evidence supporting the UR’s long-term connections assumption.416 It also noted that the UR did not provide any quantitative evidence to support the 15% Assumption.417 FE submitted that the 15% Assumption implied a considerably higher long term penetration rate than both the 2045 penetration rate it put forward in its Business Plan (65%), and the equivalent assumption used by the UR in GD14 (45% after 30 years).418

5.24 In addition, FE submitted that it was not clear what role the 15% Assumption played in determining the GD17 connection target, and how it related to the 5% annual connection rate.419 FE attempted to replicate its GD17 connection target based on the information provided by the UR in the published price control documents, but was unable to arrive at the same figures as the UR.420

5.25 FE also raised a concern that, while it was unclear from the UR’s published documents, it appeared that the 15% Assumption may have been derived from the UK gas penetration rate.421 FE noted that basing the assumption on the 85% UK gas penetration rate would be inappropriate, since the UK figure would comprise other categories besides OO properties within the domestic residential category (such as Housing Association (HA) and new build properties). It noted that basing the assumption on the UK figure would be inappropriate since the UK figure was the ratio of connections to domestic properties, rather than the ratio of connections to the number of properties

415 NoA, paragraph 5.30.
416 NoA, paragraph 5.40(e).
417 NoA, paragraph 5.16.
418 NoA, paragraph 5.15.
419 NoA, EW/S Kristensen 1, Tab 1, paragraph 3.3.
420 The difference between the GD17 connection target and FE’s estimate of the UR’s target was approximately 1.9%. See NoA, EW/S Kristensen 1, Tab 1, paragraphs 3.4 & 3.5.
421 NoA, paragraph 5.30.
It submitted that using the UK gas penetration rate was likely to overstate the level of connections FE could achieve in GD17.\textsuperscript{423}

\textbf{5.26} FE also submitted that the GD17 connection target was sensitive to changes in this assumption. It submitted that assuming that 50\% of OO properties passed would not connect in the long run resulted in a GD17 connection target 14\% lower than that set by the UR.\textsuperscript{424}

\textbf{5.27} Finally, FE submitted that the UR did not have regard to FE’s historic connections, which did not support the GD17 connection target, since they included HA properties and were based on a period in which FE significantly overspent its connection allowance.\textsuperscript{425} FE submitted that the UR should have had regard to this in formulating its GD17 connection target.\textsuperscript{426}

\textit{Housing Associations}

\textbf{5.28} FE submitted that HA properties were included in the connection incentive for GD14, but had been removed for GD17. FE stated that the UR had narrowed the class of properties covered by the connection incentive in GD17 so that it expressly excluded domestic premises which were owned by an HA.\textsuperscript{427} FE then submitted that it was inappropriate, therefore, to set a substantially higher target for new OO connections in circumstances where a significant part of the customer base by reference to historic growth performance had been excluded.\textsuperscript{428}

\textit{GD14 overspend}

\textbf{5.29} FE submitted that over the course of GD14, it overspent its connection allowance by £2.8 million, or 155\%, while falling short of meeting its connection target by 6\%.\textsuperscript{429} FE submitted that the size of FE’s overspend in GD14 was strong evidence that a further 22\% increase in FE’s OO connection targets for GD17 compared with its Business Plan proposal would result in an even larger overspend if FE were to try to achieve those connection targets.\textsuperscript{430}

\textsuperscript{422} NoA, EW/S Kristensen 1, Tab 1, paragraph 4.10.
\textsuperscript{423} NoA, paragraph 5.30.
\textsuperscript{424} FE R/S, EW/S Kristensen 2, Tab 1, paragraph 2.28.
\textsuperscript{425} NoA, paragraphs 5.32 and 5.35.
\textsuperscript{426} NoA, paragraph 5.37.
\textsuperscript{427} NoA, paragraph 5.41(c).
\textsuperscript{428} Ibid.
\textsuperscript{429} NoA, W/S Martindale, paragraph 11.17.
\textsuperscript{430} NoA, paragraph 5.36.
Availability of Government subsidies

5.30 FE submitted that Government subsidies can play an important role in reducing the upfront costs of customers switching to gas, but that the availability of such schemes during GD17 was uncertain. FE subsequently submitted that the Northern Ireland Sustainable Energy Programme, the Boiler Replacement Scheme and the Affordable Warmth Scheme were due to be subsumed into the new EnergyWise scheme and that there was a lot of uncertainty around EnergyWise. Following the main hearing, FE submitted evidence on the take-up of the three schemes mentioned above during the period 2013/14 to 2015/16. This showed that in each year, between 841 and 1,373 of FE’s customers that connected made use of these schemes. FE noted that this represented approximately 50% of the OO properties connecting to its network over the same period.

Relative price of oil vs. gas

5.31 FE submitted that, historically, gas had been cheaper than oil for domestic heating purposes, but that since 2012 the price of oil had declined, reducing the cost saving associated with using gas. FE noted that the recent fall in the price of oil had made it the cheapest source of domestic energy. Specifically, at the time it submitted its NoA, FE estimated that oil was about 30% cheaper than gas for heating an average three-bedroom home in Great Britain. It noted that should low oil prices persist, the incentive to switch to gas would continue to be limited. FE added that if customers expected oil to 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.

The UR’s submissions

5.32 As noted above, the UR did not set out clearly the methodology it used to set the connection target in its published documents. As a result, much of the UR’s methodology was revealed for the first time in the course of this appeal, and is summarised below.

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431 NoA, EW/S Kristensen 1, Tab 1, paragraph 5.12.
432 FE Hearing transcript, 9 March 2017, page 73.
434 NoA, EW/S Kristensen 1, Tab 1, paragraph 5.14.
435 NoA, EW/S Kristensen 1, Tab 1, paragraph 5.13.
436 NoA, EW/S Kristensen 1, Tab 1, paragraph 5.15.
The 15% Assumption

5.33 The UR submitted that the 15% Assumption was not taken directly from any particular penetration rate, but was ‘the UR’s expert judgement of an appropriate figure given the various information available’. Nonetheless, the UR outlined the evidence it considered supported its 15% Assumption, highlighting four pieces of quantitative evidence:

(a) The percentage of domestic properties in the UK that were connected to the gas network and used gas central heating was approximately 85%;

(b) By the end of 2015, 48% of OO properties passed by PNGL’s network were connected and the UR was not aware of any slowdown in new connections to PNGL’s network since then which could suggest that the 15% Assumption was materially inaccurate;

(c) In the Gas to the West Project, the Department for Enterprise, Trade and Investment had suggested a penetration rate of 70% of OO properties after 40 years. The UR submitted that it seemed a reasonable assumption that at least a further 15% of properties would connect at some point in the future; and

(d) Data from the Department of Energy & Climate Change suggested that 82% of domestic properties in England had access to a gas supply, with penetration rates likely to be in excess of that level.

How the 15% Assumption is used to calculate the connection target

5.34 The UR’s connection target model calculated the connection target using the following three steps:

(a) Step 1: For a given year, the model took the total number of OO properties passed by the end of that year, and multiplied by 85% (that is, by (1 minus the 15% of properties that were assumed never to connect)), to calculate the total pool of properties that could connect in the long run;

(b) Step 2: The model then subtracted the number of OO properties that had already connected by the end of the previous year, to establish the total

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437 UR R&O on NoA, paragraph 10.50.
438 UR R&O on NoA, W/S McHugh, paragraph 13.48(c).
439 UR R&O on NoA, W/S McHugh, paragraph 13.48(d).
440 UR R&O on NoA, W/S McHugh, paragraph 13.48(e).
441 UR R&O on NoA, W/S McHugh, paragraph 13.48(f).
442 UR R&O on NoA, W/S McHugh, paragraph 13.27 and UR’s connection target model spreadsheet.
pool of properties that were ‘available to connect’ in the year in question; and

(c) Step 3: The model then multiplied that number by the 5% annual connection rate (the proportion of those properties available to connect that were assumed to connect in any given year) to calculate the total OO connection target for that year.

5.35 Rather than estimate a value for the annual connection rate (the 5% figure used in step three above), the UR’s model used a ‘backcasting’ approach to find the value for this variable that best fitted FE’s historic connection data (over the period 2011 to 2015), given its assumption that 15% of OO properties passed would not connect in the long run.

5.36 This meant that if the 15% Assumption was increased, meaning that more OO properties were assumed never to connect (and therefore the pool of OO properties available to connect was decreased), the annual connection rate had to increase in order to fit the total number of connections in FE’s historic connections data, and vice versa.

5.37 The UR therefore submitted that FE overstated the importance of the 15% Assumption to the GD17 connection target. It noted that if the 15% Assumption was changed, the annual connection rate would also change. In the UR’s spreadsheet setting out its sensitivity analysis, increasing the assumption of the percentage of OO properties that would not connect in the long run from 15% to 30% resulted in an offsetting increase in the annual connection rate to 6.28%. The UR submitted that the overall impact of this change would be a 2.5% reduction in the level of the GD17 connection target. The UR clarified that it undertook this sensitivity analysis before the GD17 Final Determination.

443 The UR’s connection target model spreadsheet included two backcasting models using FE’s historic connection data; one that examined connections over the period 2005–2015, and another that examined connections only over the period 2011–2015. The UR clarified in the hearing that it derived the annual connection rate using the model based on FE’s connections during the period 2011–2015, on the basis that in the earlier period, FE prioritised industrial and commercial connections over domestic connections. The UR submitted that the later period was therefore more representative of the connections that could be expected during GD17. See UR hearing transcript, 9 March 2017, pages 40 & 42.

444 The UR did not mention this aspect of the connection target model in the published documents at all, and its existence became apparent only when the UR submitted the UR R&O on NoA.

445 UR R&O on NoA, paragraph 10.45.

446 UR’s connection target model spreadsheet.

447 UR R&O on NoA, paragraph 10.45.

448 UR Hearing transcript, 9 March 2017, page 42.
Housing Associations

5.38 The UR submitted that – in contrast to FE’s claims – HA properties were never included in the GD14 connection target. The UR R&O on NoA submitted that domestic properties owned by HAs were excluded from the connection incentive in GD17, but such premises were also excluded from the connection incentive in GD14. However, the UR did not appear to dispute FE’s claims during the appeal that the historic data on which the GD17 connection target was calculated included HA properties, noting only that it used the data FE provided.

GD14 overspend

5.39 The UR noted that it requested information from FE in January 2016 on its overspend in this area, but FE did not provide it with a satisfactory explanation of the reasons for its GD14 overspend on sales and marketing activities, or evidence that any overspend was efficient.

5.40 The UR also submitted that PNGL incurred significantly lower spend per connection than FE, indicating that FE’s spend on connections may not have been efficient. The UR submitted that for 2014, FE spent an average of £1,471 per connection, compared to an average of £365 per connection for PNGL.

5.41 The UR then noted that the broad discrepancy between FE’s performance and PNGL’s performance over the same period called into question FE’s efficiency in this area. The UR added that since it had not received a more detailed explanation of FE’s costs in response to its January 2016 information request, it had not been able to test this further.

5.42 The UR also submitted that any overspend may have been the result of FE wanting to ‘kick–start the market’, and would therefore not be required in GD17.

Availability of Government subsidies

5.43 In response to FE’s concerns about the uncertainty around the future availability of Government subsidies, the UR submitted that in the long term,

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449 UR R&O on NoA, paragraph 10.18.
451 UR R&O on NoA, W/S McHugh, paragraphs 13.64–13.68.
452 UR R&O on NoA, W/S McHugh, paragraph 13.67.
453 UR R&O on NoA, W/S McHugh, paragraph 13.68.
particular Government incentives to connect are withdrawn and other incentives are introduced.\textsuperscript{455} It stated that it could not predict with any certainty precisely what incentives would be available over the GD17 Period, but it seemed more likely than not that incentives would continue to be available.\textsuperscript{456}

**Relative price of oil vs. gas**

5.44 The UR noted that there can be significant variation in the relative prices of oil and gas over the course of a price control, and noted that there have been periods in which gas was cheaper than oil and vice versa. The UR therefore submitted that the GD17 connection target was based on historical connection numbers, which included connections over periods where oil had been cheaper than gas and when it had been more expensive.\textsuperscript{457}

5.45 The UR later submitted that there was ‘some limited connection’ between the relative price of oil vs. gas and connections, but that it was not ‘a big driver’ of connections.\textsuperscript{458} The UR also submitted that it considered boiler replacement to be more of a driver of connections than the relative price of oil and gas.\textsuperscript{459}

5.46 The UR also noted that while the fluctuation of oil and gas prices into the GD17 Period and beyond could not be known, the evidence put forward by Oxera\textsuperscript{460} on the price of oil and gas over the period 2006 to 2016 showed that oil prices had generally been higher than gas prices.\textsuperscript{461}

**Third party submissions**

5.47 We received representations from PNGL setting out its understanding that connections to HA properties were included in its GD14 connection target.\textsuperscript{462}

**Our assessment**

5.48 In this section we set out our assessment of the main issues raised in FE’s appeal under Ground 2A. We have found it useful to consider the inclusion of HA properties, GD14 overspend, availability of Government subsidies and the relative price of oil vs. gas before finally turning to the 15% Assumption. In

\textsuperscript{455} UR R&O on NoA, paragraph 10.94.
\textsuperscript{456} Ibid.
\textsuperscript{457} UR R&O on NoA, paragraph 10.98.
\textsuperscript{458} UR Hearing transcript, 9 March 2017, page 61.
\textsuperscript{459} Ibid and page 62.
\textsuperscript{460} NoA, EWS Kristensen 1, Tab 1, Figure 5.2.
\textsuperscript{461} UR R&O on NoA, paragraph 10.99.
\textsuperscript{462} PNGL Representation received 10 February 2017.
making this assessment, we have adopted the modelling approach used by
the UR during the GD17 process. Although FE criticised the model as being
overly simplistic,\textsuperscript{463} in our view the points raised by FE during the appeal did
not demonstrate that the UR’s model was not fit for the purpose for which it
was used. We have therefore focused instead on how the modelling approach
was applied in practice.

\textit{Housing Associations}

5.49 As noted above in paragraph 5.28, FE submitted that connections to HA
properties were included in its GD14 OO connections, but that these
properties were excluded from its GD17 OO connection target.\textsuperscript{464} FE
confirmed that the historic connections data (on which the UR based the
GD17 connection target) therefore included HA properties.\textsuperscript{465}

5.50 The UR submitted that the definition of HA property used by FE for
connections during GD14 was incorrect. It submitted that HA properties did
not form part of the GD14 connection target, and should therefore not have
been included in FE’s reported connections data. However, the UR did not
dispute FE’s claim that the data it used in its connection target model included
HA properties.

5.51 FE and the UR therefore appeared to have been working from a different
definition of OO properties for GD14. FE considered that this included HA
properties, whereas the UR did not.\textsuperscript{466} As a result, the historic connections
data used by the UR included HA properties, even though the UR did not
intend this.\textsuperscript{467}

5.52 In our view, since the UR’s connection target model forecasted future
connections on the basis of FE’s historic connections, and since HA
properties were not included in FE’s GD17 connection target, it was not
appropriate to use historic data that includes connections to HA properties.

5.53 We have therefore found that the UR made an error in using the historic
connections data that included HA properties in its connection target model.

\textsuperscript{463} FE Response to the Provisional Determination (FE R/PD), paragraph 3.17.
\textsuperscript{464} NoA, paragraph 5.35(b).
\textsuperscript{465} FE Hearing transcript, 9 March 2017, page 67.
\textsuperscript{466} The UR told us that the concept that HA properties should be considered OO properties had been raised only
during this appeal. See UR Hearing transcript, 9 March 2017, page 47.
\textsuperscript{467} We note also that, as set out in paragraph 5.47, PNGL also understood that connections to HA properties
were included in its GD14 connection target.
5.54 FE provided us with data on the number of HA properties passed and connected over the period 2005 to 2016. FE also confirmed that the OO properties passed for 2017 to 2026 used in the forecasting section of the UR’s model already excluded HA properties. As a result, we were able to re-run the UR’s connection target model using the connection data excluding HA properties provided by FE. We note that the UR has expressed concerns around the accuracy of the HA data. However, the dataset provided by FE is the only dataset available to us in determining this aspect of the appeal. Furthermore, the UR has not provided any evidence that undermines the validity of FE’s revised data.

5.55 Re-running the ‘backcasting’ section of the connection target model with the corrected number of OO properties connected (2010 to 2015) and passed (2011 to 2015), ie excluding HA properties, indicated that the appropriate annual connection rate based on FE’s historic connections was 4.9971% – very close to the 5% annual connection rate used by the UR.

5.56 Re-running the forecasting section of the model using this revised annual connection rate and with the corrected number of cumulative properties connected in 2015 and passed for the period 2016 to 2022 (which previously included HA properties) resulted in the following connection targets for GD17:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>2,468</td>
</tr>
<tr>
<td>2018</td>
<td>2,808</td>
</tr>
<tr>
<td>2019</td>
<td>3,134</td>
</tr>
<tr>
<td>2020</td>
<td>3,401</td>
</tr>
<tr>
<td>2021</td>
<td>3,655</td>
</tr>
<tr>
<td>2022</td>
<td>3,937</td>
</tr>
</tbody>
</table>

Table 8: GD17 connection target excluding and including HA properties

<table>
<thead>
<tr>
<th>Number of properties</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excluding HA properties</td>
<td>2,600</td>
<td>2,950</td>
<td>3,300</td>
<td>3,600</td>
<td>3,900</td>
<td>4,100</td>
<td>20,450</td>
</tr>
<tr>
<td>Including HA properties</td>
<td>2,468</td>
<td>2,808</td>
<td>3,134</td>
<td>3,401</td>
<td>3,655</td>
<td>3,937</td>
<td>19,403</td>
</tr>
</tbody>
</table>

5.57 Correcting for the error resulting from using historic connections data that included HA properties therefore resulted in a GD17 connection target of 19,403 – approximately 5% lower than the 20,450 set by the UR for GD17.

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468 FE, Letter to CMA, 20 March 2017, Annex A.
469 FE noted that the UR had made some ‘relatively minor adjustments’ to these figures from those it originally submitted (see FE email dated 28 March 2017). However, FE did not provide any evidence to demonstrate that the figures used in the UR’s model were wrong. We have therefore not made any changes to properties passed for 2017–2026.
470 In re-running the model, we used the data contained in the UR’s connection target model wherever possible, using the data provided by FE only for the number of HA properties passed and connected historically. For example, all figures for total (ie HA and non–HA) OO properties passed and connected came from the UR’s model, since – apart from the inclusion of HA properties – FE had not raised concerns with the data used in the UR’s model.
471 We note that FE told us when submitting the data that it had done the best in the time available to identify relevant HA properties (FE Letter to the CMA, 20 March 2017)
We calculated the impact of this error on FE’s connection allowance revenue using two different scenarios for the number of connections FE achieves. First, we assumed that FE would achieve its GD17 connection target set by the UR (of 20,450 connections); and second, we assumed that FE would achieve only the number of connections proposed in its Business Plan (16,724 connections). The results are set out in Table 9 and Table 10 below.

Table 9: Connection allowance revenue under different connection targets, if FE achieves its GD17 connection target of 20,450 OO connections

<table>
<thead>
<tr>
<th>Connection target</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,450 (GD17 target)</td>
<td>1.37</td>
<td>1.48</td>
<td>1.61</td>
<td>1.67</td>
<td>1.76</td>
<td>1.75</td>
<td>9.64</td>
</tr>
<tr>
<td>19,403 (corrected for HA error)</td>
<td>1.39</td>
<td>1.51</td>
<td>1.64</td>
<td>1.70</td>
<td>1.79</td>
<td>1.78</td>
<td>9.80</td>
</tr>
</tbody>
</table>

Source: CMA analysis

Table 10: Connection allowance revenue under different connection targets, if FE achieves its Business Plan proposal of 16,724 OO connections

<table>
<thead>
<tr>
<th>Connection target</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,450 (GD17 target)</td>
<td>1.27</td>
<td>1.21</td>
<td>1.17</td>
<td>1.15</td>
<td>1.28</td>
<td>1.27</td>
<td>7.33</td>
</tr>
<tr>
<td>19,403 (corrected for HA error)</td>
<td>1.29</td>
<td>1.23</td>
<td>1.20</td>
<td>1.18</td>
<td>1.31</td>
<td>1.29</td>
<td>7.50</td>
</tr>
</tbody>
</table>

Source: CMA analysis

Correcting for this error resulted in an increase in FE’s connection allowance revenue of approximately £165,000 under both scenarios.

While correcting for this error resulted in a different connection target, we could not conclude from this alone whether the UR’s decision to set the GD17
connection target at 20,450 was wrong. We had to consider the other elements of Ground 2A, before assessing whether the UR’s choice of connection target was wrong overall.

**GD14 overspend**

5.61 FE submitted that it significantly overspent its connection allowance during GD14, while still failing to achieve its connection target. It submitted that the UR’s connection target (which is 22% higher than that proposed by FE) would result in an even larger overspend in GD17.

5.62 In our view, if FE undertook significant, efficient overspend on connections in GD14 but was unable to achieve its GD14 connection target, the UR may have made an error in not considering this when setting the GD17 connection target. However, to find that the UR made an error, FE would need to demonstrate that this overspend would need to be repeated to achieve its GD17 connection target.

5.63 The UR noted that it requested information from FE on its overspend in this area, but said that FE did not provide it with a satisfactory explanation of the reasons for its GD14 overspend on sales and marketing activities, or evidence that any overspend was efficient.477

5.64 In addition, as noted above in paragraph 5.40, the UR submitted that the cost incurred for each connection by FE was considerably higher than the cost incurred by PNGL (£1,471 per connection for FE compared to £365 per connection for PNGL). As noted in paragraphs 5.41 and 5.42, the UR submitted that this called into question whether FE’s overspend was efficient, and whether any overspend would need to be repeated in GD17.

5.65 Notwithstanding differences between PNGL’s and FE’s Licence Areas, we agree with the UR that such a large difference in the sales and marketing spend per connection calls into question the efficiency of FE’s overspend in this area.

5.66 We recognise that there are differences between FE’s and PNGL’s Licence Areas. However, FE did not submit evidence on the specific impact of any differences on its sales and marketing costs such as to demonstrate that its significantly higher costs were efficient.

477 UR R&O on NoA, W/S McHugh, paragraphs 13.64–13.68.
5.67 Overall, FE did not provide any evidence in the course of this appeal that demonstrated either that its significant overspend in GD14 was efficient, or that it would need to be repeated in GD17 to achieve its connection target.

5.68 We have therefore reached the view that the UR did not make an error in not adjusting FE’s GD17 connection target to take account of FE’s reported overspend in GD14.

Availability of Government subsidies

5.69 FE submitted that the availability of Government subsidies can play an important role in reducing the upfront cost of connections.\(^{478}\) It noted that there was currently a degree of uncertainty around the availability of these incentives during GD17,\(^{479}\) and that the UR was wrong to set the connection target without taking this significantly into account.\(^{480}\)

5.70 In our view, the UR’s connection target may be wrong if it were the case that Government subsidies were available during the historic period on which the GD17 connection target was based, but could be expected not to be available to a similar extent during GD17. In addition, for the UR to be wrong on the connection target, FE would need to demonstrate that these subsidies played an important role in driving OO connections.

5.71 FE submitted that approximately half of the customers that connected to its network over the period 2013/14 to 2015/16 made use of Government subsidies. We consider it likely that had these subsidies not been available (or had more limited availability), the level of connections to the network would also have been lower. We therefore consider it likely that there is a link between the availability of Government subsidies and the number of connections to the gas network.

5.72 However, while we accept that there is uncertainty around the specific Government subsidy schemes that are likely to be available during the GD17 Period (as submitted by FE), FE has not demonstrated that these types of subsidy are less likely to be available during GD17 than they were during the period 2011 to 2015 on which the GD17 connection target is based.\(^{481}\)

\(^{478}\) NoA, paragraph 5.50(b).

\(^{479}\) Ibid.

\(^{480}\) NoA, paragraph 5.57.

\(^{481}\) In its response to the PD (FE R/PD, paragraph 3.24), FE disagreed with this finding. It noted that it is unclear to FE what more it could reasonably have done to demonstrate future uncertainty around the Boiler Replacement Scheme, Affordable Warmth Scheme and NISEP. However, as noted above, we do not consider it sufficient in this case for FE to demonstrate uncertainty around the future availability of subsidies. Rather, FE would have had to demonstrate that subsidies could be expected to be available to a lesser extent during GD17 than they were during the historic period on which its GD17 connection target was based.
5.73 We have therefore reached the view that the UR did not make an error in its decision not to make an adjustment to the connection target as a result of uncertainty in this area.

**Relative price of oil vs. gas**

5.74 FE submitted its case in fairly general terms: essentially that the currently high price of gas relative to oil reduces customers’ incentives to connect to the gas network.

5.75 In our view, to find that the UR had made an error in not adjusting the GD17 connection target, FE would need to demonstrate that the relative price of oil vs. gas was a significant driver of connections. It would also need to demonstrate that the relative prices of oil and gas during GD17 could be expected to be different to those during the historic period on which its GD17 connection target was based.

5.76 FE did not submit specific evidence showing that the relative price of oil vs. gas was a significant driver of connections. As noted above in paragraph 5.45, the UR submitted that the relative price of oil vs. gas was not a major driver of the level of connections, and that boiler replacement was the major driver of connections.

5.77 FE stated that the current price of oil was low relative to gas, which it submitted might result in reduced incentive for customers to switch to gas if it persisted (see paragraph 5.31 above). However, in our view the relevant question is not whether oil is currently cheap relative to gas, but whether the relative price of oil vs. gas could be expected to be different in GD17 to the relative price during the historic period on which the connection target was based. That is, whether FE’s historic connections during 2011 to 2015 were a good indicator of the connections that could reasonably be expected during the GD17 Period.

5.78 We did not receive any evidence from which we could infer that the relative price of oil vs. gas could be expected to be different during the GD17 Period from the historic period on which the GD17 connection target was based. We also note the UR’s point that it is impossible to know the future oil and gas prices.

5.79 As a result, our view is that the UR did not make an error in not making an adjustment to the connection target to take account of the relative price of oil vs. gas.
The 15% Assumption

5.80 As noted above, the UR submitted that the 15% Assumption was not taken directly from any observed penetration rate, but that it was based on its ‘expert judgement’, and provided some evidence it considered supported its assumption (addressed below). FE submitted that the UR did not have sound and robust evidence supporting its 15% Assumption, that this assumption was not an appropriate use of judgment, and that the connection model was essentially driven by a subjective view of this variable.

5.81 In our view, the key issues to resolve here are first, the extent to which the value of this variable was supported by evidence, and second, if the evidence is found to be lacking, the extent to which the UR was wrong to exercise its judgment in the manner it did.

5.82 As noted above, the UR submitted a range of evidence in the course of this appeal that it considered supported its choice of the 15% Assumption. Our view is that FE’s appeal has highlighted that the UR did not base this assumption on robust evidence for the following reasons:

(a) Regarding the UR submitting the UK penetration rate of 85% as evidence supporting its assumption, we note that the UR has itself acknowledged that (as submitted by FE) it would be inappropriate to base FE’s connections targets on this UK figure;

(b) On the figure cited by the UR that 48% of OO properties passed in PNGL’s Licence Area had connected by the end of 2015, our view is that this figure does not support the assumption that 85% of OO properties will connect in the long run. That is because achieving connections of 48% of OO properties passed after approximately 20 years could be consistent with a range of different figures for the 15% Assumption;

(c) We consider that the assumption that for Gas to the West 70% of properties passed would connect after 40 years provides only limited support for the 15% Assumption. First, it was only an assumption, not data on actual connections; and second, the penetration rate would need

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482 UR R&O on NoA, paragraph 10.50.
484 FE R/S, paragraph 4.13.
485 FE R/S, paragraph 4.16.
486 UR R&O on NoA, paragraph 10.49.
to increase substantially (by a further 15%) after 40 years if it were to reach the 85% implied by the 15% Assumption;

(d) Finally, the UR noted that 82% of properties in England have access to gas supply. It is not clear precisely to what this figure referred. The reference to this point in Mr McHugh’s Witness Statement was to FE’s Infill Allowances Plan Methodology,\(^{487}\) which cited this figure, but did not give a source. In addition, this figure seemed to be contradicted by the Office for National Statistics figures cited in FE’s Notice of Appeal, that demonstrated that only 9% of households in England were not connected to the gas network.\(^{488}\)

5.83 Our view is that the evidence put forward by the UR did not provide strong support for the UR’s specific figure of 15%, and pointed to the fact that a number of other figures could be equally appropriate.

5.84 Given the information cited by the Parties, we recognise that it was difficult to establish the value of this variable, and that some judgment was likely to be required in making this assumption. We now consider whether the UR was within its margin of appreciation in exercising its regulatory judgment to make this assumption when setting this variable.

5.85 We would expect assumptions that are major drivers of the price control to be based on robust evidence. However, we would not expect a regulator to expend significant resources in determining and fine–tuning a variable that is not a major driver of the price control.

5.86 We therefore considered the extent to which the 15% Assumption drove the connection target and FE’s connection revenue.

5.87 FE submitted that the GD17 connection target was sensitive to changes in this variable. As set out above in paragraph 5.26, FE submitted that had the UR assumed that 50% of OO properties passed would never connect, the GD17 connection target would have been 14% lower than that set by the UR.\(^{489}\)

5.88 In contrast, the UR submitted that the connection target was not sensitive to changes in the 15% Assumption, noting that assuming 30% of OO properties

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\(^{487}\) UR R&O on NoA, W/S McHugh, paragraph 13.48(f).

\(^{488}\) NoA, paragraph 5.19.

\(^{489}\) FE also highlighted that changing this assumption has a significant impact on the number of OO properties connected by 2045. We do not consider this to be a useful indicator, since GD17 concerns only the years 2017–2022.
passed never connected would result in only a 2.5% reduction in the GD17 connection target.490

5.89 We had concerns with the approaches taken by both Parties in undertaking their sensitivity analyses around this variable.491 We therefore undertook our own sensitivity analysis to establish the extent to which the 15% Assumption was a major driver of FE’s connection target and revenue.

5.90 Table 11 below sets out the connection targets that would result under a range of different assumptions about the percentage of OO properties passed that will not connect in the long run.492,493

490 UR R&O on NoA, paragraph 10.45.
491 In the UR Hearing, 9 March 2017, page 40, the UR set out that it based the annual connection rate used to determine the GD17 connection target on the 2011–2015 model of FE’s historic connections (and not the 2005–2015 model). In determining the annual connection rate required when making the assumption that 50% of OO properties passed will not connect in the long run, FE used the 2005–2015 model instead of the correct 2011–2015 model. This gave an annual connection rate of 8.8% instead of the correct value of 9.4% (see FE R/S, EWS Kristensen 2, Tab 1, footnote 10). As a result, FE’s approach significantly understated the connection target that would result from changing the 15% Assumption to 50%. The UR’s sensitivity analysis also appears to be based on the 2005–2015 model (see UR’s connection target model spreadsheet). In addition, neither party considered the impact on FE’s revenues.

492 This sensitivity analysis is based on the UR’s connection target model, with the HA properties removed (that is, correcting for the HA error outlined above).
493 As set out above (paragraph 5.35), the UR’s connection model calculated the annual connection rate that best fits FE’s historic connections data. In most cases, each value for the proportion of OO properties passed that will never connect does not have a single, unique annual connection rate that fits FE’s historic data. For example, for the assumption that 30% of OO properties passed will never connect, any annual connection rate between approximately 6.23064% and 6.23209% fits FE’s historic data. These small differences in the annual connection rate can cause small differences in the connection targets resulting from the model. Taking this example, using the values reported above for the annual connection rate gives a connection target of between 18,850 and 18,853 connections over GD17. For the purposes of our analysis, we have calculated the minimum and maximum annual connection rates that are consistent with FE’s historic connection data to four decimal places, and taken the mean of these two values. The connection targets are then calculated on the basis of these mean figures.
Table 11: Sensitivity of the connection target to changes in the 15% Assumption

<table>
<thead>
<tr>
<th>Proportion of OO properties passed that never connect (the &quot;15% Assumption&quot;) (%)</th>
<th>Annual connection rate (%)</th>
<th>Number of connections in each year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>2018</td>
</tr>
<tr>
<td>0</td>
<td>4.17</td>
<td>2,498</td>
</tr>
<tr>
<td>5</td>
<td>4.41</td>
<td>2,489</td>
</tr>
<tr>
<td>10</td>
<td>4.69</td>
<td>2,479</td>
</tr>
<tr>
<td>15</td>
<td>5.00</td>
<td>2,468</td>
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<tr>
<td>20</td>
<td>5.35</td>
<td>2,456</td>
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<tr>
<td>25</td>
<td>5.76</td>
<td>2,441</td>
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<tr>
<td>30</td>
<td>6.23</td>
<td>2,425</td>
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<tr>
<td>35</td>
<td>6.79</td>
<td>2,406</td>
</tr>
<tr>
<td>40</td>
<td>7.46</td>
<td>2,383</td>
</tr>
<tr>
<td>45</td>
<td>8.28</td>
<td>2,356</td>
</tr>
<tr>
<td>50</td>
<td>9.31</td>
<td>2,324</td>
</tr>
<tr>
<td>55</td>
<td>10.62</td>
<td>2,284</td>
</tr>
<tr>
<td>60</td>
<td>12.38</td>
<td>2,234</td>
</tr>
<tr>
<td>65</td>
<td>14.86</td>
<td>2,168</td>
</tr>
<tr>
<td>70</td>
<td>18.64</td>
<td>2,079</td>
</tr>
<tr>
<td>75</td>
<td>25.22</td>
<td>1,957</td>
</tr>
<tr>
<td>80</td>
<td>40.72</td>
<td>1,798</td>
</tr>
</tbody>
</table>

Source: CMA analysis of the UR’s connection target model

5.91 Table 11 above illustrates that even under a wide range of values for the 15% Assumption, the GD17 connection target does not vary significantly. For the purpose of this sensitivity analysis, we consider that the widest plausible range for the true value of this variable is somewhere between 10% and 50%.

5.92 Table 11 above shows that taking this wide range of potential values for the 15% Assumption gave a relatively narrow range of levels for the GD17 connection target (17,618 to 19,546).

5.93 While taking a wide range of values for the 15% Assumption resulted in a narrow range of connection targets, we were conscious that it is the impact of the connection target on revenue that mattered to FE. We therefore also

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494 We have not formed a view on the correct value for this variable. As a result, undertaking a sensitivity analysis necessarily requires a degree of judgment around the range of inputs we consider plausible. We consider that a figure below 10% is unlikely to be correct, although we note that the sensitivity analysis would be almost unaffected by choosing a lower figure (see Table 11 above). We also consider that a figure above 50% is unlikely to be correct, on the basis that this is approximately the level achieved by PNGL after just under 20 years of developing its network (see paragraph 5.33(b) above). While we recognise that the long term penetration rates for FE and PNGL may differ, we consider that taking the 20 year penetration rate for PNGL as the lower bound for FE’s penetration rate at year infinity appears conservative. We also note that this is the figure used by Mr Kristensen in his second Expert Report in considering the sensitivity of the connection target to the 15% Assumption. See FE R/S, EW/S Kristensen 2, Tab 1, paragraph 2.14.
considered the impact of changing the 15% Assumption on the revenue that FE receives from its connection allowance.

5.94 We calculated FE’s connection allowance over the GD17 Period using the low and high connection targets resulting from our sensitivity analysis on the 15% Assumption set out above (17,618 and 19,546 connections over the GD17 Period respectively).

5.95 We undertook this analysis using two different scenarios for the number of connections FE achieves. First we assumed that FE would achieve its GD17 connection target (of 20,450 connections). We then undertook the same analysis assuming that FE achieves only the number of connections proposed in its Business Plan (16,724 connections). Table 12 and Table 13 below set out the results.

Table 12: Connection allowance under different connection targets, if FE achieves its GD17 connection target of 20,450 OO connections

<table>
<thead>
<tr>
<th>Connection target</th>
<th>Connection allowance revenue (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
</tr>
<tr>
<td>17,618 (based on 50% assumption)</td>
<td>1.41</td>
</tr>
<tr>
<td>19,546 (based on 10% assumption)</td>
<td>1.39</td>
</tr>
</tbody>
</table>

Source: CMA analysis

Table 13: Connection allowance under different connection targets, if FE achieves its Business Plan proposal of 16,724 OO connections

<table>
<thead>
<tr>
<th>Connection target</th>
<th>Connection allowance revenue (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
</tr>
<tr>
<td>17,618 (based on 50% assumption)</td>
<td>1.32</td>
</tr>
<tr>
<td>19,546 (based on 10% assumption)</td>
<td>1.29</td>
</tr>
</tbody>
</table>

Source: CMA analysis

5.96 Table 12 and Table 13 above demonstrate that the narrow range of connection targets that resulted from taking a wide range of assumptions for the 15% Assumption also resulted in a narrow range of revenue for FE.

5.97 Table 12 demonstrates that if FE achieves its GD17 connection target as set by the UR (20,450 connections), taking a wide range of values for the assumption of the proportion of OO properties passed that will never connect to the network (10% to 50%) would result in a narrow range of connection allowance revenue. In this scenario, basing the connection target on the assumption that 10% of OO properties passed will never connect, FE would receive total connection revenues of £9.78 million. Basing the connection
target on the assumption that a full 50% of OO properties passed will not connect in the long run would result in connection revenues of £10.08 million. In this scenario, the range of connection allowance revenue is therefore £9.78 million to £10.08 million.

5.98 Table 13 demonstrates that if FE achieves only the number of connections proposed in its Business Plan (16,724 connections), taking the same wide range of values for the 15% Assumption as above would also result in a narrow range of revenue. In this scenario, basing the connection target on the assumption that 10% of OO properties passed will never connect, FE would receive total connection revenues of £7.48 million. Basing the connection target on the assumption that 50% of OO properties passed will never connect would result in connection revenues of £7.78 million. In this scenario, the range of connection allowance revenue is therefore £7.48 million to £7.78 million. The range of revenue in both cases is approximately £300,000.

5.99 This sensitivity analysis demonstrated that taking a wide range of values for the 15% Assumption resulted in a narrow range for both the connection target and FE’s resulting connection allowance revenue. This showed that taking a wide range of values for the 15% Assumption used in setting FE’s connection target resulted in a range of revenue equivalent to approximately 3 to 4% of FE’s connection allowance revenue. Our analysis demonstrated that this remains the case even if FE were to significantly under-achieve the connection target set by the UR.

5.100 Overall, we recognise that there is no single, clearly correct value for the assumption of the proportion of OO properties passed that would not connect in the long run. Therefore, some degree of judgment is required in setting its level. As set out above, we consider that the evidence put forward by the UR to support this assumption did not clearly support its chosen value of 15% (and, in our view, it could support a range of other levels for this assumption).

5.101 However, having undertaken the sensitivity analysis set out above, we have reached the conclusion that the 15% Assumption is not a major driver of the GD17 connection target and connection revenues. We also note that the UR undertook a sensitivity analysis of the impact of this variable on the GD17 connection target before publishing the Final Determination. In our view the UR was within its margin of appreciation in exercising its regulatory judgment to make this assumption when setting this variable. We have therefore concluded that the UR was not wrong to use the 15% Assumption.
Other issues

5.102 In addition to the points addressed above, FE raised a number of further concerns:

(a) **Area–specific issues:** FE raised a number of issues specific to its area that it considers affect customers’ propensity to connect. These include the sparsity of its network, its network’s relative immaturity compared to PNGL’s, and the high upfront cost of switching to gas coupled with low incomes in its Licence Area. We agree with the UR that since FE’s connection target is based on its own historic connections, these factors are implicitly taken into account by the UR’s connection target model. Therefore, while these factors may be drivers of connections, we have concluded that the UR did not make an error in not making further adjustments to FE’s connection target for these factors in setting FE’s connection target for GD17.

(b) **Circularity:** In his second Expert Report, Mr Kristensen submitted that the UR’s modelling was inherently circular since it relied on a ‘good fit’ to validate its parameter assumptions, but the modelling methodology was designed to achieve a ‘good fit’ for most values of the assumption of the proportion of OO properties passed that would not connect in the long run (by adjusting the annual connection rate). We do not agree that this makes the UR’s model circular. We recognise that for each value of the assumption of the percentage of OO properties passed that would not connect in the long run there will be a different annual connection rate that will provide a good fit with the historic data. However, as noted above, the GD17 connection target was relatively stable to changes in this pair of assumptions.

(c) **The connection incentive as a penalty mechanism:** Submissions from both Parties have covered whether the GD17 connection incentive includes a penalty for underperformance (aside from the collar described above in paragraph 5.10). FE clarified in the hearing that it raised this only to demonstrate that it is important to set the connection target correctly, and that the presence (or otherwise) of a penalty mechanism

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495 NoA, paragraph 5.46(b).
496 NoA, paragraph 5.41(b).
497 NoA, paragraph 5.46(a).
498 UR R&O on NoA, paragraph 10.47.
499 For example, even if the high upfront cost of connecting deters potential customers from doing so, this would also have been the case during the historic period on which the GD17 connection target was based.
500 FE R/S, EW/S Kristensen 2, Tab 1, paragraph 2.10.
501 NoA, paragraph 5.27, and UR R&O on NoA, paragraphs 10.32–10.34.
does not form part of FE’s appeal in itself. As a result, we have not found it necessary to form a view on whether the GD17 connection incentive includes a penalty mechanism.

(d) **Uniform distribution**: FE submitted that the UR’s model assumed a uniform distribution of OO property types within the FE Licence Area. FE submitted that it is highly unlikely that the 15% of OO properties that would not connect would be uniformly distributed across the FE Licence Area, and that since FE expanded into the most profitable areas first, FE’s network was now likely to expand into areas with a higher proportion of properties with a low propensity to connect. The UR noted that the properties available to be passed in future were larger on average than those already connected to FE’s network, which it submitted may have a higher propensity to connect. We were not persuaded by FE’s evidence that the pool of properties available to connect would have a materially different propensity to connect than those properties that had connected previously. We have therefore reached the view that the UR did not make an error in not adjusting the connection target to take account of this.

(e) **Future economic uncertainty**: FE submitted that the uptake of gas connections by OO properties may be adversely affected by the worsened macroeconomic outlook following the Brexit referendum. It submitted that the connection target set by the UR was therefore inconsistent with the economic prospects for NI. However, we agree with the UR’s assessment that it would be too speculative to assume that the UK leaving the EU would have a specific impact on connections and to make an adjustment to the connection target on that basis. As a result, we have reached the view that the UR did not make an error in not adjusting the GD17 connection target to account for economic uncertainty.

**Our conclusion on Ground 2A**

5.103 As set out above, we have concluded that the UR made an error in including HA properties in the historic data on which the GD17 connection target was calculated. In this section, we assess whether that error means that the

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503 NoA, paragraph 5.40(b).
504 NoA, EW/S Kristensen 1, Tab 1, paragraph 3.6 & 3.7.
505 UR R&O on NoA, W/S McHugh, paragraph 13.86.
506 UR R&O on NoA, W/S McHugh, paragraph 13.85.
507 NoA, paragraph 5.56.
508 UR R&O on NoA, paragraph 10.104.
connection target set by the UR and in consequence the GD17 Decision on the connection incentive was wrong.

5.104 We recognise that there is no single, correct value for the connection target. As set out above, we concluded that taking a wide range of values for the 15% Assumption gives a narrow range for the connection target (and associated revenues). Given the uncertainty around the correct value for the connection target (as evidenced by the wide range of potential values for the 15% Assumption, for example), we would be unlikely to find a connection target that falls within this range to be wrong. However, we note that the UR’s connection target (20,450) falls outside the range indicated by the sensitivity analysis on the 15% Assumption. This is despite the fact that we took as wide a range of values for this variable as we considered plausible.509

5.105 Our analysis demonstrates that correcting for the HA error would result in a connection target of 19,403 over the GD17 Period. This is more than 1,000 connections lower than the target set by the UR. As set out above in paragraph 5.59, the direct impact of the error that resulted from the UR incorrectly including HA properties in its connection target model is a reduction in FE’s connection allowance revenue of approximately £165,000.

5.106 In its response to the provisional determination, the UR raised the issue of materiality. As explained in chapter 3, in determining whether an error is material, the question must be decided on a case–by–case basis taking into account the particular circumstances of each case.510

5.107 In our view, Ground 2 covers an important area of the GD17 price control which is at the heart of the UR’s objectives for GD17: that the connection target is set in a manner that encourages OO properties to connect to the gas network. FE’s evidence has shown that there was a clear data error in the model used by the UR in setting the GD17 connection target. In our view, as a point of regulatory principle, such data errors (and ensuing calculation errors) when making important decisions should generally be corrected. We would expect the UR to accept this as a matter of principle.

5.108 In response to our provisional determination, the UR submitted that it would be a highly unsatisfactory regulatory precedent if the CMA were to conclude that an issue of such small value, caused by the inaccuracies in data provided

509 The UR stated in its response to the provisional determination (UR R/PD, paragraphs 5.20 to 5.23) that the higher figure for connections remains appropriate because a greater proportion of properties passed will be larger and the propensity to connect is higher for these properties. We consider that if this were an important factor driving connections in GD17, it should have been taken into account during the GD17 process. Therefore, it is not appropriate to base a conclusion that the UR’s target remains appropriate on the basis of this factor.

510 See paragraph 3.25.
by a company, could lead to a decision being wrong.\textsuperscript{511} We do not agree with the framing of the proposition as put by the UR. In this case, the underlying cause of the error lay in the ambiguity around the definition of OO properties.\textsuperscript{512} Furthermore, the error comprised the use of the wrong data (which would be straightforward to correct), rather than the exercise of regulatory judgment (being a matter in respect of which the CMA would ordinarily apply appropriate restraint).\textsuperscript{513}

5.109 In summary, we conclude that the UR used incorrect HA data, the resulting connection target set by the UR was outside the range indicated by our sensitivity analysis on the 15\% Assumption, and correcting for the HA error would result in a connection target more than 1,000 connections lower than the target set by the UR. In our view, the error relates to a matter of regulatory principle: data errors (and ensuing calculation errors) when making decisions on an important area of the price control which is at the heart of the UR’s objectives should generally be corrected. In view of the foregoing, in the circumstances of this case, we conclude that the error in question was material. We set out at the end of this chapter the reasons by reference to the statutory grounds for our conclusion that the GD17 Decision on the connection incentive was consequently wrong.

\textbf{Observations on the GD17 process}

5.110 The appeal has highlighted a number of process issues where, in our view, the UR fell short of the high standards expected from a regulator.

5.111 We note that the UR did not set out clearly in any published documents the methodology it used to calculate the connection target. As set out above, there is a brief description of the UR’s methodology in the Capex section of the Final Determination. However, as demonstrated by FE’s appeal, this was not sufficient for FE to understand and replicate the UR’s methodology.

5.112 In addition, the UR’s published documents did not make any mention of its backcasting model, whereby the 5\% annual connection rate is derived from FE’s historic connections. The existence of this model became apparent only during the course of this appeal. This is a major part of the connection target model. Indeed, our conclusion above that the connection target and revenue

\begin{footnotesize}
\textsuperscript{511} UR response to amended PD (UR R/APD), paragraph 2.8.
\textsuperscript{512} In this regard, we note also that both FE and PNGL understood that their GD14 connection targets included HA properties, and submitted their connections data accordingly (see FE Hearing transcript, 9 March 2017, page 67 and PNGL Representation received 10 February 2017, pages 5–7).
\textsuperscript{513} See paragraph 3.20(f) which sets out the principle that where the decision of the regulator requires an exercise of judgment, the CMA should apply appropriate restraint and should not interfere with the regulator’s exercise of judgment unless satisfied that the regulator was wrong.
\end{footnotesize}
are not sensitive to changes in the 15% Assumption is the result of the annual connection target changing in an offsetting manner. Without knowledge of the existence of the backcasting model, FE could not have known this ahead of submitting its appeal.

5.113 Furthermore, the UR stated in its Defence that the methodology used was sufficiently straightforward that ‘FE’s consultant seems to have had no difficulty in reproducing the methodology which was used’, a comment it repeated in the hearing. However, we note that FE’s consultant was unable to reproduce the UR's precise numbers.

5.114 Even if FE’s consultant had been able to replicate the UR’s methodology, we note that this was only during the course of the appeal. We do not consider this to be a suitable substitute for setting it out clearly during the course of the price control process. This is especially the case since the whole model (including all of the data) used to calculate FE’s connection target could have been shared with FE without concerns around confidentiality.

5.115 We also note that FE requested the underlying modelling behind the UR’s Opex calculations (of which the connection incentive is part) following the GD17 Draft Determination, but we understand that the UR did not provide it. It is not clear why the UR did not share its connection target model in response to FE’s request during the price control process.

5.116 In addition, it is quite possible that had the UR shared its model with FE during the price control process, the HA error would have been identified before the GD17 Decision.

5.117 Overall, it is our view that there was such an absence of information during the price control process on the UR’s methodology for calculating the connection target that FE was not in a position to understand the method used to calculate this important part of the connection incentive and thereby potentially to obviate the necessity for an appeal.

5.118 More generally, we would note that as matters unfolded in this appeal, we would have expected the UR to have expressed a willingness to correct what emerged to be a straightforward error in the underlying data. We are concerned that it did not do so.

514 UR R&O on NoA, paragraph 10.58.
515 UR Hearing transcript, 9 March 2017, page 70.
516 See paragraph 5.24.
517 FE R/S, paragraph 4.9.
Ground 2B – ‘The Non–Additionality Error’

5.119 As set out above in paragraph 5.9, in each year, 25% of FE’s connection target was considered ‘non–additional’, meaning that FE would not receive the per connection allowance for these properties. For example, in 2017, when FE’s connection target is 2,600 OO connections, FE will not receive any connection allowance for its first 650 OO connections (25% of 2,600).

5.120 As noted in paragraph 5.11 above, aside from determining when the collar is triggered, the only other role of the connection target in the connection incentive is to determine the number of connections to which the non–additionality assumption should be applied. The non–additionality assumption is therefore as significant a driver of FE’s connection allowance as the connection target.

The UR’s Decision

5.121 The GD17 Decision did not mention the 25% non–additionality rate. Reference to the non–additionality number was made only in the GD17 Draft Determination and the GD17 Final Determination.

5.122 The UR did not set out in the GD17 Final Determination the reasoning behind its assumption that 25% of FE’s connection target would connect absent any sales and marketing spend.

5.123 The GD17 Final Determination noted that the 25% rate is the same one that was used during GD14, and that it is lower than the figure set for PNGL, to recognise the fact that FE’s network is less developed.518

FE’s submissions

5.124 FE submitted that the UR had 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 GD14.519 It added that the list of points put forward by the UR as evidence in its Defence was ‘entirely anecdotal and unsubstantiated’.520

5.125 FE cited two pieces of evidence it considered supported its claim that the UR was wrong in setting the non–additionality rate at 25%:

518 GD17 Final Determination, paragraph 6.159.
519 NoA, paragraph 5.71.
520 FE R/S, paragraph 4.48.
(a) FE noted that it carried out a trial, whereby it did not undertake any sales visits or other advertising in a newly served area of 200 properties for a period of five months. It noted that during this period, essentially no customers switched to gas where no marketing activities were conducted;\(^{521}\) and

(b) FE also undertook some market research that in its view demonstrated that the 25% non–additionality number was wrong. FE submitted that in a survey of oil customers in FE’s Licence Area, among respondents who had seen advertising, 24% were interested in switching, a rate eight times higher than the proportion of people who had not been exposed to advertising (3%).\(^{522}\)

5.126 FE submitted that the true non–additionality rate was much lower than 25% and was likely to be closer to the 5% figure included in its Business Plan.\(^{523}\)

**The UR’s submissions**

5.127 In its Defence, the UR submitted the range of evidence it considered supported its assumption that 25% of the annual connection target would connect in each year without any allowance for sales and marketing. It submitted that:

(a) ‘A number of commercial and other organisations have now been advertising gas for a period of 20 years. Familiarity with gas as a fuel has built up over that period’;\(^{524}\)

(b) ‘Gas suppliers are now competing for customers in the area and will be conducting sales and marketing activities in relation to the services they offer’;\(^{525}\)

(c) ‘Consumer bodies such as Which [sic] and the CCNI provide readily accessible information about gas’;\(^{526}\)

(d) ‘Press coverage on the development of the gas network in Northern Ireland has been considerable in recent years’;\(^{527}\)

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\(^{521}\) NoA, paragraph 5.72(b).

\(^{522}\) NoA, W/S Martindale, paragraph 11.23.

\(^{523}\) NoA, paragraph 5.75.

\(^{524}\) UR R&O on NoA, W/S McHugh, paragraph 13.54(a).

\(^{525}\) UR R&O on NoA, W/S McHugh, paragraph 13.54(b).

\(^{526}\) UR R&O on NoA, W/S McHugh, paragraph 13.54(c).

\(^{527}\) UR R&O on NoA, W/S McHugh, paragraph 13.54(d).
(e) ‘The government substantially supports gas as a fuel. The Department for the Economy's website includes information indicating the benefits of gas’; 528

(f) ‘In our experience of the customer base of the Northern Ireland gas industry, the power of word–of–mouth messaging is considerable, both in smaller communities and across Northern Ireland as a whole. When one household converts to gas, they are likely to tell family, friends and neighbours about their experience’; 529

(g) ‘Persons resident in the licence area commute or otherwise travel to the Greater Belfast area on a regular basis and will notice the marketing of gas in that area’; 530

(h) ‘Even within the licence area, PNGL’s marketing activities that get national coverage are likely to have an impact on persons residing in the area. For example, PNGL have previously conducted television advertising on national television and are currently undertaking a radio advertising campaign on Cool FM, which is a national radio station. This advertising will promote gas in FE’s area’; 531 and

(i) ‘The circumstances set out above of required boiler replacement, change of ownership and renovation will each mean that the property owner in question is incentivised to proactively seek out information about potential options for switching to gas, rather than relying on receiving sales and marketing materials. As noted above, assuming a uniform distribution of boiler replacements over time, 5% of properties which use oil fuel will need to replace their boiler every year and it may be cheaper to switch to gas (in addition to the other benefits)’. 532

5.128 The UR also submitted that experience of withdrawing the connection allowance for PNGL’s I&C customers supported its decision. It noted that when PNGL’s connection incentive was withdrawn from connections to I&C properties, there was no dramatic reduction in the level of connections. It submitted that, although it was not a perfect comparison, it considered that this provided useful evidence that could be compared with the incentive for OO connections in FE’s area, given the small size of the business customers involved. The UR added that it supported the 25% assumption as being

528 UR R&O on NoA, W/S McHugh, paragraph 13.54(e).
529 UR R&O on NoA, W/S McHugh, paragraph 13.54(f).
530 UR R&O on NoA, W/S McHugh, paragraph 13.54(g).
531 UR R&O on NoA, W/S McHugh, paragraph 13.54(h).
532 UR R&O on NoA, W/S McHugh, paragraph 13.54(i).
reasonable and raised significant doubts about FE’s proposition that gas connections would collapse if customers were not targeted by advertising.\textsuperscript{533}

5.129 Finally, the UR provided some analysis based on connections in the Republic of Ireland that it considered supported the 25% non–additionality rate. It submitted that 4,676 ‘one off residential’ properties connected to the gas network in the Republic of Ireland in 2014, which it said is 1.83% of the properties available to connect (using the 15% Assumption). It submitted that these connections were achieved ‘without any spend by the network operator on sales, marketing or incentives’. The UR submitted that this supported the 1.25% implied by the 25% assumption (that is, 25% of the 5% of available OO properties that are assumed to connect each year).\textsuperscript{534}

\textit{Our assessment}

5.130 The assumed non–additional connections rate is a key driver of FE’s connection allowance revenue. As a result, we consider that it is crucial that it is based on robust evidence.

5.131 By way of illustration, reducing the non–additionality rate from 25% to 20% would have the same impact on FE’s revenue as reducing FE’s connection target by 20% (from 20,450 to 16,360 – below the level proposed by FE in its Business Plan).\textsuperscript{535} That is, a minor change in this variable has a greater impact on the connection allowance than the difference between the UR’s and FE’s views on the appropriate connection target.

5.132 Furthermore, adopting FE’s proposed non–additionality rate of 5% would result in more than £2.5 million additional connection allowance revenue for FE over the GD17 Period – an increase of over 25%.\textsuperscript{536}

\textit{Assessment of FE’s evidence}

5.133 As regards the Loughgall trial, we agree with the UR’s submission that this trial was on too small a scale and/or for too short a duration to give any meaningful evidence.\textsuperscript{537} As regards the market research undertaken by FE,

\textsuperscript{533} UR R&O on NoA, W/S McHugh, paragraphs 13.55 & 13.56.
\textsuperscript{534} UR R&O on NoA, W/S McHugh, paragraph 13.57.
\textsuperscript{535} Assuming that FE achieves at least 50% of its connection target each year, meaning that the collar is not triggered.
\textsuperscript{536} Again, assuming that the collar is not triggered.
\textsuperscript{537} Taking the UR’s methodology for calculating the connection target, in the first year after passing these 200 OO properties, 170 properties would be ‘available to connect’. Of these, 5% (8.5 properties) would connect during the year if FE was engaging in advertising and sales activity. Over the five months of the trial (assuming properties could be expected to connect at a constant rate throughout the year), 3.5 OO properties could therefore be expected to connect. Taking the UR’s assumption that 25% of these properties would have
we agree with the UR that the sample sizes and questions asked do not provide robust evidence on the correct level of non–additionality. Overall, in our view the evidence put forward by FE in support of its proposed non–additionality number of 5% is not sufficient in itself to demonstrate that the UR was wrong.

5.134 However, we acknowledge that FE attempted to gather evidence to support its proposed non–additionality rate of 5% using two widely accepted approaches – a natural experiment and market research. We consider that FE has made the case that alternative approaches were available to obtain evidence for a non–additionality assumption.

Assessment of the UR’s evidence

5.135 We note that the UR did not set out the evidence on which it based the 25% non–additionality rate in any of its published documents. In addition, we are unaware of any attempt by the UR to gather quantitative evidence of a type similar to that provided by FE (eg a survey) to support its assumption. In our view, the UR could and should have done more evidence–gathering or analysis of this nature in formulating the 25% non–additionality assumption.

5.136 We agree with FE that the evidence submitted by the UR (outlined above in paragraph 5.127) is anecdotal, and does not in any way support a figure of 25%. We do not set out our assessment of each of the points raised by the UR, since our assessment is substantially the same for each. It may be said that some of the UR’s evidence set out in paragraph 5.127 could be used to support a finding that some OO properties would connect absent spending on sales and marketing (ie the number should not be 0%). However, there is nothing in the UR’s evidence that would support the UR’s specific non–additionality rate of 25%. In our view, the evidence put forward is potentially consistent with a wide range of different values for the non–additionality rate.

5.137 We do not place much weight on the evidence from removing the connection allowance for PNGL’s I&C customers, as we consider that the behaviour of firms is likely to be different to that of domestic customers. Furthermore, the UR did not provide any evidence that demonstrates that this category of customer provides a useful comparison for OO properties.

connected absent advertising or sales activity, we would have expected less than one property to connect during the five month trial.

538 The question on which FE relied asked participants the extent to which FE’s advertising increased their likelihood of switching; it did not assess the extent to which customers that had not seen advertising were likely to switch.
5.138 The UR also pointed to evidence from the Republic of Ireland that in its view supports its assumption that 25% of FE’s connection target should be considered non-additional. We note that this is the only quantitative evidence offered by the UR to support its 25% non-additionality assumption. We have a number of concerns with this piece of evidence, as set out below.

5.139 First, the UR’s analysis relied on the connections in the Republic of Ireland being achieved without advertising on the part of the network company. However, FE submitted evidence at the Hearing on 14 March 2017 showing that Gas Networks Ireland does advertise, specifically targeting customers that are not connected to the network.

5.140 Second, we note that there is competition in the supply market for gas in the Republic of Ireland. Unlike in NI, where FE is the single supplier to domestic properties in the FE Licence Area, in the Republic of Ireland, there are several companies competing in the market for the supply of gas to customers, and these companies advertise to attract customers. The UR submitted that, rather than advertising gas and the benefits of gas, supply companies in the Republic of Ireland advertise their brand (the UR noted that one supply company ‘advertise[s] with an orangutan, for example’).

5.141 However, in our view, advertising undertaken by gas supply companies in the Republic of Ireland is likely to increase potential customers’ awareness of gas, and is therefore likely to have an impact on the level of connections to the gas network. As a result, we consider that it cannot be assumed that all connections in the Republic of Ireland should be considered non-additional.

5.142 Third, it is also not clear how the UR derived its 1.83% figure. While the UR included a reference to the number of properties that connected in the Republic of Ireland in 2014, it did not include a reference to the number of properties passed, which would be required to calculate the connection rate. As a result, we were unable to verify this calculation.

5.143 These factors in our view call into question the UR’s assumption that the total number of OO connections (or equivalent) in the Republic of Ireland are equivalent to the number of connections that would result without any sales or advertising spend from FE.

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538 Gas Networks Ireland owns, operates, builds and maintains the natural gas network in Ireland.
540 FE submitted a printout showing a number of Gas Networks Ireland’s social media campaigns aimed at encouraging customers to connect to gas.
541 Document provided in FE hearing on (14 March).
542 As set out by the UR in the hearing. See UR Hearing Transcript, 9 March 2017, page 66.
544 Ibid.
5.144 Overall, we concluded that the evidence submitted by the UR does not support the specific 25% non–additionality rate chosen by the UR.

5.145 In its response to the provisional determination, the UR stated that it viewed the non–additionality mechanism as part of an overall package forming the incentive mechanism. It noted that it included a ‘new area’ allowance in the GD17 Final Determination in response to concerns raised by the GDNs in response to the GD17 Draft Determination regarding the non–additionality mechanism. This ‘new area’ allowance is an uplift on the per connection allowance. We have not considered this point in reaching our decision on Ground 2B since the level of the per connection allowance did not form part of the appeal.

Our conclusion on Ground 2B

5.146 We have concluded that the evidence submitted by the UR does not support its decision to set the non–additionality rate at 25%, or indeed any other specific figure. In our view, the evidence used to support the UR’s 25% non–additionality rate is potentially consistent with a wide range of different values for the non–additionality rate.

5.147 The evidence that has emerged during the appeal has exposed a significant lack of rigour in the UR’s approach to determining the non–additionality assumption. FE’s appeal has demonstrated that methodologies (such as surveys) were available to gather evidence as to this assumption. Our assessment of FE’s case, and the UR’s response, leads us to conclude that the UR did not make use of these or any alternative methodologies in making its assumption. We have therefore reached the view that the UR made an error when it decided to make an adjustment for non–additionality which was not based on evidence, in circumstances in which it could and should have sought to obtain evidence on which to base its decision.

5.148 Furthermore, small changes in the non–additionality rate have a significant impact on FE’s revenue (as noted above in paragraphs 5.131 and 5.132). We therefore consider that the error made by the UR in respect of the non–additionality assumption has a significant impact on the overall price control, and is thus a material error.

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545 UR R/PD, paragraph 6.23.
546 GD17 Final Determination, paragraph 6.141.
5.149 We have therefore reached the conclusion that the UR’s decision to set the non–additionality rate at 25% was wrong, as the basis for the UR’s approach has been so fundamentally undermined that it cannot stand.547

5.150 We set out below the reasons by reference to the statutory grounds for our conclusion that the GD17 Decision on the connection incentive was consequently wrong. The question of what decision should be substituted for the GD17 Decision, to the extent that it was wrong, is addressed below in the chapter on remedies.

Statutory Grounds of Appeal – Ground 2A and Ground 2B

5.151 The UR in the GD17 Final Determination stated that the aim of the connection incentive is to encourage the connection of OO properties, and was created due to initial difficulties in driving gas connections in NI.548

5.152 Accordingly, in our view, setting the correct connection incentive is a matter that is covered by the UR’s principal objective to promote the development and maintenance of an efficient, economic and coordinated gas industry in NI;549 having regard to the the need to secure that licence holders are able to finance their activities.550 It is also a matter covered by the UR’s statutory duty to promote the efficient use of gas and efficiency and economy in the conveyance, storage or supply of gas;551 and it is also covered by the stated effect of the licence modifications 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 [sic] activities’;552

5.153 Therefore, in our view,

(a) as regards Ground 2A –

547 As set out in paragraph 3.20(d), usually an appellant will succeed by demonstrating the flaws in the decision and the merits of an alternative solution. However, the courts have not ruled out the possibility that there could be a case in which an appellant succeeds in so undermining the foundations of a decision that it cannot stand, without establishing what the alternative should be. In such a case, if there is no other basis for maintaining the decision, the CMA would be at liberty to conclude that the decision was wrong but that it could not say what decision should be substituted. For the reasons set out above, the present appeal is such a case. The fact that we did not find the evidence put forward by FE was sufficient to support its proposed non–additionality number of 5% is not fatal to FE’s appeal.

548 GD17 Final Determination, paragraph 6.115.
549 Article 14(1) Energy Order.
550 Article 14 (2)(b) Energy Order.
551 Article 14(5)(a) Energy Order.
552 GD17 Decision, paragraph 2.40.
(i) to the extent that it is based on incorrect data, the connection target set by the UR falls short of the UR’s principal objective, its statutory duties and the stated effect in the GD17 Decision;

(ii) we note also that the HA error resulted in the UR setting a connection target higher than it would have absent the error, and hence FE receiving lower connection allowance revenue. In our view, this falls short of the UR’s statutory duty to have regard to the need to secure that licence holders are able to finance their licensed activities;

(b) as regards Ground 2B –

(i) setting a non–additionality rate on a basis that has been so fundamentally undermined that it cannot stand falls short of the UR’s principal objective, its statutory duties and the stated effect in the GD17 Decision;

(ii) we note also that the non–additionality rate is a major driver of FE’s connection allowance revenue. As a result, setting the non–additionality rate on a basis that has been so fundamentally undermined that it cannot stand risks FE receiving less revenue than it should. In our view, this falls short of the UR’s statutory duty to have regard to the need to secure that licence holders are able to finance their licensed activities.

5.154 In view of the foregoing, we have decided that, by setting OO connection targets on the basis of incorrect data (Ground 2A) and/or by setting the OO 25% non–additionality rate on a basis that has been so fundamentally undermined that it cannot stand (Ground 2B), the GD17 Decision on the connection incentive was wrong on the following grounds (taken individually, or in any combination):

(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 NI;\textsuperscript{553}

(b) the UR failed properly to have regard to and/or to give appropriate weight to the need to secure that licence holders are able to finance their licensed activities;\textsuperscript{554}

\textsuperscript{553} Article 14D(4)(a) and (b) Gas Order and Article 14(1) Energy Order.

\textsuperscript{554} Article 14D(4)(a) and (b) Gas Order and Article 14(2)(b) Energy Order.
(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 and economy in the conveyance, storage or supply of gas;\textsuperscript{555}

(d) the connection incentive modifications failed 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 [sic] activities’.\textsuperscript{556}

**Conclusion on Ground 2**

5.155 For the reasons given above, we conclude that:

(a) In respect of Ground 2A (the ‘Connection Target Error’), the GD17 Decision was wrong as regards the connection target set by the UR.

(b) In respect of Ground 2B (the ‘Non–Additionality Error’), the GD17 Decision on the UR’s 25% non–additionality rate was wrong.

5.156 Accordingly, we allow the appeal to that extent.\textsuperscript{557}

\textsuperscript{555} Article 14D(4)(a) and (b) Gas Order and Article 14(5)(a) Energy Order.

\textsuperscript{556} Article 14D(4)(d) Gas Order and GD17 Decision, paragraph 2.40.

\textsuperscript{557} Article 14D(4) of the Gas Order provides that the CMA may allow the appeal only to the extent that it is satisfied that the decision appealed against was wrong.

6.1 Ground 3 concerns the reduction in the rate of return on under–recoveries in the GD17 Decision.\(^{558}\)

FE's grounds of appeal

6.2 FE submitted that the GD17 Decision on under–recoveries was wrong on the following grounds: \(^{559}\)

(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 NI, by creating regulatory uncertainty through withdrawing previously made commitments regarding under–recoveries, providing insufficient notice and consultation, and proposing a change that had retrospective effect;\(^{560}\)

(b) The UR was wrong in law because it asserted without substantiation that the licence provisions relating to under–recoveries were not in the public interest and, when making its decision, the UR had not sufficiently taken into account the effect of the licence condition on under–recoveries in supporting the growth of the gas network;\(^{561}\) and/or

(c) The modifications to under–recoveries failed 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'.\(^{562}\)

6.3 FE set out the UR’s alleged errors under three sub–grounds:

(a) **Ground 3A: Creation of regulatory uncertainty and damaging investor confidence:**\(^{563}\) FE submitted that the UR retrospectively changed the rate of return on under–recoveries to eliminate perceived ‘perverse incentives’, which was erroneous, because:

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558 The under–recovery mechanism permits a GDN to charge customers less than the maximum allowed tariff, accumulating under–recoveries which it may recover in future years. For more detail, see paragraphs 6.5 to 6.9. 
559 NoA, paragraphs 2.31 and 6.3.
560 Article 14D(4)(a) and (b) Gas Order; Article 14(1) Energy Order. We note that Article 14(1) Energy Order goes on to add the requirement that the UR must do so in a way that is consistent with the fulfilment by the UR of the objectives in paragraphs (a) to (h) of Article 40 of the Gas Directive.
561 Article 14D(4)(e) Gas Order.
562 Article 14D(4)(d) Gas Order; GD17 Decision, paragraph 2.40.
563 NoA, paragraph 6.2(a).
(i) the proposed changes withdrew 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 acted 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) **Ground 3B: Disregarding the reasons for the licence condition:** FE submitted that the UR sought to reverse its former decision–making taken in accordance with its statutory duties, which was erroneous because:

(i) strong evidence demonstrated 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 remained consistent with the UR’s primary objective to promote the development of the gas network in NI.

(c) **Ground 3C: Errors in the selection of the new rate of return:** FE submitted that the UR had proposed a new rate of return on under–recoveries of LIBOR+2% to apply to accumulated under–recoveries (with a three–year glide path), which was erroneous because:

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

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

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564 **NoA**, paragraph 6.2(b).

565 **NoA**, paragraph 6.2(c).
6.4 FE submitted\textsuperscript{566} that the combined effect of Grounds 3A to 3C was a reduction of £0.99 million (in 2014 prices).

**Background: The UR’s approach to under–recoveries**

6.5 In price–controlled industries a regulated company may be permitted to under–recover revenue by charging customers less than the allowed revenue. This may be where a regulator sets a cap on total revenues (a ‘revenue cap’) together with a licence requirement that the regulated company must set tariffs to avoid over–recovery. Where tariffs vary by customer type the regulated company may over–recover or under–recover against the revenue cap when the mix of customers is different to what was forecast; in these instances the regulator may allow future recovery of under–recoveries or require repayment of over–recoveries against the allowed revenues in future years.\textsuperscript{567}

6.6 Another reason for incurring an under–recovery is to encourage take–up of the utility, such as gas. Under this scenario, the regulated company may be given commercial discretion in setting tariffs to recover allowed revenues over multiple periods.

6.7 In NI, where there remains a relatively low level of take–up of gas in comparison with oil, the UR recognised that such an approach to under–recovery of revenue might be an appropriate commercial strategy by a GDN.

6.8 This was contemplated by a letter\textsuperscript{568} (the side letter) to the original March 2005 licence (the FE Licence) from the UR which confirmed that the licence allowed accumulation of under–recoveries. It also allowed their eventual recovery by a future review date, but stated that such accumulated under–recoveries should in any event be written off by 2034/35. The letter also stated that the regulator expected prices to be ‘set efficiently with respect to the price of competing fuels … and thus that any under–recovery is bona fide’.\textsuperscript{569}

6.9 Prior to the GD17 Period, FE operated under a price cap form of price control.\textsuperscript{570} FE was set a maximum tariff in each year but had some discretion

\textsuperscript{566} NoA, paragraph 6.4.

\textsuperscript{567} For example, Ofgem allows a correction factor ‘K’. The workings of K for the current electricity distribution review is summarised in Ofgem (2015), ‘RIIO-ED1 regulatory instructions and guidance: Annex C – Revenue and Financial Issues.’ (RIIO-ED1)

\textsuperscript{568} Letter from UR to BGE, 24 March 2005, paragraph 5.2 [NoA tab 10] and see paragraph 6.38 for details of the letter.

\textsuperscript{569} Letter from UR to BGE, 24 March 2005, paragraph 5.7.

\textsuperscript{570} FE has operated under a revenue cap form of price control since the start of the GD17 Period.
in setting actual tariffs. During previous price control periods, FE decided to set tariffs below the permitted maximum and built up under–recoveries. By the time the GD17 process started in 2014, the UR had noted that the forecast under–recovery amount at the end of 2016 was approximately £15.0 million in 2014 prices.571

The FE Licence

6.10 The price control conditions are set in Part 4 of the FE Licence. The price control contains a Primary Constraint572 which allows for the recovery of revenue in excess of the sum allowed to the extent that the revenue together with revenues from earlier years are less than the sums allowed (an accumulated under–recovery). The licence also contains a Supplemental Constraint573 which ensures that FE is able to recoup under–recoveries over time, by permitting FE to set a higher tariff than otherwise allowed, subject to certain constraints.

6.11 The Primary and Supplemental Constraints are represented by formulae which include the following terms that are relevant for this ground of appeal:

(a) ‘Z’ term (accumulated under–recoveries): The principal purpose of the ‘Z’ term is to establish the value of any under–recovery and adjust that value by reference to any under–recovery in prior years.574 The effect of the ‘Z’ term is to establish a value for the accumulated under–recovery.575

(b) ‘r’ term (rate of return): The principal purpose of the ‘r’ term is to adjust the value of any accumulated under–recovery when it is being carried forward by reference to the rate of return.576 The secondary purpose is to provide a mechanism for adjustment of the rate of return to increase or decrease the value of under–recovery being carried forward.577

(c) ‘α’, described as the 'alpha term': the purpose of the alpha term is to establish the maximum permitted extent by which the sum of the actual revenues may exceed the sum of the allowed revenues (ie over–recovery).

571 GD17 Final Determination, paragraph 11.83.
572 FE Licence, condition 4.2.3.
573 FE Licence, condition 4.3.
574 FE Licence condition 4.2.8. The condition refers to over– and under– recoveries but as our concern is under–recoveries we do not mention over–recoveries.
575 FE Licence condition 4.2.9.
576 FE Licence, condition 4.2.16.
577 FE Licence, condition 4.2.17.
(d) ‘\(X_{u,t-1}\)’: which is a parameter by reference to which the value of ‘\(r\)’ may be adjusted in order to achieve a decrease in the value of any accumulated under-recovery.\(^{578}\)

6.12 Condition 4.10.4 sets out terms (b) to (d) above, which are described in the licence as ‘Designated Parameters’. It states that ‘\(r\)’ shall be 0.075 until the end of 2016 after which it may be any number between 0 and 1. It described ‘\(X_{u,t-1}\)’ as a rate of return adjustment which may be used to encourage or discourage accumulated under–recoveries and provides that it ‘shall be zero until Formula Year 2034 when it shall be the rate of return in 2033 +1’.\(^{579}\)

**The UR’s Decision**

6.13 In GD17 the UR reviewed the workings of the under–recovery mechanism and made the change to the rate of return on under–recoveries which is the subject of this appeal. This was the end of a lengthy process of review of the FE Licence, which started before the GD14 Final Determination.

6.14 The GD17 Decision modified FE’s licence by changing the rate of return on under–recoveries from the full rate of return (also known as the WACC), which was 7.5% up until the end of GD14, and which would have implied a rate of return of 4.32% in GD17. The UR decided to change from the WACC to a rate of return on under–recoveries of LIBOR\(^{580}+2\%\), which is more comparable to the cost of debt financing. The change was subject to a glide path: LIBOR+4% in 2017 and LIBOR+3% in 2018, to an enduring rate of LIBOR+2% by 2019. The glide path was added in response to comments from FE on the GD17 Draft Determination.\(^{581}\)

6.15 The UR explained that under–recoveries were included in the licence to allow FE flexibility as it built its customer base, for example to manage times when oil would be cheaper than gas. The UR noted that FE had built up its under–recoveries during a period where gas prices were generally cheaper than oil and at times over 30% cheaper. The UR considered that this raised questions as to the motive of building up such large under–recoveries.\(^{582}\)

6.16 In addition, the UR noted that pricing below the cap could allow FE to outperform volume targets while also earning a 7.5% rate of return on the

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\(^{578}\) FE Licence, condition 4.2.18.

\(^{579}\) FE Licence, condition 4.10.4.

\(^{580}\) LIBOR is the London InterBank Offered Rate.

\(^{581}\) The UR stated (GD17 Final Determination paragraph 1.52) that it introduced a glide path to allow a gradual alignment of FE with other GDN licences.

\(^{582}\) GD17 Final Determination, paragraph 11.78.
under-recovery, and in its view this appeared to be ‘precisely the type of perverse incentive’ the licence was meant to address by adjusting the rate of return as provided for in condition 4.2.17.  

6.17 The UR stated that it had set out ‘very clearly’ in GD14 that it would revisit the rate attached to under-recoveries as part of the GD17 price control, as it believed that the 7.5% return was providing a perverse incentive for FE to under-recover revenues. It noted that it was minded to review the allowed return on under-recoveries in GD17 to ensure there were no perverse incentives and if that required a licence modification the UR would consider this at that time. The UR considered that waiting until GD17 to take any action would provide FE with a lengthy notice period that the licence was likely to be modified giving it time to eliminate its under-recovery amount.

6.18 The UR stated that the accumulation of such a material balance of under-recoveries (forecast to be £15.0 million at the end of 2016) had provided a significant benefit to FE at a time when no volume or Totex risk applied to the under-recovery amount.

6.19 The UR stated that the existing arrangements were put in place for good policy reasons at the time. The UR said that any suggestion that the under-recovery mechanism was the equivalent of the Profile Adjustment did not withstand scrutiny. The UR stated that the purpose of the Profile Adjustment was to smooth tariffs for NI gas customers over the long term, which ensured that customers over different generations pay the same price for gas.

6.20 The UR reiterated that the role of under-recovery was different and was in place as an extreme measure to deal with difficult circumstances such as gas being very uncompetitive with oil. By its nature the under-recovery mechanism could result in different generations of customers paying different prices over time; therefore it must be treated differently from the Profile Adjustment.

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583 GD17 Final Determination, paragraph 11.79.
584 GD17 Final Determination, paragraph 11.82.
585 GD14 Final Determination, paragraph 10.46.
586 GD14 Final Determination, paragraph 10.52.
587 GD17 Final Determination, paragraph 11.81.
588 In 2014 prices.
589 Total expenditure, i.e. the sum of Capex and Opex.
590 GD17 Final Determination, paragraph 11.83.
591 GD17 Final Determination, paragraph 11.87.
592 The Profile Adjustment is a mechanism embedded in the conveyance licences for NI GDNs which smooths tariffs and profile costs over the period up to the forecasting horizon.
Adjustment.\textsuperscript{593} We set out FE’s submissions in relation to the Profile Adjustment at paragraph 6.111 onwards.

6.21 The UR explained that this was why the FE Licence included clear principles on the need to control the rate of return to apply to under–recoveries. It noted that the licence was inconsistent.\textsuperscript{594} The purpose of the proposed licence modification was to bring clarity to the licence.\textsuperscript{595}

6.22 The UR noted that both the PNGL and SGN licences, which are the two most similar to FE, never allowed the full rate of return on under–recoveries; and that the strong policy reasons for this, in line with the principles in the FE Licence, must apply to FE.\textsuperscript{596}

6.23 The UR stated that it continued to think that the history of FE’s build–up of under–recoveries demonstrated the risk of perverse incentives. The period when FE built up its under–recovery had historically low gas prices relative to oil. The UR noted that FE found itself having to raise prices to recover its under–recovery at a time when gas prices were less competitive.\textsuperscript{597}

6.24 In response to FE’s suggestions that the change would introduce regulatory uncertainty, the UR highlighted that the change was forward looking only and would only apply from 2017. FE would retain the 7.5% return on under–recovery built up in the period to 2017, which, as at the end of 2016, was estimated to make up approximately 80% of the under–recovery amount.\textsuperscript{598,599}

6.25 The UR stated that it remained of the view that best practice regulation required a licence modification to break the link with under–recoveries and the rate of return on under–recoveries. The UR had: \textsuperscript{600}

\begin{enumerate}
\item (a) considered the context of the FE Licence drafting and the perverse incentive created by the licence;
\end{enumerate}

\begin{flushleft}
\textsuperscript{593} GD17 Final Determination, paragraph 11.87.
\textsuperscript{594} The inconsistency is that the ‘r’ term (in condition 4.2.17) provides a mechanism for adjustment of the rate of return on under–recoveries to increase or decrease the value of under–recovery being carried forward. \(X_{a,1}\) is the designated parameter being the mechanism by which the value of ‘r’ may be adjusted in order to achieve a decrease in the value of any accumulated under–recovery. Condition 4.10.4 states \(X_{a,1}\) remains at 0 until 2034.
\textsuperscript{595} GD17 Final Determination, paragraph 11.88.
\textsuperscript{596} GD17 Final Determination, paragraph 11.89.
\textsuperscript{597} GD17 Final Determination, paragraph 11.91.
\textsuperscript{598} GD17 Final Determination, paragraph 11.92.
\textsuperscript{599} Our interpretation of this statement is set out at paragraph 6.82.
\textsuperscript{600} GD17 Final Determination, paragraph 11.93.
\end{flushleft}
(b) taken into account that FE had been aware of UR concerns on under–recoveries for many years and could have reduced the amount in 2016 to £2 million to £3 million but it was at £15 million; and

(c) noted that the delay in the UR’s taking action meant the effect on FE was less than £800,000.601

6.26 The UR stated602 that it remained of the view that LIBOR+2% remained a reasonable rate to allow; this was consistent with the PNGL and SGN licences and reflected the fact that it viewed under–recoveries as something which should be a short–term arrangement that should not be incentivised in the licence.

6.27 In order to transition towards the new rate, the UR stated603 it would apply LIBOR+4% in 2017 and LIBOR+3% in 2018, which would have some moderate benefit for FE and should see under–recoveries largely dealt with by the time the enduring rate of LIBOR + 2% was applied in 2019.604

FE’s grounds of appeal on Ground 3

6.28 We have set out FE’s sub–grounds of appeal at paragraph 6.3 onwards and address each in turn below.

Ground 3A: ‘Creation of regulatory uncertainty and damaging investor confidence

FE’s submissions

6.29 FE submitted that the GD17 Decision withdrew previous commitments in the FE Licence regarding the applicable rate of return on under–recoveries and discontinued the link between the rate of return on under–recoveries and the allowed cost of capital from time to time.605

6.30 FE submitted that the GD17 Decision had a retrospective effect as the proposed rate applied to under–recoveries accumulated before the start of GD17. FE said that it had been given no indication in the GD14 Final Determination that a changed rate would be applied retrospectively. FE further submitted that even if it had been informed at the time of the GD14

601 This amount relates to the whole of the price control period, ie six years.
602 GD17 Final Determination, paragraph 11.96.
603 GD17 Final Determination, paragraph 11.97.
604 UR R&O on NoA, paragraphs 11.49 and 11.50.
605 NoA, paragraph 2.27.
Decision 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 GD14.606

6.31 FE said that as a result, the UR’s proposed changes represented a withdrawal of commitments in FE’s licence from when the licence was originally granted in 2005. It concluded that this was a form of retrospective change, ie that the UR was reopening previous decisions.

6.32 FE submitted that it was 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. FE submitted that it was 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’. 607

6.33 FE clarified the reasons why the proposed change would have a retrospective effect. It submitted that in the GD17 Final Determination the UR had stated the change would be forward looking, applying from 2017, but in the GD17 Consultation Paper the UR had stated that the new rate of return on under-recoveries would be applied to all under-recoveries from the start of the GD17 price control period and the 7.5% rate would continue to apply until the end of 2016.608

6.34 FE referred to609 the CC 2012 price control redetermination for PNGL, in which the 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 network expansion is expected and desired.’610

6.35 FE submitted that any investor relied on the terms of the published licence, and noted the damaging impact that changing the terms of the licence would have on investor confidence.611

6.36 FE submitted that the UR had 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 following four reasons: previous

606 NoA, paragraphs 2.28 and 6.10.
607 NoA, paragraph 6.11.
608 NoA, paragraph 6.28.
609 NoA, paragraph 6.12.
611 FE R/S, paragraph 5.12 and 5.14.
commitments in FE’s licence, penalty for previous decisions, insufficient notice of the change, and insufficient detail in GD14.612

Previous commitments in FE’s licence

6.37 FE submitted that the proposed change to the rate of return on under–recoveries in GD17 Decision withdrew previous commitments in FE’s licence. FE submitted that the rate of return adjustment (the Designated Parameter (\(X_{u,t-1}\))) for under–recoveries (denoted in the licence by the term ‘Z’) ‘shall be zero until Formula Year 2034’.613 FE noted that whereas the licence contained provisions allowing for the adjustment of the rate of return on under–recoveries, condition 4.10.4 ‘expressly does not provide for’ such an adjustment until 2034.614

6.38 FE also referred to the side letter issued by the UR in March 2005 when the original licence was awarded in support (see paragraph 6.8). Part 5 of this letter stated that:

(a) the price control also included a Supplemental Constraint which limited the recovery of under–recoveries (paragraph 5.4);

(b) any accumulated under–recovery would be disregarded at 2034 (paragraph 5.4);

(c) any under–recovery would be accumulated at the rate of return, during the period of supply exclusivity (paragraph 5.6); and

(d) any under–recovery of revenue needed to be bona fide (paragraph 5.7).

Penalty for previous decisions

6.39 FE submitted that if the purpose for the rate adjustment was to avoid alleged perverse incentives, a retrospective change to the return on previous under–recoveries could have no impact on incentives in any event and would only act as a penalty for previous decisions.615

6.40 FE submitted that it was unclear why the UR should consider a decision not to recover the full charge possible in order to incentivise network roll–out to be perverse. The UR had given insufficient consideration to the interests of

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612 NoA, paragraph 6.15.
613 FE Licence, condition 4.10.4.
614 NoA, paragraph 6.16.
615 NoA, paragraph 6.17.
consumers and the development of the network in characterising FE’s decision in this way. FE went on to claim that the UR’s own reason for making the change was inconsistent with the application of any revised rate to accrued under–recoveries.616

**Insufficient notice of the change**

6.41 FE submitted that it was given insufficient notice of the proposed change.617 FE disagreed with the UR that it was given a lengthy notice period or any clear signal of the intention to change the rate (from the GD14 Decision). 618 FE disagreed that by signalling a possible change to the approach in GD14, it ‘allowed time for FE to eliminate the ‘Z’ under–recovery amount’.619

6.42 FE submitted that, in any event, its model620 showed that this would have been unachievable: FE was bound by a limit on the annual amount by which it could reduce its balance of accumulated under–recoveries, which was set by the alpha term.621 While the alpha term was increased in GD14 from 10% to 40%, the model showed that FE had increased its charges to the maximum allowable level, and thus FE could not have unwound its level of under–recoveries during the three years of the GD14 Period.

6.43 FE also submitted622 that it would have been unrealistic to expect it to increase its conveyance charges to its maximum allowable level for two reasons: (i) some of the tariffs had already been published prior to the GD14 Final Determination; and (ii) limitations put in place by the ‘netback’ arrangements had led to a certain level of essentially unavoidable under–recovery in 2014 and quarter 1 of 2015.623 FE stated that it did increase its prices and reduce the overall level of under–recoveries by £8 million by the end of 2016, but that the UR did not provide it with sufficient time or ability to increase prices yet further during the GD14 Period in a manner that could have reduced the balance to zero.

6.44 FE submitted that the UR did not explain why it would have been in the interests of consumers or the development of the network for all of the under–recoveries...
recoveries to have been recouped in a single price control period, and that in addition, the ability to meet the new connections target would have been jeopardised by an introduction of a sudden increase in prices. FE submitted that this would have affected the incentive allowance and revenues, and would have had a detrimental impact on consumers.  

Finally, FE submitted that there would have been ample opportunities for the UR to raise concerns regarding FE’s approach to under–recoveries during the annual tariff approval processes.

**Insufficient detail in GD14**

FE submitted that the UR did not provide sufficient detail on what modifications it envisaged or how they would operate. There was no indication in the GD14 Final Determination that the UR would consider applying a retrospective adjustment to its approach; 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 in the GD14 Final Determination. The approach taken by the UR therefore ran contrary to the approach outlined by the CC in the 2012 PNGL case that a revision of a previous regulatory determination should be well–reasoned, properly signalled, and subject to fair and effective consultation.

**The UR’s submissions**

The UR submitted that FE’s claim that the UR had withdrawn previous commitments was based on a ‘fundamental mistaken premise’ as there were no commitments in the licence that were not subject to variation through a licence modification. Furthermore no promise or representation had been made by the UR at any time that the rate of return would be equal to the cost of capital; even if any such promise or representation had been made, it would not have been unreasonable to vary the rate given the circumstances of the case.

The UR disagreed that the change had retrospective effect. The UR stated that the change took effect from 1 January 2017 and was a prospective change.
6.49 The UR set out in further detail the following points:

No commitment, let alone a clear or unambiguous commitment

6.50 The UR submitted that this Ground rested on a mistaken premise as there was no commitment by the UR not to vary the applicable rate in the circumstances where the UR considered variation to be the proper course in pursuance of the UR’s statutory duties. The UR further submitted that it considered that it would have been inappropriate as a matter of public law for it to have fettered its discretion in the way suggested by FE. The UR noted its public law duty to monitor licences and make modifications.629

6.51 The UR further submitted630 that it accepted that there may be circumstances where a public body made a commitment from which it was not entitled to resile, but that FE’s appeal did not even refer to legitimate expectation;631 any claim of legitimate expectation632 would fail at the first hurdle because there was no clear or unambiguous representation; if it passed the first hurdle, it would fail at the second, because it was not unreasonable for the UR to vary the rate as circumstances had changed.

6.52 In support of the ability to modify licence conditions, the UR referred633 to condition 4.2.17 of the licence as granted in 2005 which specifically foresaw circumstances in which it might be necessary to change the rate of return applicable to accumulated under-recoveries.

6.53 The UR disagreed with FE’s interpretation of the side letter and referred to an email634 dated 22 September 2005 from the UR to BGE which stated:

(a) During the period of exclusivity any under-recovery generated would be accumulated at the full rate of return and recovered in tariffs when market conditions allowed (paragraph 1).

(b) Under-recovery would cease to be generated post-exclusivity and accumulated under-recoveries at this point may be recovered up to 2034 after which any remaining un-recovered under-recoveries would be written off (paragraph 2).

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629 UR R&O on NoA, paragraph 11.5.
630 UR R&O on NoA, paragraph 11.6.
631 We note that FE did in fact refer to ‘legitimate expectation’ (NoA, paragraph 6.29).
632 The UR refers to R (Association of British Civilian Internees: Far East Region) v. Secretary of State for Defence [2003] QB 1397 at [72]: ‘It is clear that it will only be in an exceptional case that a claim that a legitimate expectation has been defeated will succeed in the absence of a clear and unequivocal representation’.
633 UR R&O on NoA, paragraph 11.7.
634 Email from UR to BGE (now FE), 22 September 2005.
6.54 The UR submitted that FE could not say that the 2005 licence terms contained a clear or unambiguous representation that accumulated under-recoveries would continue to be inflated at any particular rate, nor indeed could FE say that it had any guarantee that it would be allowed to carry forward all of its accumulated under-recoveries.

6.55 The UR submitted that all that could be concluded from the inclusion of a condition in any licence was that it reflected the circumstances at that time; by including a provision in a licence condition, a regulator was not making any kind of commitment that it would never be modified. The UR further submitted that the power of the UR to modify the conditions of a licence was found in statute – Article 14(1) of the Gas Order.

It is inappropriate to cherry-pick from the 2005 licence

6.56 The UR submitted that it was inappropriate for FE to pick and choose which aspects of the 2005 licence it wished to challenge (‘cherry-picking’) and leave others unchanged. It noted that other aspects of the regime for under-recoveries had changed significantly since 2005 which would have made it ‘wholly sensible’ to revisit the rate of return for accumulated under-recoveries and cited the following changes: the alpha term (Supplemental Constraint), the condition of supply exclusivity, and the Forecast Horizon.

6.57 The UR submitted that the 2005 licence contained a provision, namely the Supplemental Constraint, whereby the UR could have constrained FE’s ability to make use of its accumulated under-recoveries. The Supplemental Constraint was relaxed under GD14 at FE’s request by increasing the amount by which FE could over-recovers (the alpha term), allowing it to reduce its under-recoveries before GD17.

6.58 The reason for the change was that FE had already so significantly under-recovered revenues in relation to one particular category of customers that it would have been unable to get those under-recoveries back from future customers in that same category even over a period of two decades. Consequently, FE would have seen an appreciable part of the under-recoveries extinguished; the only solution to this problem was for the UR to

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635 UR R&O on NoA, paragraph 11.8.
636 UR Rejoinder, paragraph 10.8(a).
637 UR Rejoinder, paragraph 10.8(b).
638 UR R&O on NoA, paragraph 11.9.
639 The length of time into the future that forecasts are prepared.
640 UR R&O on NoA, paragraphs 11.10 and 11.11.
change the value of the alpha term in order to permit prices to be increased sufficiently so as to pass through the under-recovery already accumulated.  

6.59 The UR further submitted that FE offered no answer to the question posed by the UR—why did FE need to use the under-recovery mechanism to offer substantial reductions in price to these customers given that they were already saving six figure sums by switching to gas and did not appear to need any further incentive? (See also paragraph 6.116(a) where we set out further points made by the UR in relation to the use of the under-recovery mechanism.)

6.60 Second, the UR explained that the 2005 licence terms on under-recoveries provided for any accumulated under-recoveries remaining in 2034 to be completely eliminated.

6.61 Third, the UR explained that, in 2005, it was assumed that under-recovery would cease entirely with supply exclusivity. Despite supply exclusivity ceasing for large I&C customers, and domestic and SME customers, under-recoveries had continued.

6.62 The UR submitted that, from the above three points, it was impossible to extract from the 2005 licence any clear commitment on the part of the UR to allow FE the full benefit of its accumulated under-recoveries inflated at any particular rate of return.

6.63 The UR further submitted that, even if there were a clear commitment, FE accepted elsewhere that the 2005 terms were not set in stone, where it suited FE’s convenience. The UR cited the example of FE’s proposal to change the Forecast Horizon from 2035 to 2045 in its GD17 Submission.

*Not retrospective*

6.64 The UR submitted that the effect was not retrospective; the new rate of return on under-recoveries applied prospectively.

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642 UR Rejoinder, paragraph 10.16.
644 UR R&O on NoA, paragraph 11.12.
645 UR R&O on NoA, paragraph 11.13.
646 In its response to the Provisional Determination, FE stated that the UR’s statement was incorrect. FE stated that when supply exclusivity ceased in April 2015, no further under-recoveries were generated, and accumulated under-recoveries were in fact reduced over 2015 and 2016. (FE R/PD, paragraph 4.42)
648 UR R&O on NoA, paragraph 11.15.
649 UR R&O on NoA, paragraph 11.17.
Notice of change

6.65 The UR submitted\textsuperscript{650} that its intentions were clear to FE over four years ago (that is, before 2013), and that FE’s response to the GD14 Draft Determination consultation demonstrated that it recognised this.

6.66 The UR also submitted that the UR’s concerns were made clear to FE even earlier, and that it did not accept FE’s suggestion to the contrary.\textsuperscript{651} The UR cited two specific examples where it stated it had raised concerns: \textsuperscript{652}

(a) Mr McHugh (UR) wrote to Michael Scott (FE) on 28 September 2012 to express serious concerns about the FE approach and to confirm that:

The continued policy of firmus to price below cap when gas prices are so far below oil raises issues and we will be looking to address those at the next price control.

(b) At the time of the sale of FE to iCON in 2013, which coincided with the GD14 process, the UR made clear to all investors that it was ‘very possible’ that the return on under–recoveries would be changed in GD17, and this point was made to iCON at a meeting on 29 August 2013.

6.67 The UR submitted\textsuperscript{653} that FE alluded to harming investor confidence, but that FE’s statements included no concrete example of investors having specifically relied on this particular variable, or indeed on any particular strategy FE may have had in its approach to under–recoveries. The UR submitted that FE gave no explanation of why any such alleged investors ignored paragraphs 10.48 to 10.52 in the GD14 Final Determination.

6.68 The UR submitted\textsuperscript{654} that FE now sought to bring a new hurdle of ‘formal notice’, and contrasted this with FE’s submissions in the NoA that the UR should have given ‘reasonable warning’ and proper signalling of its intention to change the licence.

Consultation

6.69 The UR submitted\textsuperscript{655} that it was not clear what FE meant by its complaint of lack of consultation; FE appeared to be complaining about the specificity of

\textsuperscript{650} UR R&O on NoA, paragraph 11.19.
\textsuperscript{651} NoA, W/S Martindale paragraph 12.50.
\textsuperscript{652} UR R&O on NoA, paragraphs 11.22 - 11.23.
\textsuperscript{653} UR R&O on NoA, paragraph 11.24.
\textsuperscript{654} UR Rejoinder, paragraphs 10.26–10.28.
\textsuperscript{655} UR R&O on NoA, paragraph 11.25.
statements made by the UR in the course of the GD14 process. The UR stated that it conducted a full consultation exercise in the course of its GD17 decision-making process; clearly it was not going to conduct detailed consultation on the period 2017 to 2023 when deciding on GD14.

Not a penalty

6.70 The UR stated that FE suggested that the UR’s decision ‘can have no impact on incentives … and will only act as a penalty for previous decisions’. The UR submitted that its GD17 Decision removed any incentive FE might have had to retain or accumulate under-recoveries based on receiving the full rate of return; under-recoveries accumulated in the past were maintained and this could not be characterised as a penalty. The UR further submitted that it could alternatively have maintained the original 2005 licence terms and taken action under the Supplemental Constraint provisions described above (see paragraph 6.10 onwards) to curtail FE’s recoveries such that FE’s accumulated under-recoveries would have been written off entirely by 2034, without FE acquiring any benefit from them. The UR submitted that it chose not to do that and instead took a more proportionate approach, which could not be characterised as a penalty.

Our assessment

6.71 We consider each of the matters pleaded by FE under this Ground in turn. We note that the UR’s responses in some cases address more than one of the points in FE’s submissions, and we refer to them below where they are particularly relevant to our assessment.

Withdrawal of commitments already made

6.72 The starting point for Ground 3 is that the 2005 licence included a commitment in the form of a term which kept the rate of return on under-recoveries equal to the WACC until 2034.

6.73 FE and the UR have referred to supporting evidence in the form of a side letter and an email, both of which were sent from the UR to FE in 2005. FE’s case is that the 2005 licence provided a commitment, and that these supporting documents are consistent with this interpretation of the licence.

6.74 We note that the UR is subject to a range of statutory obligations in order to fulfil its principal objective, and it may consider it thereby necessary to vary

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656 UR R&O on NoA, paragraph 11.26, referring to NoA, paragraph 6.17.
657 UR R&O on NoA, paragraph 11.28.
the terms of the licence. Article 14 of the Gas Order empowers the UR to make licence modifications subject to various procedural requirements. In the present case, the UR gave reasons why it considered it necessary to vary the licence in order to meet its principal objective and statutory duties.

6.75 The UR was therefore following the usual approach of acting in accordance with its powers and duties in considering the need to change the licence in GD17. As a result, the onus is on FE to identify some mechanism which means that the UR was wrong in its approach to implementing a licence modification in this case.

6.76 To start with we considered the correct interpretation of the licence itself. The submissions of both Parties indicated that the licence, as originally drafted in 2005, is inconsistent and lacks clarity. In particular, there are two sets of clauses which appear to be internally inconsistent:

(a) Conditions 4.2.16 and 4.2.17 which explain the ‘r’ term has two purposes – to provide for an adjustment to the value of accumulated under-recoveries being carried forward by reference to the rate of return for that year (condition 4.2.16) and a secondary purpose to adjust the rate of return in order to increase or decrease the value of any accumulated under- or over-recovery and thereby to provide an incentive or disincentive (condition 4.2.17).

(b) The designated parameter \(X_{u,t-1}\) in condition 4.10.4. The value of ‘r’ is calculated according to formulae which contains the designated parameter \(X_{u,t-1}\) which is the mechanism by which the value of ‘r’ may be adjusted in order decrease the value of any accumulated under-recovery. Condition 4.10.4 describes ‘\(X_{u,t-1}\)’ as a rate of return adjustment which may be used to encourage or discourage accumulated under-recoveries and provides that it ‘shall be zero until Formula Year 2034 when it shall be the rate of return in 2033 +1’. This condition also provides for any under-recoveries still existing at 2034 to be written off.

6.77 One interpretation of the combined effect of these conditions is that there is both an opportunity to change the rate of return on under-recoveries but only from 2034, and that there is also provision that any existing under-recoveries as at 2034 would be written off. However, in our view, this combination of conditions is plainly inconsistent: condition 4.10.4., which is consistent with supporting commentary at the time it was implemented, states that any under-recovery amounts as at 2034 are to be written off. In that case, there would be no under-recovery amount as at 2034 to which to apply a new rate of return.
6.78 Given this lack of consistency between the different terms within the licence, this would not indicate that either one of the licence terms can be separately taken as being clear enough to create some sort of irrevocable commitment. The submissions to this appeal indicate that the UR and FE interpreted the combination of the licence conditions and the side letter differently, and given the lack of consistency, there are a number of ways in which the combined effect of these terms could be interpreted. FE’s case is that we should only consider the reference to changes in the rate of return after 2034. We agree that there is a lack of clarity, but in our view it does not thereby follow that the conclusion should be that the UR was subject to an irrevocable commitment in respect of this particular term.

6.79 We note that regulators may establish a mechanism which imposes a firm but not irrevocable regulatory commitment, for example in respect of assets included within a regulatory asset base (RAB). It is generally accepted that, by virtue of such a regulatory commitment the regulator is not normally able to make adjustments which would reduce the size of the RAB. A change to a previous regulatory commitment would be characterised as retrospectivity, and we consider this in response to FE’s second reason for this ground of appeal.

6.80 We note that FE states that it has never argued that it was entitled to recover the rate of return indefinitely: it stated that the change could be made if it were in compliance with ‘the Phoenix Gas criteria’, which is also a reference to the CC’s decision in the PNGL case in respect of retrospectivity. We therefore consider the relevance of the Phoenix Gas criteria below.

**Retrospectivity and penalty for previous decisions**

6.81 FE submitted that the proposed rate applied to under–recoveries accumulated before the start of GD17 and thus had retrospective effect, acting as a penalty in respect of previous decisions. In support FE submitted that the UR’s approach was contrary to the approach outlined by the CC in the 2012 PNGL case, which related to the revision of a previous regulatory determination.

6.82 As noted at paragraph 6.79, we agree with the UR that there are important differences between the circumstances of this case and the circumstances of PNGL. The new rate of return on under–recoveries applies prospectively, that is, from the beginning of 2017, and there is no effect on the amount already

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658 FE hearing transcript, 14 March 2017, page 5, lines 12–14
built up, that is, the under-recovery amount is not being written off. Further, there is no effect on the amount already built up in accumulated interest.

6.83 However, the effect of the UR’s licence modification is that, from 2017, FE will earn a lower rate of return on under-recoveries on the amount already built up compared with what it expected to earn (LIBOR+2% compared with full rate of return on under-recoveries at the WACC). This includes a lower rate of return on under-recoveries that were built up prior to GD17. Therefore, in our view, the UR’s characterisation that the change is wholly prospective does not fully reflect all the circumstances of this case.660

6.84 The effect of the change is that the return on under-recoveries accumulated prior to 2014 will, from 2017, be below the return expected when those under-recoveries were incurred. However, the financial impact of the change is small relative to the size of the under-recoveries and to FE’s overall financial position. We would not consider that the change would have a material effect on FE’s ability to finance its activities, in particular given the expectation that the under-recoveries will now be eliminated over the GD17 Period. FE has submitted that it expected the effect to be £0.99 million661 over the remaining life of the under-recoveries.

6.85 FE submitted that this ground of appeal was material, and contended that Ground 3 satisfied the materiality tests as set out in paragraphs 3.22 to 3.26.662 We agree that Ground 3 is capable of having an effect on the price control which would be classed as material in that context. However, this does not imply that the change to the rate of return on under-recoveries would materially affect the ability of FE to finance either the accumulated under-recoveries or any other associated investments. The intention of the UR’s change was to reduce the return prospectively on accumulated investments in under-recoveries to a level which it considered better reflected the prevailing circumstances in GD17. Furthermore, FE received notice of a proposed change in GD14. It is open to the UR to make a change to the financial assumptions in the price control to reflect changes in financial and economic conditions over time.

6.86 In the PNGL case, the UR sought to exclude sunk investments from the asset base. It is established regulatory practice that the RAB represents a commitment on behalf of the regulator, and therefore a change to the established RAB would be characterised as retrospectivity, as it would effectively

660 UR Rejoinder, paragraph 10.4(d).
661 This is the estimated impact according to FE’s model which relies on a number of assumptions, one of which is that the accumulated under-recoveries will be eliminated by the end of 2020.
662 FE R/PD.
constitute a change to prior decisions. In the present case, however, the UR has not sought to reduce the under–recovery amount, only the rate of return on under–recoveries. In addition, in the present case the scale of the impact of the change on FE is also limited. In light of these reasons, the change is in stark contrast to the type of retrospectivity in the PNGL case.

6.87 However, to the extent that the decision does have some backward–looking effect, this needs to be taken into account in assessing both the justification for the change and the way in which the change was made. In this case, had the UR decided not to allow FE to recover accumulated under–recoveries at all, then this might be considered a comparable form of retrospectivity to the PNGL decision. However, this is not alleged in this case: FE has submitted that the rate of return on under–recoveries applied to the under–recovery amounts accumulated had changed with effect from GD17.

6.88 We consider that the reduction in the rate of return on under–recoveries incentivises FE not to build up further under–recoveries, and to recover the outstanding amounts sooner. Therefore we conclude that the change does not act as a penalty for past decisions.

Insufficient notice and consultation; and no reasonable warning

6.89 The UR stated that, as far back as 2010, it expressed concern that FE was not increasing prices at a time when oil prices had risen.

6.90 We note that the change to the rate of return on under–recoveries was flagged in the GD14 process: both the possibility of a change and the reasons for the change. The GD14 Final Determination included a specific reference to the licence term which was changed in GD17:

(a) ‘One way of addressing this issue is to reduce the return allowed on under–recoveries in GD17. This could reflect the fact that there is no risk associated with these under–recoveries and hence it is against customers’ interests to retain a full return on them.’

(b) ‘The FE Licence contains a designated parameter which can be used to adjust the return allowed on under–recoveries below the allowed cost of capital. The licence has this set to zero until 2034 and it would require a licence change to enable us to set a value above zero which would have

663 UR R&O on NoA, paragraph 11.20.
664 GD14 Final Determination, paragraph 10.48.
665 GD14 Final Determination, paragraph 10.47.
the effect of reducing the return on under-recoveries below the allowed cost of capital." 666

(c) ‘we will consider future licence modifications to reduce the return on under-recoveries in GD17 and we will also carefully review FE actions in reducing the under-recovery amount before 2017.’ 667

6.91 As shown, the UR was clear in the GD14 process that it was considering this change. In our view, the suggestion by FE that there was insufficient notice has little merit in itself; the question is whether the UR should have changed the rate, not whether it signalled that it was planning to do so. In our view, however, the UR gave sufficient notice. We also note that the GD14 Final Determination did not signal how any change would be implemented; the emphasis was on reviewing the rate in GD17 so that ‘there are no perverse incentives’. 668

6.92 We consider that the strongest part of FE’s case is that it did not have sufficient opportunity to reduce its under-recoveries to zero before the start of GD17, and despite this, the UR changed the rate of return on the full balance of accumulated under-recoveries. In other words, although FE had three years of notice, this was insufficient to take the necessary action to remove under-recoveries.

6.93 However, the scale of this effect should be considered in the context of FE’s overall financial position, and FE has confirmed that it will indeed be able to reduce the under-recoveries to zero in around two to three years. 669 We also note that the UR put a glide path in place (LIBOR+4% in 2017, LIBOR+3% in 2018, reducing to an enduring rate of LIBOR+2% from 2019) (see paragraph 6.14. We agree that it was open to the UR to have regard to the change in circumstances: that the risk associated with under-recoveries had fallen substantially prior to GD17. The UR gave reasons for the change in rate of return on under-recoveries: because there had been a change to the alpha term in GD14, there was a reduction in the risk profile of under-recoveries. As a result, the UR considered that a rate more consistent with the cost of short-term financing, such as working capital, was more appropriate. We discuss the UR’s choice of a rate of LIBOR+2% further under Ground 3C below.

6.94 We note that the UR had a range of options open to it in dealing with the build-up of under-recovery amounts which it did not consider to be built up for the right reasons, ranging from write-off of under-recovery amounts at

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666 GD14 Final Determination, paragraph 10.48.
667 GD14 Final Determination, paragraph 10.50.
668 GD14 Final Determination, paragraph 10.52.
669 NoA Tab 29.
one extreme, to no change to the rate of return on under–recovery amounts at
the other.

6.95 In our view, the approach taken struck a balance between the UR’s concerns
over the level of under–recoveries, and the need to allow FE to finance its
activities. The UR decided not to write off the under–recoveries but only to
reduce the rate of return on under–recoveries, using a glide path. The UR’s
approach struck a balance between (1) the UR’s view that under–recoveries
were built up for the wrong reasons and the rate of return on under–
recoveries created perverse incentives; and (2) the fact that FE had built up
under–recoveries under a long–term framework, and which it needed time to
recover. Although it is true that FE had built up the under–recoveries over
time, the UR had signalled the change to the rate of return on under–
recoveries in the GD14 Final Determination, which was well in advance of the
GD17 Decision, and with the addition of the glide path. FE could not
reasonably have had an expectation that it would recover at the former rate of
return indefinitely. The UR’s decision to reduce the rate of return on past
under–recoveries incentivised FE to reduce the balance more quickly than if it
only applied to future under–recoveries. In our view, in the circumstances the
balance struck by the UR was proportionate to address its concerns, taking
account of the effects on FE, and was within its margin of appreciation in
exercising its regulatory judgment.

6.96 FE told us that it relied on the under–recoveries earning the full WACC in the
context of \[
\text{[\text{\ldots}]}
\], in that FE and \[
\text{[\text{\ldots}]}
\] treated the under–recoveries as part of its
total regulatory value (TRV) for its \[
\text{[\text{\ldots}]}
\].\footnote{670} We note that the GD17 Final
Determination specifically stated\footnote{671} that under–recoveries were not, and never
had been, part of the TRV, and that FE supported this approach.\footnote{672} In any
case, the UR’s approach did not change the size of the ‘Z’ term, and it was
the ‘Z’ term which was included within the documentation provided as
evidence by FE. We have seen no evidence to indicate that the UR was
required to have any particular regard to one aspect of FE’s \[
\text{[\text{\ldots}]}
\], or that it
would have changed its approach even if it had been required to do so.

6.97 Therefore, in our view the UR was not wrong to change the rate of return on
under–recoveries to reflect the change in the broader framework for under–
recoveries, which itself followed the build–up of under–recoveries which were
significantly greater than originally anticipated by the UR.

\footnote{670} \cite{3}.\footnote{671} GD17 Final Determination, paragraph 11.99.\footnote{672} Ibid.
FE submitted\textsuperscript{673} that there were close parallels between the PNGL case\textsuperscript{674} and the UR’s change to the rate of return on under-recoveries, and submitted\textsuperscript{675} that certain criteria outlined in that case should apply to the current case: ‘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.’\textsuperscript{676} As discussed above (paragraph 6.82), we do not consider that there are close parallels with the PNGL case. In the PNGL case, the UR was attempting to reduce the TRV on a retrospective basis, whereas in this current situation the UR was seeking to reduce the rate of return on an amount outside the TRV which it considered was more comparable to short-term financing such as working capital, as discussed further in Ground 3C below.

Even though we do not consider there are parallels with the PNGL case, in our view the criteria cited above from the PNGL case are good regulatory practice for changes such as those made by the UR. In the context of the present case, we consider that the UR both gave sufficient notice and also gave reasons for its decision, which were in line with PNGL principles. We have found that the change made was not wholly forward looking, but that any aspect of retrospectivity in the decision was weak and had limited impact on FE. In this context, we found that the balance struck by the UR in addressing the issues raised was proportionate. Therefore, the UR was not wrong.

We address the issue of regulatory uncertainty and investor confidence at paragraphs 6.72 onwards, and 6.89 onwards.

**Our conclusion on Ground 3A**

We conclude that the UR was not wrong to change the rate of return on under-recoveries to reflect the change in the broader framework for under-recoveries, and we conclude that the UR did not create regulatory uncertainty or damage investor confidence by changing the rate of return on under-recoveries.
Ground 3B: ‘Disregarding the reasons for the licence condition’

FE’s submissions

6.102 FE submitted that the UR had asserted, without substantiation, that the current licence condition regarding the rate of return on under–recoveries was not in the public interest, and that the UR now sought to state that the primary reason for the licence condition was to manage differences between the relative price of oil and gas.

6.103 FE submitted that this was an incorrect characterisation of the reasons behind the licence condition and failed properly to 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 NI.

6.104 FE submitted that it did not believe the UR had sufficiently taken into account the positive impact that the licence condition on under–recoveries had had in the promotion of the natural gas network in the FE Licence Area in making its decision at GD17.

6.105 FE set out the following reasons for their view.

Public interest

6.106 FE submitted that charging less than the full tariff could not fairly be characterised as against the public interest where it is done to support an increase in volume growth. FE emphasised that the only incentive to reduce charges was for reasons associated with the growth of the network; indeed by supporting the development of the gas network, the inclusion of the under–recoveries provision in the current licence condition was squarely in line with the UR’s primary objective to ‘promote the development and maintenance of an efficient, economic and coordinated gas industry in Northern Ireland’. FE submitted that it was unclear to what extent the UR had applied a different ‘public interest’ test to this part of the GD17 Final Determination, and that if it had done so, it was wrong in law. FE further submitted that no reasoning was provided to explain why circumstances had

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677 NoA, paragraph 2.29.
678 Ibid.
679 NoA, paragraph 6.30.
680 NoA, paragraph 6.31.
681 NoA, paragraph 6.32.
682 Energy Order, Article 14(1).
changed to such an extent that a provision the UR considered was in accordance with its statutory duties at the time of granting the licence now created perverse incentives.

*Intended effect and duration of licence conditions*

6.107 FE submitted\(^{683}\) that the sophistication of the licence condition drafting demonstrated that the UR was quite aware, at the time of drafting, how it was intending to treat under-recoveries and over what time period. FE submitted that it was not in doubt that the clear provisions in the licence would be relied on by the licensee which entered into the licence on that basis.

*Relative prices of oil and gas*

6.108 FE stated\(^{684}\) that the UR had sought to state that the primary reason for the licence condition was to manage differences between the relative price of oil and gas. However, FE submitted that it had found no basis for the UR’s specific claim that the mechanism was limited to this; rather the purpose of under-recoveries was much broader as they provided FE with the ability to grow volumes quickly and more generally promote the development of the gas network.

6.109 FE disagreed with the UR’s suggestion in the GD17 Final Determination that there was some kind of improper motive for FE’s reducing the charges.

6.110 FE provided\(^{685}\) evidence that oil had become cheaper than gas for the first time in many years. Therefore, it submitted, even if the policy intention was inaccurately interpreted so as to be confined to supporting gas when oil was cheaper, the proposed change was being imposed at an inappropriate time, and the gas distribution network should thus be supported rather than penalised.

*Profile Adjustment*

6.111 FE submitted\(^{686}\) that the UR had ignored a key element of FE’s regulatory regime and history, and failed to take account of the way that FE’s prices were modified by the Profile Adjustment.

6.112 FE submitted that the Profile Adjustment had the effect of smoothing prices over the long term for FE’s customers, deferring the recovery of some allowed

\(^{683}\) NoA, paragraph 6.33.
\(^{684}\) NoA, paragraph 6.34.
\(^{685}\) NoA, paragraph 6.39.
\(^{686}\) NoA, paragraph 6.41.
revenue into future price control periods; the recovery of this deferred revenue was secured by way of an addition to the TRV via a mechanism known as the ‘Profile Adjustment’. The Profile Adjustment built up over the course of each price control period, and then formed part of FE’s asset base at the beginning of each price control review.687

6.113 FE submitted688 that there were strong links between the rationale underlying the Profile Adjustment and the approach to remunerating under–recoveries. The Profile Adjustment was calculated on a net present value (NPV) neutral basis. FE submitted that 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 between the two mechanisms.

The UR’s submissions

6.114 The UR submitted689 that there was no merit in FE’s argument that the UR had disregarded the reasons for the licence conditions: the UR took decisions taking into account all of the relevant factors and in line with its principal objective and general duties, and had not disregarded the reasons for enabling FE to under–recover against allowed costs.

6.115 The UR submitted690 that it had properly considered whether FE had taken proper account of the reasons for the under–recovery mechanism, and had concluded that in circumstances where ‘the state of the market’ and ‘competitor fuels’ (both factors acknowledged by FE to be relevant) could be assessed as favourable to gas consumers, there was no good reason for FE to have built up such considerable under–recoveries.

6.116 The UR set out in further detail the following points:

(a) The UR submitted691 that FE accumulated substantial under–recoveries at a time when gas was cheaper than oil, which suggested that it was not using the under–recovery mechanism as intended. The UR also submitted that in 2010 it engaged with FE at a senior level to express concern that FE was not increasing its prices at a time when oil prices had significantly increased, and that the UR was not satisfied that FE’s

687 Ibid.
688 NoA, paragraph 6.42.
689 UR R&O on NoA, paragraph 4.48.
690 UR R&O on NoA, paragraph 4.49.
691 UR R&O on NoA, paragraphs 11.29–11.37.
response addressed its concerns. The UR submitted that these concerns ultimately led to the licence modification in GD17 which led to this appeal.

(b) Responding to FE’s reference to ‘public interest’, the UR submitted\(^{692}\) that its decision on under-recoveries was influenced by the public interest. While the UR recognised that FE may have had good reasons for under-recoveries in previous years, it considered that the public interest also included the interest of future customers not to be saddled with excessive bills from previous generations of customers, arguing that the UR was required to have regard to future consumers as well as existing consumers.\(^{693}\)

(c) Finally, the UR submitted\(^{694}\) that the side letter (referred to at paragraph 6.38(c)) was not part of the licence, that there was no reason to suppose that the text was intended to last in perpetuity (but instead described the terms as they stood in 2005, not 2017), and that the licence did not contain a clear commitment to preserve a particular rate.

**Our assessment**

6.117 As a starting point, we note that FE has in this Ground provided a number of reasons as to why the licence condition as originally implemented was appropriate, and therefore why it considered that the UR should not have changed the licence condition. FE’s submissions are in respect of issues which would have been relevant to the UR’s overall decision to change the rate of return on under-recoveries, in respect of which it was required to balance a number of considerations. We consider each of FE’s submissions in turn, and we then conclude on whether FE has provided evidence to demonstrate that the UR was wrong.

**Public interest**

6.118 In this appeal the UR clarified that its reference to the public interest was to the range of statutory duties of the UR.\(^{695}\)

6.119 FE has submitted that the UR was wrong to have any regard to the public interest in its decision. The relevance of the public interest to this appeal in particular is whether the UR was wrong to change the rate of return on under–

\(^{692}\) UR R&O on NoA, paragraph 11.40.

\(^{693}\) Article 40(h) of the Gas Directive, referred to in Article 14(1) of the Energy (Northern Ireland) Order 2003; Article 2(2) of the Energy Order.

\(^{694}\) UR R&O on NoA, paragraphs 11.40–11.42.

\(^{695}\) UR R&O on NoA, paragraph 11.48, which referred to ‘the broader public interests'. The UR clarified that this phrase was shorthand for the legal framework within which the UR operated and set the price control. UR hearing transcript 7 February 2017 pages 29 and 30.
recoveries because it gave weight to public interest considerations, when it should not have done.

6.120 The UR made reference to the public interest because, in its view, the scale of under-recoveries was not consistent with its intentions in allowing under-recoveries. It made reference to the particular importance of under-recoveries during a period when the price of oil was below that of gas.

6.121 We agree with the UR that it had signalled that the reason for allowing the accumulation of under-recoveries was to incentivise take-up of gas. There are references throughout the evidence, including within the 2005 side letter, that the pricing of the different fuels was a relevant consideration in the level of under-recoveries. The UR told us, and it does not appear to be disputed by FE, that there was a significant build-up of under-recoveries at a time when gas was cheaper than oil.

6.122 We acknowledge FE’s submission that there may be broader public interest benefits in under-recoveries, but equally we agree with the UR that it is not necessarily the case that creating under-recoveries to build up volumes is consistent with the UR’s primary objective, if the level of under-recovery is not efficient or economic. Further, we consider that the ‘public interest’ also includes the duty to have regard to the need to protect consumer interests.\textsuperscript{696} To this point, we consider that the UR has a responsibility to future customers not to be ‘saddled’ with excessive bills caused by under-recoveries from previous customers.

6.123 In any case, we do not see that FE’s submissions relating to the ‘public interest’ are particularly relevant to the rate of return: the UR is continuing to allow FE to earn a return on its under-recoveries. FE’s submissions would have significant weight if the UR were seeking to ‘write off’ under-recoveries on public interest grounds, rather than the question in this case, which is whether it is appropriate to change the rate of return on under-recoveries to reflect changes in circumstances.

\textit{Intended effect and duration}

6.124 These points are covered under Ground 3A above.

\textsuperscript{696} Article 14(2) of the Energy Order provides that the UR shall carry out its gas functions in the manner which it considers is best calculated to further the principal objective, having regard (among other matters) to the need to ensure a high level of protection of the interests of consumers of gas (Article 14(2)(a)).
Relative prices of oil and gas

6.125 FE submitted that the purpose of the under-recoveries mechanism was for broader reasons than submitted by UR (ie not just managing differences in price between oil and gas but more generally to support the roll-out of the network).

6.126 It was evident in 2005 that the UR linked the under-recovery mechanism with the difference between the price of oil and gas and the need to build up a network. The 2005 side letter makes that clear. In GD14 the UR noted the ‘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’.697 We see merit in FE’s submission that under-recovery was necessary in order to build up its network. However, we agree with the UR that this does not mean that any level of under-recoveries would always be in customers’ long-term interests. In our view, it was not wrong for the UR to review the level of under-recoveries accumulated by FE to determine whether the 2005 approach to regulation of under-recoveries was still appropriate.

6.127 We have considered the UR’s approach in this context. We note that FE’s case more broadly and the UR’s approach in the GD17 Final Determination are not dependent on the reasons for the build-up of under-recoveries. The UR’s decision was the outcome of a process to review the rate of return on under-recoveries started before the GD14 process, and concluding with a decision in GD17 reflecting the extent of accumulated under-recoveries at that point. We agree with the broad principle that the UR should change its approach where it is consistent with its statutory duties, and that it should not be bound by any statements on the reasons for the under-recoveries in 2005.

6.128 We note the approach taken by the UR was not to investigate the reasons for the build-up of under-recoveries but was focused on the question of how quickly they could be recovered. Following the change to the alpha term in the GD14 Final Determination, the period over which under-recoveries could be expected to be recovered had significantly changed. The original licence term envisaged under-recoveries potentially being recovered over a period as long as to 2034, whereas following the change to the alpha term, the under-recoveries could be expected to be recovered over the first few years of GD17. In that case, it is entirely understandable that the UR should reconsider whether the reasons for the rate of return on under-recoveries stated in 2005

697 GD14 Final Determination, paragraph 10.45.
continued to apply in GD17, and to conclude that a different approach might be more appropriate.

6.129 On a separate point, FE pleaded that now that gas was more expensive than oil, the proposed change was being imposed at an inappropriate time. We do not consider that this submission has any merit. FE has had the benefit of an investment option at the full rate of return on under-recoveries for many years, with effectively no Opex or Capex risk, and at this stage there appears to be no suggestion that FE needs to continue to invest in its network through the use of the under-recovery mechanism.

Profile Adjustment

6.130 FE submitted that the Profile Adjustment and under-recoveries should be treated consistently.

6.131 We do not consider that this argument has any merit: the only link between the Profile Adjustment and the under-recovery mechanism is that they both relate to prices being modified, but there is no reason for them to be treated consistently.

6.132 In particular, we note that the Profile Adjustment is related to the life of the assets included within the RAB, whereas the under-recovery mechanism relates to the deferred recovery of a fixed level of revenue between price control periods, with no associated operational investments. In previous periods, the UR has considered the two mechanisms to have comparable risk, but this should not require it to do so under all circumstances, as long as it has reasons for changing its approach.

Our conclusion on Ground 3B

6.133 We have reviewed the reasons provided by FE in support of its Ground 3B as to why the UR was wrong to change its approach. We consider that FE has highlighted a number of reasons why it disagrees with the UR in the weight it gave to different factors in its decision to change the rate of return on under-recoveries.

6.134 However, for the UR to be wrong, we would have to agree with FE not only that an alternative approach of retaining the full rate of return on under-recoveries was open to the UR, but that it was wrong to change that approach. In our view, none of the reasons stated by FE demonstrate that the UR should not have reviewed the rate of return on under-recoveries, or that it was not open to the UR to change its approach, in the context of the change in circumstances since 2005.
6.135 We therefore conclude that the UR was not wrong on the basis pleaded by FE, namely disregarding the reasons for the licence condition.

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

FE’s submissions

6.136 FE submitted\(^{698}\) that the UR has not provided any justification for the selection of a rate of LIBOR + 2% (including a three–year glide path); FE considered the selection of this measure to be inappropriate, arbitrary and disproportionate.

6.137 FE set out in more detail its three reasons for this view.

The chosen metric was inappropriate

6.138 FE submitted that an appropriate rate of return on under–recoveries should reflect the risks to the company of managing its under–recoveries, for example any deferral of revenues would need to be funded in cash.\(^{699}\) FE submitted that the risks it faced in financing under–recoveries were not linked to LIBOR. It submitted that replacing an absolute rate of return on under–recoveries (WACC) with a fluctuating index (LIBOR) introduced an additional risk to FE, and that the UR had not taken this additional risk into account when setting the alternative rate of return on under–recoveries.

6.139 FE further submitted that the UR was wrong to treat FE’s under–recoveries differently from the other aspects of its capital employed in financing FE’s business,\(^{700}\) and that any under–recovery must be financed by investors through a combination of debt and equity finance.\(^{701}\)

The proposed rate was arbitrary

6.140 FE submitted that there was no accompanying explanation for the choice of either the LIBOR index or the 2% premium, and given its importance and the change to existing practice, it was incumbent on the UR to explain its choice carefully of the appropriate rate of return on under–recoveries, and the expected effects and benefits of this new measure compared with the other measures on FE’s incentives and on consumers.\(^{702}\)

\(^{698}\) NoA, paragraph 6.44.

\(^{699}\) Ibid.

\(^{700}\) FE R/S, paragraph 5.46.

\(^{701}\) FE R/S, paragraph 5.48.

\(^{702}\) NoA, paragraph 6.47.
6.141 FE noted that the GD17 Decision stated that the new rate of return on under–
recoveries was consistent with PNGL and SGN licences, but that this
reasoning was insufficient. The fact that it was used in other licences was not
a justification in the present circumstances.

6.142 FE further noted that all three of the GDNs had had under–recoveries treated
differently in their licences. It was erroneous for the UR to have made a direct
comparison with PNGL and SGN without taking into account the wider context
underpinning each of the three licences.

6.143 FE submitted that the introduction of a glide path did not negate the fact that
the rate was inappropriate, arbitrary, retrospective, and had a significant
adverse effect on FE.

The chosen metric was disproportionate

6.144 FE submitted that the proposed change to the rate of return on under–
recoveries was a significant reduction that would have had a detrimental
financial impact on the accumulated under–recoveries built up by FE. FE
calculated that it would lose approximately £1.09 million in nominal terms
(approximately £0.99 million in 2014 prices). This estimate assumed a rapid
decline in the level of under–recoveries, such that the balance was reduced to
zero by the end of FY 2020. FE submitted that the impact would be greater
than approximately £1.09 million if this were not achievable, if UK inflation
were higher than forecast, or if the LIBOR rate fell further over the coming
years.

6.145 FE made submissions against the UR’s reasons for its choice of
LIBOR+2% rate:

(a) The comparison between LIBOR+2% and the rate in the Gas to the West
extension was spurious: in the extension process, the UR set a rate of
LIBOR+2% for under–recoveries, and if FE had sought to change the
terms of the bid process, it would have been disqualified. It was therefore
irrelevant whether FE agreed or disagreed with the UR’s approach.

(b) The fact that LIBOR+2% is used in SGN and PNGL licences is not a
justification in the present circumstances.

(c) The comparison between regulated supply companies and FE distribution
was inappropriate.

703 NoA, paragraph 6.51.
704 FE R/S, paragraph 5.56.
(d) FE outlined an example of a regulator applying the WACC in a similar context: during the last water price control review (PR14), Ofwat introduced a new mechanism: the Wholesale Revenue Forecast Incentive Mechanism (WRFIM), which was introduced to improve companies’ revenue forecasting, by incentivising companies to avoid revenue forecasting errors by applying a penalty to variations that fall outside the set revenue flexibility threshold. Rather than using LIBOR, the WRFIM mechanism uses companies’ WACC to adjust the financial value of any forecasting errors.

6.146 Finally, FE noted that in the UR’s response, the UR had misquoted a remark of FE to the extent that: ‘it can accept the lower rate of return for future under–recoveries post 2017’. This should have been read in full:

[FE] can accept the lower rate of return for future under–recoveries post 2017 but we are strongly opposed to any change that is retrospective in application (emphasis added).

The UR’s submissions

6.147 The UR denied that there were errors in its decision to allow a rate of return on under–recoveries which was linked to LIBOR, stating that it was not inappropriate to set a rate of return on under–recoveries which encouraged the collecting and unwinding of under–recoveries.705 The UR continued by stating that it was not arbitrary or disproportionate to set a rate of return on under–recoveries which reflected typical financing costs over the short–term period within which FE could recoup its under–recoveries and which was on a par with that set for other GDNs.

6.148 The UR submitted that FE ‘was labouring under the misconception that the accumulation of under–recoveries is to be equated with an investment’ and that the new rate was designed to encourage the unwinding of under–recoveries.706

6.149 The UR noted the following facts:

(a) The rate of return was identical to the rate FE was willing to sign up to when bidding for the Gas to the West extension.707

(b) The rate of return for PNGL was a real rate of 2%.

705 UR R&O on NoA, paragraph 4.50.
706 UR R&O on NoA, paragraph 11.45.
707 The Gas to the West Applicant Information Pack, paragraph 3.56.
(c) The rate of return for SGN was LIBOR+2%.

(d) A rate of return 2 to 4% above LIBOR reflected typical financing costs over the relatively short term.

6.150 The UR submitted that:

(a) the rate of return beyond 2018 was in line with the rates for PNGL and SGN;

(b) the rate of return was also in line with the rate of LIBOR+1% applied to under-recoveries in the price controls for the incumbent suppliers in FE’s area – namely FE’s Supply business – and in PNGL’s area – namely SSE Airtricity Supply;708

(c) Power NI (the incumbent electricity supplier) received only the Danske bank base rate on its under-recoveries;

(d) the rate of return Ofgem used in RIIO–ED1709 was based on the Bank of England base rate +1.25%; and

(e) finally, in its response to the GD17 Draft Determination, FE submitted that ‘it can accept the lower rate of return for future under-recoveries post 2017’.710,711

6.151 The UR also submitted712 that the under-recoveries were not a part of FE’s capital base as specified in the TRV, evident from the fact that they would be zero in two to three years’ time, and therefore they were more akin to shorter-term capital, like working capital; the slight difference between a 12-month figure for working capital and the slightly longer period for under-recoveries was fully covered by the glide path in the early years of GD17.

Third party submissions

6.152 CCNI told us713 that, recognising the detrimental effect that the 7.5% rate of return on under-recoveries had had on consumers, it supported the UR’s

708 Price Control for SSE Airtricity Gas Supply (NI) Ltd and firmus energy (Supply) Ltd, Final Determination, November 2016, paragraph 11.3.

709 RIIO-ED1 was the first electricity price control to reflect the new RIIO ((Revenue = Incentives + Innovation + Outputs) model for network regulation.

710 Note that there is a second half of this sentence which reads: ‘but we are strongly opposed to any change that is retrospective in application’.

711 UR R&O on NoA, paragraph 11.47.

712 UR Rejoinder, paragraph 10.33.

713 CCNI’s representations and observations on the NoA, dated 19 January 2017, (CCNI R&O on NoA), pages 7 and 8.
proposal to reduce the rate to LIBOR+2%. It submitted that while this might cause upward pressure on gas prices until 2019, the overall reduction in gas distribution charges set out in GD17 Draft Determination provided an opportunity to remove the under-recovery without a noticeable impact on consumers.

6.153 The UR noted that CCNI had asked it to consider returning to consumers some of the ‘windfall’ that CCNI considered had been gained by FE from inflating under-recoveries at a rate of 7.5% per year.\(^{714}\) In addition, Manufacturing NI and the Major Energy Users’ Council supported the proposal to a shift to LIBOR+2%.

**Our assessment**

6.154 We consider each of the matters pleaded by FE under this Ground in turn.

**The chosen metric was inappropriate**

6.155 We agree with the UR that the new rate of return on under-recoveries is designed to encourage the unwinding of under-recoveries. We recognise that under-recoveries are due to be reduced completely by 2020, and the change in the Supplemental Constraint (the alpha term) in GD14 was a factor in this reduction. We agree that it was reasonable for the under-recoveries to be considered more akin to working capital rather than part of the asset base, and that changing to a LIBOR-based index reflected the change in the accompanying risk. In addition, given that the under-recoveries will be for a short period, the risk described by FE is short-lived.

**The proposed rate was arbitrary**

6.156 Although the UR later explained its choice of rate of return on under-recoveries in its R&O on NoA more fully, we agree with FE that there was little explanation in the GD17 Decision for the choice of either the LIBOR index or the 2% premium. While not explained by the UR, the rate being consistent with that for SGN and PNGL indicates that it is a reasonable starting point.

6.157 A rate of 2 to 4% above LIBOR reflects typical financing costs over the relatively short term, which is appropriate given the short-term nature of the under-recovery amount. We consider that the new rate chosen by the UR is not arbitrary and we accept the UR’s explanation in the R&O on NoA.

\(^{714}\) CCNI R&O on NoA, pages 7 and 8.
The chosen metric was disproportionate

6.158 Given that the under–recovery amount is due to be eliminated within a few (two to three) years, and that there is negligible risk relating to this amount, we consider that the new rate to be applied to under–recoveries should reflect financing costs over the relatively short term.

6.159 As stated above, we consider that the new rate reflects typical financing costs over the relatively short term, and therefore that the rate is not disproportionate.

Our conclusion on Ground 3C

6.160 For the reasons given above, we conclude that the UR was not wrong in its selection of the new rate of return on under–recoveries.

Conclusion on Ground 3

6.161 Given our conclusions on each of the sub–grounds 3A, 3B and 3C, we conclude that the UR was not wrong in its decision to discontinue the link between the allowed cost of capital and the rate of return on under–recoveries. Accordingly, we do not allow the appeal, and confirm the GD17 Decision, to that extent.  

715 Article 14D(5) of the Gas Order provides that to the extent that the CMA does not allow the appeal, it must confirm the decision appealed against.
7. **Ground 4: WACC and financeability**

**Introduction**

7.1 Ground 4 concerns the level at which FE’s WACC was set and whether this was sufficient for FE to finance its operations during the GD17 Period.

**FE’s grounds of appeal on Ground 4**

7.2 FE submitted that by setting a rate of return which was too low and/or by failing 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, the UR’s decision 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 NI;\(^{716}\)

(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;\(^{718}\) and/or

(c) The rate of return set for FE and the UR’s financeability assessment both failed 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 [sic] activities’.\(^{719}\)

7.3 FE pleaded Ground 4 in two parts:

(a) **Ground 4A: ‘The asset beta error’**: The WACC or allowed rate of return for FE is too low because the measure of risk – or asset beta – is understated.

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\(^{716}\) NoA, paragraphs 2.37, 7.18 and 7.57.

\(^{717}\) Article 14D(4)(a) and (b) Gas Order and Article 14(1) Energy Order. We note that Article 14(1) Energy Order goes on to add the requirement that the UR must do so in a way that is consistent with the fulfilment by the UR of the objectives in paragraphs (a) to (h) of Article 40 of the Gas Directive.

\(^{718}\) Article 14D(4)(a) and (b) Gas Order and Article 14(2)(b) Energy Order.

\(^{719}\) GD17 Decision, paragraph 2.40. Article 14D(4)(d) Gas Order is the relevant provision here, but is not cited by FE.
(b) **Ground 4B: ‘The financeability error’**: The revenues and therefore cash flows ‘allowed’ by the UR in GD17 are insufficient for FE to finance its activities in the GD17 Period.

7.4 FE cited the following errors which in its view demonstrated the GD17 Decision on WACC and financeability was wrong:

(a) Ground 4A: FE submitted that the UR had set an incorrect asset beta based on a limited comparator set of companies that were 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 understated the actual cost of equity for FE. In particular:

(i) The UR had taken no account of the impact of systematic risk for FE arising from the scale of connections growth combined with the impact of the connection incentive. Other GB and NI utilities did not bear similar risks and therefore the systematic risk arising from FE’s connection incentive justified a premium in the asset beta compared with the comparator set used by the UR.

(ii) The UR had placed insufficient weight on the systematic risk associated with the scale of FE’s capital programme.

(b) Ground 4B: FE submitted that the UR had failed to act in accordance with its statutory duty to secure that FE was able to finance its activities by basing its financeability assessment on an incorrect assumption that FE would be able to finance its business on terms consistent with an investment grade credit rating when the UR’s own notional financeability modelling indicated a sub–investment grade outcome; and when appropriate sensitivity analysis reinforced that FE would not be in a position to secure an investment grade rating for its debt.\(^{720}\)

7.5 FE submitted that the combined effect of the UR’s errors was £5.88 million (in 2014 prices).\(^{721}\)

7.6 In terms of relief, FE requested that the CMA quash the GD17 Decision and substitute its own decision which:

(a) provides an increase in the asset beta to within a range of 0.47 to 0.50, to reflect systematic risks faced by FE;

\(^{720}\) NoA, paragraph 7.18.
\(^{721}\) NoA, paragraph 7.6.
(b) 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; and

(c) sets an allowed rate of return for FE correcting for the above errors at 4.90% (assuming an asset beta of 0.47).722

7.7 In the alternative, FE requested that the CMA remit the matter to the UR for reconsideration and determination with directions as necessary to address the errors.723

7.8 Each of the grounds pleaded and the UR’s Defence is analysed in detail below.

Ground 4A: ‘The Asset Beta Error’

The UR’s Decision

7.9 The WACC is an estimate of the percentage return that a company needs to generate, in order to provide a fair return to its debt and equity providers. The WACC therefore combines an estimate of the cost of debt and the cost of equity into a single figure, using the relative proportions of debt and equity (the gearing).

7.10 In the GD17 Decision the UR set FE’s WACC at 4.32%, via a licence modification to the rate of return parameter (or ‘r’).724

7.11 The UR derived FE’s WACC using the capital asset pricing model (CAPM) to estimate the cost of equity component, in line with standard regulatory practice. The CAPM is a model used to estimate the return required on a particular equity investment based on market data.

7.12 The CAPM relates the cost of equity (E[Rj]) to the risk–free rate (Rfr), the expected return on the market portfolio (Rm), and a firm–specific measure of investors’ exposure to systematic risk (equity beta or βe) as follows:

\[ E[R_j] = R_{fr} + \beta_e(R_m - R_{fr}) \]

7.13 Within the CAPM, the ‘beta’ is a measure of the covariance725 of a firm’s returns to shareholders with returns on the market as a whole. It therefore

722 NoA, paragraph 7.60.
723 NoA, paragraph 2.40.
724 GD17 Decision, Table 2.
725 The joint variability of two variables. In other words how similar the behaviour of two variables is over time. In this case the two variables are (i) returns to a firms shareholders and (ii) returns on the market as a whole.
captures the systematic risk of investing in a given stock, which refers to risks that are correlated with the market as a whole, such as changes in interest rates, inflation and GDP.

7.14 FE is not listed. Where a firm is not listed, the data is not ordinarily available to perform an analysis of returns to shareholders of that firm’s stock versus the market as whole. In order to replicate the market comparison for an unlisted firm, the UR selected comparators to estimate FE’s asset beta. This is a matter of judgment. The UR relied upon the following:

(a) The asset betas that regulators have factored into other companies’ allowed rates of return; and

(b) The asset beta that SGN Natural Gas (SGN), new entrant in 2015, identified in its successful application for the new Gas to the West Licence.726,727

7.15 The comparators used by the UR are set out in Table 14 below.

<table>
<thead>
<tr>
<th>Regulator/company</th>
<th>Asset beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ofgem, gas distribution networks</td>
<td>0.38</td>
</tr>
<tr>
<td>Ofgem, electricity distribution networks</td>
<td>0.38</td>
</tr>
<tr>
<td>CC, NIE</td>
<td>0.40</td>
</tr>
<tr>
<td>Ofwat, water and sewage networks</td>
<td>0.30</td>
</tr>
<tr>
<td>SGN Gas to the West</td>
<td>0.43–0.45</td>
</tr>
<tr>
<td>Commission for Energy Regulation, Bord Gais</td>
<td>0.35</td>
</tr>
<tr>
<td>FE GD17</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Source: GD17 Final Determination, Table 188: Asset beta estimates.

7.16 The UR sought to understand the different risk profiles of FE and these comparators and position FE logically in the above range, on that basis.728 In doing so, the UR considered that:

(a) FE’s asset beta should be lower than SGN because SGN was getting a price, not revenue, cap and there was more pronounced uncertainty about the long–term recovery of SGN’s investments.729

(b) There was no material difference between the riskiness of NI gas networks and other regulated utilities. On that basis, FE’s asset beta should logically sit within the 0.38 to 0.40 asset beta range, formed by

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727 These asset betas were submitted as part of a competitive bid.
728 GD17 Final Determination, paragraph 10.28.
729 GD17 Final Determination, paragraph 10.37.
Ofgem and the CC when they were setting the asset beta for the GB GDNs and Northern Ireland Electricity (NIE), respectively.\textsuperscript{730}

7.17 The UR’s chosen point estimate for asset beta was 0.40, at the top of its range of comparators.\textsuperscript{731} This 0.40 estimate was within the range put forward by FE and its external consultants – Oxera – at the time of the GD17 consultation, albeit at the bottom of the range (0.40 to 0.50).

7.18 The UR also relied on reports from First Economics and the UK Regulators Network (UKRN) to guide its beta assessment.\textsuperscript{732}

\textbf{FE’s submissions}

7.19 FE submitted that the asset beta used by the UR had failed to take into account FE’s specific characteristics and relied inappropriately on precedents relating to businesses which have ‘wholly different characteristics’ to FE.\textsuperscript{733} FE considered that this approach had caused the UR to arrive at an incorrectly low asset beta that did not reflect the risks faced by FE.\textsuperscript{734}

7.20 FE sought the expert opinion of Mr Nicholas Forrest of PwC to review the approach of the UR to the estimation of the asset beta.\textsuperscript{735} On the basis of Mr Forrest’s expert evidence, FE submitted a number of critiques relating to the UR’s approach to setting the asset beta.

7.21 First, the UR did not take sufficient account of fundamental differences between FE and (i) the benchmarks used by the UR, and (ii) PNGL.\textsuperscript{736}

7.22 Second, an asset beta of 0.4 did not capture the specific risks associated with FE from the connection incentive and its capital programme for GD17.\textsuperscript{737} Mr Forrest’s report included a detailed explanation of why the connection incentive and FE’s capital programme increased the risk to FE and, further, why these risks should be captured in the beta (ie why they are systematic risks).\textsuperscript{738}

7.23 Third, an asset beta of 0.4 did not capture the non–CAPM risks facing FE, owing to the capital programme, the potential mis–calibration of the Opex

\textsuperscript{730} GD17 Final Determination, paragraph 10.38.
\textsuperscript{731} GD17 Final Determination, paragraph 10.39.
\textsuperscript{732} GD17 Final Determination, paragraph 10.18 and UR R&O on NoA, paragraph 12.7.
\textsuperscript{733} NoA, paragraph 7.9.
\textsuperscript{734} Ibid and paragraph 7.19.
\textsuperscript{735} NoA, paragraph 7.27.
\textsuperscript{736} NoA, paragraph 7.32.
\textsuperscript{737} NoA, paragraph 7.27.
\textsuperscript{738} NoA, E/WS Forrest 1, paragraphs 2.48 and 2.66.
allowance, the non–additionality assumption within the connection incentive and the increased inflation forecasting error risk, due to the cost of debt adjustment mechanism.  

7.24 On the basis of the above points, FE submitted that the asset beta could be as high as 0.50 – with an uplift (from 0.40) of 0.06 for the connection incentive and an uplift of 0.04, linked to the scale of the capital programme. Overall, FE submitted that the UR was wrong to set the asset beta at 0.40. A more reasonable range would be 0.45 to 0.50, with a point estimate of 0.47.  

7.25 In response to evidence from the UR that its appeal was inconsistent with its own previous submissions during the GD17 consultation process, FE submitted that its range and point estimate was consistent with the range submitted by Oxera. To support its position on this point, FE provided a Witness Statement of Ms Sahar Shamsi of Oxera, who managed the analysis and drafting of the Oxera reports submitted during the GD17 process.  

7.26 Ms Shamsi concluded in her report that Oxera had made clear to the UR that the appropriate point estimate was towards the top end of the 0.40 to 0.50 range and that the UR’s point estimate of 0.40 ‘was not reasonable’. On that basis, she concluded that the Oxera submissions during the GD17 consultation process were consistent with the evidence put forward during the course of the appeal by PwC.  

**The UR’s submissions**  

7.27 The UR submitted there were two ‘fundamental problems’ with FE’s case.  

7.28 First, the UR set the asset beta within a range, which FE’s own consultants (Oxera) regarded as reasonable – referred to as the ‘Oxera Problem’ by the UR. The ‘Oxera problem’ related to FE appealing the asset beta set by the UR of 0.40, when, in its capacity as FE’s adviser during the GD17 consultation period, Oxera initially submitted a range of 0.40 to 0.50 for the asset beta.
7.29 Second, the PwC report, on which FE based Ground 4A of its appeal, was unreliable because it contained several factual errors, unjustified assumptions and misapprehensions, as well as failure to take into account relevant considerations. These matters were set out in an expert witness statement by Mr John Earwaker of First Economics. The UR submitted that:

(a) the starting point for any asset beta uplifts should be 0.38, as opposed to 0.40;

(b) FE had not provided ‘hard evidence’ linking switching to gas with changes in relevant underlying economic conditions;

(c) the GB GDNs face other sources of systematic risk, which FE does not eg pensions and higher Opex, so any uplift to the beta cannot be assumed to be additive; and

(d) the calculations of the uplifts themselves were not robust, in particular due to the assumption that the asset beta is proportional to a company’s variation in expenditure and therefore returns.

7.30 Overall, the UR considered that it had determined a beta which ‘…fell within a range that was both reasonable and appropriate and squarely within the reasonable judgement open to the UR.’

Third party submissions

7.31 CCNI submitted that an asset beta of 0.35 was appropriate, as it sat within the middle of the range of comparators used by the UR.

Our assessment

7.32 FE’s submissions on the asset beta identified differences between its business and the comparators used by the UR. FE identified three main differences between FE and the comparators as evidence that the asset beta was materially wrong. We therefore set out our assessment of Ground 4A under three headings corresponding to FE’s case:

748 UR R&O on NoA, paragraph 12.17.
749 UR R&O on NoA, paragraph 12.37.
750 UR R&O on NoA, paragraph 3.14.
751 Note the UR refers to switching to gas here – as new connections are ordinarily from households previously using Oil.
752 UR R&O on NoA Earwaker-1, paragraphs 3.18 and 3.19.
753 UR R&O on NoA Earwaker-1, paragraph 3.20.
754 UR R&O on NoA Earwaker-1, paragraph 3.24.
755 UR R&O on NoA, paragraph 12.61.
756 CCNI R&O on NoA, paragraphs 6.2 and 6.3.
(a) Connection incentive;

(b) Capex programme; and

(c) Other risks described qualitatively by FE but not captured in the asset beta uplift.

*Connection incentive*

7.33 As described in paragraph 5.2 above, the connection incentive is a per connections allowance for FE, for new gas connections achieved against a target set by the UR. FE submitted that the connection incentive creates systematic risk for FE. Given that the asset beta captures systematic risk (see paragraph 7.13) and the comparators used by the UR to derive its asset beta estimate do not face a connection incentive, FE submitted that an uplift to the UR’s asset beta estimate was required.

7.34 FE’s submission that the connection incentive exposed FE to systematic risk was based on the assumption that the number of new connections was influenced by the macroeconomic environment and that a significant portion of the costs associated with new connections were fixed.

7.35 FE estimated the asset beta uplift associated with the connection incentive as follows:

(a) FE calculated the variation in its returns that would arise from the connection incentive using estimates of performance against the connections target and the percentage of connections costs that are fixed. FE estimated a ‘P10/P90’ out/underperformance against the connections target of +/-20% and that 72.5% of connections costs were fixed. FE calculated the variation in its returns, when the preceding assumptions were applied, to be 0.68 percentage points.

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757 NoA, EW/S Forrest 1, paragraph 2.66.
758 NoA, paragraph 7.38.
759 NoA, EW/S Forrest 1, paragraph 2.66.
760 NoA, EW/S Forrest 1, paragraphs 2.68 and 2.69. A ‘P10’ is an estimate of the figure below which the underlying variable, here the level of connections, will only drop with 10% probability. A ‘P90’ is the comparable figure relative to which the same variable will only be higher with 10% probability, i.e. it will be lower with 90% probability.
761 NoA, EW/S Forrest 1, paragraph 2.70.
(b) FE then calculated the variation of returns in the GB GDNs, which accompanied the asset beta of 0.40. FE estimated this variation to be 4.4 percentage points.\textsuperscript{762}

(c) Finally, FE took the connection incentive induced variation in returns and divided it by the variation in returns of the GB GDNs before multiplying this proportion by the 0.40 asset beta to get 0.06 ((0.68/4.4)x0.4 = 0.06).\textsuperscript{763}

7.36 This approach to quantification of the impact of the connection incentive on FE’s asset beta relied heavily on the number of new connections being directly proportional to changes in systematic risk factors.\textsuperscript{764}

7.37 Whilst it may seem plausible that the drivers of systematic risk (such as changes in the macroeconomy) play a part in the number of connections, FE’s expert witness acknowledged that there were some other drivers of new connections:

… there are some sources of demand for gas connections which are not driven by wider economic conditions (eg oil boilers breaking down at the end of their useful life).\textsuperscript{765}

7.38 Further, at the main hearing FE stated:

…the bottom line is, for every single customer connecting to our network, there will be a different influence from a different variable from the suite of variables. That is the first point.

Second of all, it is just that; it is a suite of variables. It is macroeconomics. It is affordability, the cost of making the connections and so forth. It is differentiating factors, oil–gas differential in price there. It is lifestyle choices and, indeed, it is timing choices at times.\textsuperscript{766}

7.39 These quotes demonstrate that FE did not provide empirical evidence demonstrating the main drivers of new connections. Rather, FE only described, in qualitative terms, a “suite of variables” that would affect the number of new connections. Similarly, in our view, there would be a suite of

\textsuperscript{762} NoA, EW/S Forrest 1, Table 2.6. Note at paragraph 2.73 the percentage point range is stated to be 4.5%. There appears to be a rounding error between the text and the table.

\textsuperscript{763} NoA, EW/S Forrest 1, paragraphs 2.66 to 2.75.

\textsuperscript{764} NoA, EW/S Forrest 1, paragraph 2.66.

\textsuperscript{765} FE R/S, EW/S Forrest 2, paragraph 5.22.

\textsuperscript{766} FE Hearing transcript 9 March 2017, page 62.
variables which would influence the beta associated with investment in the GB GDNs used as a comparator in FE’s analysis.

7.40 Estimating betas based on comparators is difficult and generally requires the use of both analysis and judgment. FE’s evidence illustrates that there may be a link between the drivers of systematic risk and the drivers of new connections. However, given the wide range of risk factors, both systematic and non–systematic, which influence both the variability of connections and also the variability of returns in the underlying business, the identification of some common risk factors does not in our view demonstrate any particular strength of link between the connection incentive and the asset beta assumed in FE’s evidence. As a result, whilst FE’s evidence indicates that there could be some effect on systematic risk from new connections, it does not demonstrate that the scale of any adjustment to the beta would be of such a magnitude that the revised level of beta would fall outside the UR’s range.

7.41 In our view, therefore, FE did not provide persuasive evidence that systematic risk factors had a measurable effect on new connections. Given that FE’s case relies upon the connection incentive creating systematic risk for FE\textsuperscript{767} we consider that FE’s evidence fell short of demonstrating that the UR’s estimate of FE’s asset beta was wrong, as a consequence of the connection incentive.

7.42 Setting aside our view that FE did not provide persuasive evidence that new connections were driven by systematic risk factors, we now turn to the calculation of the uplift itself. As set out at paragraph 7.35 above, the calculation is based on a number of other assumptions, which we address in turn below:

(a) The assumption that the uplift to the beta was proportional to the size of the additional variation in returns that the connection incentive introduces. As explained in paragraph 7.13 above, the beta is a measure of the covariance between returns on a company’s shares and returns on the market. In applying an uplift to the asset beta, based on the variation in returns from the connection incentive, FE assumed that (i) the variation in FE’s returns caused by the connection incentive will directly correspond to variation in FE’s value; and (ii) the resultant variation in FE’s value will be directly proportional to movements in the FTSE All Share Index. We consider that there are factors other than returns which affect company value such as investors’ perception of the relative risk of the sector and whether investors perceive past returns to be informative

\textsuperscript{767} NoA, EW/S Forrest 1, paragraph 2.42.
of future performance. Further, the correlation of changes in FE’s value and the FTSE All Share index is unlikely to be perfect. Beta estimates are often imprecise, given the numerous factors that affect company value and the value of the market as a whole. We therefore consider that both of FE’s assumptions stretch the CAPM model too far and are therefore unlikely to be robust.

(b) **The +/-20% connections against target assumption.** It was assumed that a plausible range of outcomes against the connections target was +/-20% ie an upside estimate of 20% more connections than the UR’s connections target and a downside of 20% less than the target. This range compares to FE’s historical connections against target of –21% to +4%. On that basis, the –20% assumption may seem reasonable but the +20% upside assumption appears overstated, given the historical data, which shows a maximum outperformance of just 4%. Further, outperformance by 20% seems unlikely given that under Ground 2 of this appeal, FE submitted that its connections target is not achievable.

(c) **The 72.5% fixed cost assumption.** An assumption had to be made around what proportion of costs associated with new connections were fixed, in order to quantify the impact of outperformance and under-performance against target on FE’s returns. FE’s analysis is highly sensitive to this assumption. If all costs are deemed variable then the change in revenue associated with the connections target will have a significantly reduced impact on profits. The 72.5% fixed cost assumption is based on direct financial incentives payable to customers being the only ‘demonstrably variable cost’ of delivering new connections. The other cost categories were (according to FE) (i) advertising, marketing and PR, (ii) sales–related staff, and (iii) shared corporate overheads. These categories were all assumed to be fixed. In our view, FE has not provided persuasive evidence to show that these other cost categories will be fixed across GD17. Moreover, we consider that it is likely that in aggregate FE would alter its spend on these cost categories, if during the course of the GD17 Period the number of new connections achieved were consistently below target.

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768 NoA, EW/S Forrest 1, paragraph 2.68.
769 FE R/S, EW/S Forrest 2, page 9, Table 1.
770 NoA, paragraph 2.21.
771 NoA, EW/S Forrest 1, paragraph 2.69.
772 More specifically, the asset beta will then equal the beta of the revenues, since all operational leverage would have been eliminated: B assets = B revenue x (1+ PV fixed cost/PV asset). See, for example, Brealey, Myers & Allen, Principles of Corporate Finance, 11 ed pages 226 and 227.
773 FE R/S, EW/S Forrest 2, paragraph 5.39.
774 Ibid.
7.43 Overall, we were not persuaded that FE’s evidence demonstrated that the number of new connections are driven by sources of systematic risk, which is fundamental to its case for an uplift to asset beta for the connection incentive. In the absence of persuasive evidence that systematic risk factors have a measurable effect on new connections, we do not agree with FE that all variability in profitability as a result of new connections creates systematic risk for FE that would support an increase in the asset beta.

7.44 Further, the 0.06 uplift is highly sensitive to the assumptions used, none of which have been effectively defended by FE. In our view, FE has therefore failed to show that the connection incentive requires an adjustment to the asset beta and therefore has not demonstrated that the asset beta set by the UR was wrong as a result of the connection incentive.

Capex programme uplift

7.45 FE submitted that its relatively high Capex to asset base ratio compared with GB GDNs meant that it faced higher systematic risk than the comparator set, upon which the UR’s asset beta estimate was based. FE followed this with a quantification of the uplift to asset beta that would be required in order to compensate for this increased risk. PwC quantified the uplift required to compensate for FE’s Capex risk, based on the uplift provided to Heathrow during the construction of Terminal 5.775

7.46 There is both theory and regulatory precedent which supports the proposition that high levels of Capex increase exposure to systematic risk.776 This is largely because Capex costs can overrun due to changes in systematic risk factors, which introduces volatility to the net cashflows. FE also submitted that large new or enhancement capital expenditure, typically has an additional effect on the level of systematic risk, and that this may be greater than the risk associated with replacement Capex or Opex, as was the case for the investment in Heathrow Terminal 5.777 FE submitted that this was also illustrated by property developers typically having higher betas than property landlords.778

7.47 However, as the UR submitted,779 levels of both Capex and Opex, relative to the regulated asset base, can expose a firm to more or less systematic risk. This is because both Opex and Capex costs can overrun, due to various

775 NoA, EW/S Forrest 1, paragraph, 2.81.
776 See for example Bristol Water price redetermination, Appendix 10.1, page 108
777 FE NoA, E/W, Forrest-1, paragraphs 2.49 and 2.77
778 FE NoA, E/W, Forrest-1, paragraph 2.48
779 UR R&O on NoA, EW/S Earwaker, paragraph 3.34.
systematic risk factors.\textsuperscript{780} It is therefore appropriate to compare Totex (ie. Capex and Opex combined) to asset base ratios.

7.48 We note that FE submitted that there were risks and challenges associated with determining risk solely by reference to comparisons of operational leverage ratios. In particular, FE’s expert evidence criticised the use of the totex:TRV ratio and explained that the Depreciated Asset Value (DAV) could offer a more direct comparison to the conventional Regulated Asset Value (RAV) in GB.\textsuperscript{781} We agree with FE that consideration of which definition of the asset base is more suitable for benchmarking with comparators is important. However, FE’s analysis assumed that under–recoveries were included in the TRV,\textsuperscript{782} a point with which we do not agree.\textsuperscript{783} We consider that this undermined FE’s analysis of totex:TRV ratios and therefore placed little weight on this analysis.

7.49 Moreover, in the ratios presented by both Parties, FE has lower Opex to asset base ratios than the GB GDNs and comparable Totex to asset base ratios.\textsuperscript{784} Further, the UKRN highlighted that FE had low Opex to asset base ratios compared with the GB GDNs:\textsuperscript{785}


> Although we cannot be clear how uncertainties in a company’s cost programmes translate into systematic or beta risk (conventionally, the type of risk we are primarily concerned about when we estimate the cost of equity), the small scale of PNGL’s and FE’s [operating] cost programmes, relative to their asset levels, indicate a lower exposure to systematic risk from these programmes than would be the case in the GB GDNs.\textsuperscript{786}

7.50 Whilst FE has focused on Capex and provided evidence that FE’s Capex is high, this does not capture any counteracting effect of the low Opex levels, relative to FE’s asset base. Given the opposing effects of the scale of FE’s Opex and Capex, relative to GB GDNs, it is not evident that an uplift to the

\textsuperscript{780} For example, in the Bristol Water redetermination, the CMA performed analysis of Totex across comparators – Appendix 10.1, paragraph 107.

\textsuperscript{781} NoA, EW/S Forrest 1, paragraph 2.54.

\textsuperscript{782} \textit{Ibid.}

\textsuperscript{783} GD17 Final Determination, paragraph 11.99.

\textsuperscript{784} See for example Table 2.4 of Forrest 1 and tables 1 and 2 of Mr Earwaker, where, whilst Capex to asset ratios are higher for FE than the GB GDNs, Totex ratios are comparable.

\textsuperscript{785} FE submitted that the UKRN letter lacked evidential value due to the date that the letter was written and the limited information available to the UKRN (see FE R/PD, paragraph 5.16). We note that the letter was written based on information in the GD17 Draft Determination but the same point (ie that FE has low Opex compared to the GB GDNs) stands following the GD17 Final Determination. Further, the UKRN had access to the relevant documents at the time of its review, including the Draft Determination and both FE’s and PNGL’s submissions to the UR (Peer review of the UR’s estimate of the cost of capital for GD17, dated July 2016, page 1).

\textsuperscript{786} UKRN: Peer review of the Utility Regulator’s estimate of the cost of capital for GD17, dated 26 July 2016.
asset beta should be applied for the Capex programme with no accompanying downward adjustment for the low Opex to asset base ratio.\footnote{We note that FE raised the issue of what asset base is comparable to the GB GDNs RAB – NoA, paragraph 7.39. However, on FE’s own estimates, it submitted that it had a similar Totex: asset ratio to GB companies – NoA, paragraph 7.40.}

7.51 In addition, as explained in paragraph 7.46, applying an uplift to the asset beta for Capex relied upon the assumption that Capex in GD17 would be more risky than expenditure on the assets which FE had in place prior to GD17, but FE has not demonstrated that this is the case.

7.52 Finally, the calculation itself assumed that FE is exposed to the same amount of systematic risk from its Capex programme as Heathrow was, during the construction of Terminal 5. We were not persuaded by FE that its cost structure exposes it to higher systematic risk than the GB GDNs, hence we have not considered the merits of the uplift calculation in detail. However, we find it unlikely that FE faces the same level of systematic risk from its Capex programmes as Heathrow did during the construction of Terminal 5.

Other risks described qualitatively by FE but not captured in the asset beta uplift

7.53 During the clarification hearing, we asked FE what adjustment it was seeking or what error it was alleging, if any, with regards to the risks that were not quantified in the NoA, for example non–CAPM risks.

7.54 Our understanding is that FE did not seek relief under Ground 4 or describe errors in the UR’s approach to setting asset beta, with regards to these additional risks.\footnote{FE, Clarification Hearing transcript, 7 February 2017, page 33.} Given that FE is not seeking any relief under Ground 4 for these non–CAPM risks, in our view FE has not shown that the UR’s selection of asset beta and therefore cost of equity is wrong, based on these points.

The comparison with PNGL

7.55 FE also submitted that the UR did not sufficiently take account of the differences between FE and PNGL when setting the asset beta.\footnote{NoA, paragraph 7.32 and paragraph 7.21 of this final determination.} However, whilst FE presented analysis of the differences between FE and PNGL\footnote{See for example NoA, Forrest-1, Table 2.3} it did not quantify the effect of these differences on the systematic risks and therefore asset betas for FE and PNGL. We consider, therefore, that FE’s comparison between FE and PNGL was not persuasive evidence that the UR’s estimate of FE’s asset beta was wrong.
Our conclusion on Ground 4A

7.56 The choice of asset beta is inherently a matter of judgment and, because FE is not listed, requires benchmarking to the asset betas of different firms. FE has different characteristics to the companies which the UR relied upon as benchmarks in setting the asset beta. This is an inherent issue with all benchmarking exercises. However, FE’s evidence has not established that any of the risk differences it identified have had a material impact on the asset beta:

(a) The connections uplift is highly sensitive to changes in the assumptions used, in particular the drivers of new connections being systematic. FE has not provided evidence which we consider demonstrates that there is a connections uplift. Moreover, FE has not, in our view, demonstrated that any uplift (should one be required) would be sufficiently material that it would result in a change from an asset beta of 0.40.

(b) We agree with the UR that any adjustment to the asset beta of 0.40 to reflect Capex risk would also need to take account of the potentially counteracting effect of FE’s low Opex, and that FE has not therefore demonstrated that it would result in an asset beta different to 0.40.

(c) FE is not seeking relief, under Ground 4, for non–CAPM risks. As such FE has not evidenced that the UR’s estimate of FE’s asset beta was wrong, as result of non–CAPM risks.

7.57 In our opinion, an estimate of 0.40 is supported by the following background considerations, which are also consistent with the UR’s chosen asset beta:

(a) The SGN asset beta range of 0.43 to 0.45, which captures SGN’s greater risk profile due to the price, not revenue, cap and the immaturity of its network relative to FE.

(b) The UR had already chosen from the top of the range of asset betas within its comparator set (see Table 14). FE has failed to account for this inherent allowance by the UR in its analysis of the asset beta.

7.58 Finally, during the GD17 consultation period, FE’s own advisers initially suggested an asset beta range of 0.40 to 0.50, which captured the UR’s final point estimate of 0.40.791 This was referred to as the ‘Oxera problem’ by the

791 We note that Oxera provided three reports on the cost of capital during the GD17 consultation period. By the third report, Oxera stated that an estimate at the top end of its range (the range being 0.40–0.50) would be appropriate. See FE R/S, EW/S Shamsi-1, paragraph 6.1(a).
UR. We note that Oxera later submitted that a point estimate at the top end of this range was appropriate, and as a result, we did not give this point any significant weight in our assessment. However, we saw the size of the range as providing an illustration of the judgment involved in beta estimation.

7.59 In our view, therefore, based on the reasons set out above FE has not provided evidence that demonstrates the UR’s asset beta estimate and therefore cost of equity was wrong.

**Ground 4B: ‘The Financeability Error’**

**The UR’s Decision**

7.60 Financeability is a term used by regulators to decide if a firm has the ability to pay off its providers of debt and equity finance. In price controls, such as GD17, it is generally assumed that financeability is achieved when the rate of return (or WACC) has been set at a high enough rate, such that the revenues and therefore cash flows made by the firm are sufficient to pay investors and lenders.

7.61 In determining FE’s ability to finance its activities, the UR had regard to FE’s ability to source equity and debt finance in GD17.

7.62 The UR assumed that equity finance would be readily available to FE during GD17, on the basis that:

(a) the allowed return on equity is the key determinant of a firm’s ability to raise equity finance; and

(b) the allowed return on equity was estimated by considering the level of returns that investors are likely to be able to get from other comparable equity investments.

7.63 The UR’s assessment of whether FE would be able to obtain debt finance involved financial modelling and scenario analysis, in order to test whether FE would be able to obtain debt at the interest rates which the UR had assumed in the Final Determination.

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792 Ibid.
793 GD17 Final Determination, paragraph 10.64.
794 GD17 Final Determination, paragraph 10.65.
795 GD17 Final Determination, paragraphs 10.67 and 10.68.
7.64 The focus of the UR’s assessment of financeability was the need to establish whether FE could maintain investment grade debt. The UR stated:

As far as borrowing is concerned, it will be important for PNGL and FE to maintain investment-grade credit quality.\(^{796}\)

7.65 The UR noted that FE’s ability to maintain an investment grade rating would depend on:

(a) cash flows generated by FE’s network in GD17;\(^{797}\) and

(b) the amount of borrowing that FE attempts to take on.\(^{798}\)

7.66 The UR noted that it could only influence factor ‘(a)’ above.\(^{799}\)

7.67 In order to assess the impact of GD17 on factor ‘(a)’ and therefore the financeability of FE’s network, the UR undertook financial modelling of FE’s key financial ratios during GD17.

7.68 During its assessment of FE’s financial ratios, the UR highlighted the post-maintenance interest cover ratio (PMICR) as a key metric and noted that a PMICR of at least 1.4 was needed in order to obtain an investment grade. The UR also identified that FE’s PMICR at 55% gearing at 1.35\(^{800}\) was ‘much tighter’ than for PNGL, against the above-mentioned 1.4 threshold.\(^{801}\) The UR went on to justify the low PMICR ratio for FE as follows:

(a) First, financial ratios are one of several factors that rating agencies consider.\(^{802}\)

(b) Second, there are potentially significant mitigating factors, which may come into force, ‘when other parties come to calculate interest cover’.\(^{803}\) These include additional revenue, as a result of under-recoveries and the actual post-refinancing cost of debt being cheaper than the allowed cost of debt in the GD17 model. The UR modelled PMICR, incorporating these mitigating factors and the outturn PMICR was between 1.63 and 1.90.\(^{804}\)

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\(^{796}\) GD17 Final Determination, paragraph 10.66. Investment grade is BBB or above as per Fitch or S&P or Baa3, as per Moody’s.

\(^{797}\) GD17 Final Determination, paragraph 10.66.

\(^{798}\) Ibid.

\(^{799}\) Ibid.

\(^{800}\) Ibid.

\(^{801}\) GD17 Final Determination, paragraph 10.70.

\(^{802}\) Ibid.

\(^{803}\) Ibid.

\(^{804}\) GD17 Final Determination, paragraphs 10.73 and 10.74 and Table 196.
Third, the UR did not accept that modelling of interest cover could show that allowed revenues had been set too low – because if FE came close to PMICR ratios (or indeed other key metrics considered by rating agencies) in the future, it could simply take on less debt. The UR noted that at 45% gearing FE would achieve the 1.4 threshold PMICR ratio under its notional financeability modelling.

The UR concluded that FE was capable of financing its activities during the GD17 Period via a prudent choice of capital structure. Overall, in the GD17 Final Determination, the UR assumed that FE was financeable at 55% but in the event that FE did face financeability issues it could address these by reducing gearing to 45%.

**FE’s submissions**

FE submitted that the UR was in breach of its statutory duty to secure that FE can finance its licensed activities, as evidenced by the UR’s own assessment of FE’s financeability during GD17. FE based this submission on three main concerns with the UR’s financeability assessment.

First, FE submitted that it was incorrect for the UR to assume that FE would be in a position to obtain an investment grade rating for its debt with a 55% gearing structure.

FE submitted that by applying the Moody’s rating methodology to the forecasts set by the UR, several of FE’s financial metrics were inconsistent with the minimum thresholds required for a BBB rating.

FE submitted 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. FE considered that there were two important consequences from this:

(a) The UR’s assumption that FE was not able to borrow at interest rates consistent with an investment grade rating was unsupported by the facts.

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805 GD17 Final Determination, paragraph 10.77.
806 GD17 Final Determination, paragraph 10.78.
807 GD17 Final Determination, paragraph 10.79.
808 GD17 Final Determination, paragraphs 10.73 and 10.79.
809 NoA, paragraph 7.50.
810 NoA, EW/S Forrest 1, Table 3.6. Investment grade is BBB or above as per Fitch or S&P or Baa3, as per Moody’s.
811 NoA, EW/S Forrest 1, paragraph 3.73.
As a result, the assumptions underpinning the UR’s cost of debt allowance for GD17 were incorrect.\textsuperscript{812}

(b) FE would have access to only a limited range of sources of finance, should the GD17 Decision hold.\textsuperscript{813}

7.74 Second, FE submitted that the UR did not take proper account of the different financeability positions of PNGL and FE – being that FE was consistently worse off across all key metrics.\textsuperscript{814}

7.75 Third, FE submitted that the UR did not do ‘properly calibrated’ sensitivity analysis on its financeability assessment.\textsuperscript{815} FE submitted that in performing its sensitivity analysis after assuming outperformance against the GD17 Final Determination, the UR had a misleading view of FE’s ability to withstand downside shock.\textsuperscript{816}

7.76 Finally, FE submitted that it was inconsistent of the UR to suggest FE should reduce gearing to 45% to address financeability issues without changing the gearing assumption in the WACC from 55% to 45%.\textsuperscript{817}

7.77 FE concluded that none of the evidence on financeability for FE was consistent with the UR’s assumption that FE would be able to finance its activities with investment grade debt. FE submitted that this amounted to an inconsistency between the WACC estimate and UR’s financeability assessment.\textsuperscript{818}

7.78 In order to address the financeability issues, FE submitted that should the notional gearing be reduced to 45% then it was important to use consistent inputs in order to assess the impact of changing notional gearing on the WACC because, whilst WACC typically increased with reduced gearing, a mechanical application of a lower notional gearing could lead to ‘contradictory outcomes’.\textsuperscript{819}

\textsuperscript{812} NoA, paragraph 7.53(a).
\textsuperscript{813} NoA, paragraph 7.53(b).
\textsuperscript{814} NoA, paragraph 7.54.
\textsuperscript{815} NoA, paragraph 7.55.
\textsuperscript{816} FE R/S, paragraph 6.57.
\textsuperscript{817} NoA, paragraph 7.56 and FE R/S, paragraph 6.70.
\textsuperscript{818} NoA, EW/S Forrest 1 paragraph 3.73.
\textsuperscript{819} NoA, EW/S Forrest 1 paragraph 3.78.
7.79 FE submitted that the debt beta should be reduced from 0.10 to 0.05. \(^{820}\) This reduction in the debt beta increased the allowed rate of return by 0.12 percentage points.\(^{821}\)

**The UR's submissions**

7.80 The UR submitted that FE was factually incorrect in pleading that the UR erroneously assumed FE could obtain investment grade debt at 55% gearing. Indeed, the UR considered that FE incorrectly interpreted its assumptions in GD17.\(^{822}\)

7.81 The UR submitted that it did not assume that FE was financeable at 55% gearing and referred back to the statement in the GD17 Final Determination, where the UR concluded that it was a matter for FE to select a prudent capital structure and that at 45% gearing (rather than 55%) FE’s interest cover would sit above the threshold values for an investment grade credit rating.\(^{823}\)

7.82 The UR submitted that the Final Determination was clear that the return on equity provided in GD17 would support any such restructuring.\(^{824}\)

7.83 At the hearing, the UR clarified that it was **not** its position that FE would face financeability issues at 55%:

(Mr Stern) …you seem to concede that Firmus would not be financeable with the conventional criteria at 55 per cent gearing. Have I interpreted those statements correctly?

(Mr McHugh) No, that is not our position. Again, as set out in the FD, the initial table 194 of Firmus' financeability sets out numbers that are under pressure. It also then sets out table 196 in terms of the headroom issues that are created. That does not include – although it is noted in the FD – other headroom from under-recoveries and other factors which are set out in the FD. So, we are not saying that Firmus is not financeable at a 55 per cent gearing. As I recall, the FD was very much postulating that, if there were to be pressure, these are the steps that could be taken.\(^{825}\)

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\(^{820}\) NoA, paragraph 7.58.  
\(^{821}\) Ibid.  
\(^{822}\) UR R&O on NoA, paragraph 13.12.  
\(^{823}\) UR R&O on NoA, paragraph 3.13.  
\(^{824}\) UR R&O on NoA, paragraph 13.14.  
\(^{825}\) UR, hearing transcript, 7 February 2017, pages 33 and 34.
In addition, in the hearings and the UR Rejoinder, the UR reiterated the various countervailing factors set out in its Final Determination that would, in its view, ensure that FE was financeable at 55% gearing:

(a) Headroom on the cost of debt (ie that the cost of debt in the WACC is higher than FE will incur, based on market forecasts).

(b) The UR referred to a recent Moody’s report on PNGL, which highlighted the cost of debt headroom and Moody’s view of the qualitative characteristics of the gas distribution market in NI.

(c) The release of under–recovery revenue.\(^{826}\)

The UR submitted that it did not benchmark FE against PNGL or derive any conclusions from comparing the two but each company was considered on its own merits as the GD17 Final Determination made clear.\(^{827}\)

The UR submitted that it carried out a sensitivity analysis and that was evident in the GD17 Final Determination. It further submitted that it was unable to make submissions on the merits of FE’s point on sensitivities, as FE had not provided any reasons why the UR’s sensitivity analysis was inadequate.\(^{828}\)

Notwithstanding the issue of whether FE was financeable at 55% gearing, the UR responded to the issue of whether FE could address any financeability issues itself by reducing gearing. In this regard, the UR reiterated its position in the GD17 Final Determination, where it stated that reducing gearing from 55% to 45% does not materially affect the WACC. To support this, the UR submitted analysis that showed taking on more equity would have an immaterial effect (a reduction of 0.03 percentage points) on FE’s notional WACC, due to the reduction in the uplift applied to move from asset beta to equity beta following from the lower gearing.\(^{829}\)

The UR submitted that the case for a debt beta reduction was not made out by FE as:

(a) FE did not challenge the UR’s debt beta assumption throughout the GD17 consultation process and the debt beta determined by the UR was the one Oxera itself identified. The UR submitted that FE could not credibly

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\(^{826}\) UR Rejoinder, paragraphs 12.9–12.13.

\(^{827}\) UR R&O on NoA, paragraph 13.16.

\(^{828}\) UR R&O on NoA, paragraph 13.18.

\(^{829}\) UR R&O on NoA, EW/S Earwaker, Table 3.
make a case for a different beta, having previously put forward a debt beta of 0.1.830

(b) FE’s submissions made in favour of a debt beta of 0.05 were not persuasive.831 The two primary reasons given by the UR were that the evidence presented by FE for the debt beta of BBB rated bonds did not show that a debt beta of 0.1 was wrong and the other regressions provided by FE were fundamentally flawed as evidence because they were based on bonds with stronger credit ratings than BBB.832

**Our assessment**

7.89 We consider that there are two key questions underlying FE’s submissions on Ground 4B and which need to be addressed, in order to assess whether the UR’s decision was wrong:

(a) Is FE financeable during GD17 under the base case assumption of 55% gearing?833

(b) If not, can FE address this issue itself by reducing gearing from 55% to 45%, without increasing the WACC? The Parties agree that reducing gearing removes the financeability issues.834 Hence, this second question amounts to whether reducing gearing by ten percentage points causes the WACC to increase.

7.90 We therefore set out our assessment of Ground 4B under the following two subheadings:

(a) FE’s financeability at 55% gearing; and

(b) Impact of reducing gearing on the WACC.

**FE financeability at 55% gearing**

7.91 FE submitted that it was incorrect to assume that it would be in a position to obtain an investment grade credit rating at 55% gearing, under a notional

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830 UR R&O on NoA, paragraphs 13.32(a) and 13.33.
831 UR R&O on NoA, paragraph 13.32(b).
832 UR R&O on NoA, EW/S Earwaker, paragraph 4.25.
833 This includes the alleged false comfort on financeability that the UR obtained through its ‘improperly calibrated’ sensitivity analysis.
834 NoA, EW/S Forrest 1 paragraph 3.77 and GD17 Final Determination, paragraph 10.78.
In support of this, FE provided evidence of both quantitative and qualitative analysis of FE’s notional position at 55% gearing, which involved comparing FE against the Moody’s rating criteria. In support of this, FE provided evidence of both quantitative and qualitative analysis of FE’s notional position at 55% gearing, which involved comparing FE against the Moody’s rating criteria. 

7.92 FE’s analysis of its outturn financial ratios at 55% has shown that a number of the ratios, which Moody’s considers when applying a credit rating, do fall short of investment grade. The UR’s base case modelling in the GD17 Final Determination also showed that FE’s financial metrics were, in places, below the investment grade thresholds used by Moody’s. 

7.93 However, the UR set out a number of countervailing factors, which would improve FE’s notional financeability, if the exercise were to be performed during GD17 (see paragraph 7.84 above).

7.94 First, as pointed out by the UR in its GD17 Final Determination and during the course of this appeal (see paragraphs 7.68(b) and 7.84(a) above), there is likely to be headroom on FE’s cost of debt during the GD17 Period. Headroom on the cost of debt refers to a situation whereby the allowance for interest costs in the WACC set by the UR is higher than the interest rates expected to be charged to FE by its debt providers. It follows that FE would get a higher return than it needs to cover its debt finance and would retain the difference as profit within the GD17 Period. This is because the UR has assumed a nominal cost of debt of 6.2% following FE’s refinancing in 2019, which compares to:

(a) current BBB nominal cost of debt for 10+ years of 3.4%, and

(b) FE’s nominal cost of debt on existing facilities of 4.7%.

835 NoA, paragraph 7.50.
836 By notional we are referring to a hypothetical exercise, which is undertaken to establish whether FE would obtain investment grade debt. This notional exercise makes assumptions on an efficient level of gearing and an efficient WACC which a firm with FE’s characteristics would obtain. This differs to FE’s actual financeability, which would take into account FE’s actual gearing and actual cost of funds (or WACC). It is not clear cut that considerations such as changes in the debt markets or Moody’s qualitative views of the NI gas market are actual or notional considerations, by definition. In our view, a notional FE is still within the NI gas market and will still benefit from cheaper debt being available on the market. Therefore, these considerations should be included in a notional assessment. Moreover, since we consider that both notional and actual considerations are relevant in the present case (see paragraph 7.102 of this Final Determination), the question whether, strictly speaking, a consideration is notional or actual is not relevant to our assessment in this case.
837 NoA, paragraph 7.51.
838 NoA, EW/S Forrest 1, Table 3.6.
839 GD17 Final Determination, Table 194 and paragraph 10.70.
840 GD17 Final Determination, Table 190, page 281.
841 Moody’s Credit Opinion on Phoenix Natural Gas Finance Ltd, dated 3 February 2017 Exhibit 6, page 5. Moody’s analysis of financing costs, which it states are based on iBoxx index values, indicates 3.21% for 10–15 years and 3.41% for 15+ years
842 GD17 Final Determination, Table 190, page 281.
7.95 Adjusting the UR’s financeability model for a 4.0%\textsuperscript{843} cost of debt from 2019 onwards would lead to significantly improved financial ratios. FE’s key PMICR ratio was estimated by the UR at between 1.32 and 1.36 from 2019 to 2022, and therefore it would only need a small reduction in the assumed interest rate for the ratio to be above the target level of 1.40.\textsuperscript{844}

7.96 As highlighted by the UR during the course of this appeal (see paragraph 7.84(b) above), Moody’s put emphasis on this cost of debt headroom in its recent decision to classify PNGL’s debt as investment grade stating:

PNG has recently refinanced its outstanding bank debt (£140 million, around a third of gross debt outstanding) at a tenure of five years (+1 month) and the corresponding iBoxx value (5 to 7 year bucket in January) averaged 2.5%, over 230bps below the 4.8% assumption. 80% of the 230bps will be given back through the TRV log–down at end 2022 (increasing gearing, as measured by net debt / TRV), discussed in the highlight box, but PNG retains full exposure to any out/under performance versus the 2.5% value. Historically network operators have outperformed the wider peer index, due in part to the ‘halo’ effect, and we expect this to be the case for PNG.\textsuperscript{845,846}

7.97 The Moody’s quote above is referring to the high cost of debt allowance in the WACC calculated by the UR, which Moody’s analysis suggests is 230 basis points higher than the current cost of debt available in the market (iBoxx value). Given that the cost of debt allowance in the WACC is higher than the market rates, PNGL will get a higher rate of return to pay its debt providers than it needs. As such, it is expected that PNGL will earn additional profits (being allowance for interest costs less actual interest costs) during GD17, which will improve its financeability.\textsuperscript{847}

7.98 Second, as set out by the UR in its GD17 Final Determination and during the course of this appeal (see paragraph 7.84(b)), financeability analysis should not be focused solely on the outturn financial ratios and whether these are in–line with the investment grade thresholds set by the rating agencies. Rather,

\textsuperscript{843} Taking the mid–point between the BBB cost of debt as per Moody’s and FE’s embedded debt, rounded to the nearest whole number.
\textsuperscript{844} GD17 Final Determination, Table 194, page 284. The PMICR ratio is an adjusted ‘interest cover’ ratio, ie measure of profit divided by interest, and therefore a reduction in interest paid will have a corresponding effect on PMICR and other interest cover ratios.
\textsuperscript{845} Moody’s Credit Opinion on Phoenix Natural Gas Finance Ltd, dated 3 February 2017, page 5.
\textsuperscript{846} iBoxx is an index for the bond markets.
\textsuperscript{847} The Moody’s report is dated February 2017, so the data on the debt markets is recent. Further, Moody’s specifically refers to the TRV adjustment in 2022 for cost of debt over/under performance but concludes that the within period exposure to outperformance is what matters for its assessment.
the interpretation of these ratios should instead be considered ‘in the round’, alongside other factors that the rating agencies consider when determining whether a firm is investment grade.

7.99 The two main non-financial metrics that rating agencies consider are:

(a) stability and predictability of the regulatory regime; and

(b) cost and investment recovery.848

7.100 Moody’s was complimentary about the NI regulatory regime in its report on PNGL.849

7.101 The investment grade description for the ‘cost and investment recovery’ metric allows for price controls, retrospective regulatory approval of return on investment and some revenue back-loading.850 This appears in line with FE’s regulatory environment.

7.102 The discussion above refers to whether FE would obtain an investment grade rating at 55% in the notional sense.851 FE submitted that a regulatory financeability assessment should be done solely on a notional basis and that its actual financeability position is not relevant.852 However, we disagree that actual financeability is irrelevant. For example, market data on the financial position of actual firms can provide relevant information as to the likely financeability of a notional firm, and the focus on notional gearing does not render such evidence on actual financeability irrelevant. This view is supported by regulatory practice from a number of sectors.853

7.103 In the context of actual financeability, at the main party hearing, FE said that its actual gearing was approximately [X].854 A [X] level of gearing indicates that, to date, FE has not only been able to [X]. Such a [X] level of gearing is inconsistent with FE’s submissions that it will not be in a position to finance its licenced activities at investment grade interest rates.855a

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851 Note, in this case, we consider the cost of debt headroom to be a notional consideration, as a notional company would obtain interest rates available on the market.
852 For example, FE R/S, WS Moore, paragraph 4.3.
853 See for example 2014 price review – Ofwat’s approach to assessing financeability.
854 FE hearing transcript, 9 March 2017, pages 43 and 44.
855a NoA, paragraph 7.4(b). Correction made to the text to amend a factual inaccuracy identified by FE on 28 June 2017.
7.104 Overall, we accept that under the UR’s base case model of FE’s notional financeability, certain of the financial metrics are marginally below the investment grade thresholds set by Moody’s. However, we agree that the countervailing factors submitted by the UR in principle serve to improve FE’s notional financeability. In particular, given the cost of debt headroom and Moody’s positive comments on the qualitative characteristics of gas distribution in NI, we consider it unlikely that the notional FE would have financeability issues at 55% gearing. Rather, we think it is likely that a notional FE could obtain an investment grade credit rating at 55% gearing during the GD17 Period.855,856

7.105 Finally, we note that FE submitted that the UR did not perform ‘properly calibrated’857 sensitivity analysis nor did it draw conclusions from a comparison of PNGL’s financial metrics with FE’s (see paragraphs 7.74 and 7.75 above). We have also considered FE’s additional points on sensitivity analysis and comparisons with PNGL. In our view, these factors do not change our assessment.

7.106 On the sensitivity analysis, we consider that the very nature of an Opex allowance is that it should be the best estimate of an efficient level of costs, which FE may outperform, underperform or meet. Clearly, if FE incurs actual costs higher than the allowance set in the charge control, this would have an adverse effect on financial metrics. Outperformance against assumed costs would have the reverse effect on financial metrics.858 FE provided analysis of its financial metrics assuming 15% Opex and Capex ‘shocks’ ie overspend against both the Opex and Capex allowance by 15%.859 However, FE justified the 15% sensitivity with reference to its Business Plan Opex submission being 20% higher than the GD17 allowance. In our opinion, the fact that FE requested a higher Opex level than the regulator allowed in the GD17 Decision is not evidence that substantial overspend is sufficiently likely that it merits particular consideration within a sensitivity analysis.860 Taking these

855 NoA, paragraph 7.4(b).
856 We note that the UR also submitted that release of under–recovery revenue would improve FE’s financial metrics during GD17. However, the UR did not model the effect of an increase in price on sales volumes and/or the number of new connections. We did not consider that simply increasing revenue and holding other variables in the price control constant represented a viable counterfactual. However, we did find merit with the other countervailing factors set out by the UR, as discussed above.
857 NoA, paragraph 7.55.
858 Outperformance is FE spending less than its Opex allowance, which would improve its profitability and therefore financial metrics.
859 FE R/S, E/W Forrest-2, Table 3
860 NoA, E/E Forrest-1, paragraph 3.65. Mr Forrest explains that FE’s Business Plan for Opex was 20% higher than the GD17 allowance, which is used to support the Opex sensitivities presented at Table 3.8 of Forrest-1 and Table 3 of Forrest-2.
points together, we do not agree with FE’s submissions that the UR failed to perform a properly calibrated sensitivity analysis.

7.107 Regarding FE’s point that the UR should have drawn some form of conclusion from a comparison with PNGL, our view is that such a comparison is not required in order to assess the financeability of FE. An assessment of financeability for FE should be done on its own merits on a stand-alone basis. We do not therefore agree with FE’s point that the UR should have drawn inferences from its financeability analysis of PNGL, when considering the financeability of FE.

**Impact of reducing gearing on WACC and the debt beta**

7.108 The UR submitted (see paragraph 7.87 above), that if one applies the CAPM model mechanically, holding all other inputs and assumptions constant, changing gearing from 55% to 45% does not materially affect the pre-tax WACC. This is because there are two opposing effects, which balance out:

(a) Taking on more equity, which is more expensive than debt.

(b) Reducing gearing makes equity investments in the firm less risky, so the premium required by equity investors might reduce. This is captured by a reduced uplift from asset beta to equity beta, so that the equity beta is lower at 45% gearing compared with 55% gearing. The lower equity beta reduces the overall cost of equity.

7.109 We agree that this would be the starting point to an assessment of the impact of gearing on WACC. The UR has correctly applied the CAPM model, which is a well-utilised regulatory tool – the use of which has not been disputed by FE. The UR’s assumption that reducing gearing by ten percentage points does not materially affect WACC is therefore reasonable.

7.110 However, FE’s case around whether gearing effects WACC is predicated on the need to reassess the other inputs of the WACC when reducing gearing. FE submitted that in doing so one should reduce debt beta, which in turn increases WACC.861 The relief requested by FE with regards to financeability is a reduction in debt beta of 0.05 and a resulting increase in the WACC of 12 basis points.862

7.111 Whilst the debt beta reduction is requested as relief, it is also relevant to our assessment of FE’s case, as FE’s arguments around the impact of gearing on

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861 NoA E/W Forrest-1, paragraphs 3.78 and 3.79.
862 NoA, paragraphs 7.60 and 7.58.
WACC are based upon the need to reduce debt beta when one reduces gearing. Hence, we address FE’s debt beta evidence in this section, as part of our analysis of the impact of gearing on WACC.

7.112 FE submitted that the impact of gearing on the cost of debt was not captured in the UR’s expert model, as this has kept the debt beta constant when moving from 55% to 45% gearing. FE’s expert submitted that a debt beta of 0.05 was more appropriate for a gearing level of 45% and provided evidence from regression analysis and a review of regulatory precedent to support its position.863 We set out our views on this evidence below.

7.113 First, in our view FE did not demonstrate the impact of reducing gearing on debt beta through its regression analysis, as the analysis of debt betas is not done at different gearing levels.864 FE’s evidence is that a change in gearing should be accompanied by a change in debt beta, but it has not presented empirical analysis of debt betas at different gearing levels.

7.114 We note that FE made reference to cases such as the NIE appeal, where 45% gearing was coupled with a debt beta of 0.05.865 However, in our opinion what was decided in a different case is not sufficient to prove that the UR was wrong in the present case. There is a range of options open to the UR in selecting a debt beta, which is a matter of judgment. The fact that the UR’s choice differs from the CC’s in the NIE appeal does not demonstrate that the UR was wrong. Rather, it simply shows that the UR chose a different option from a range of options.

7.115 Second, we agree with the UR that FE’s regression data866 (copied at Figure 4 below) does not show that a debt beta of 0.10 is wrong. Rather, a debt beta of 0.10 falls within the range of outputs from FE’s analysis.867 Further, as highlighted by the UR in its Defence, if one disregards the data that pre–dates the global financial crisis in 2008,868 the data presented by FE is even less

863 NoA, E/W Forrest-1, Table B.1 and Figure B.1.
864 NoA, EW/S Forrest 1 Appendix.
865 NoA, EW/S Forrest 1 Table B.1.
866 We note that PwC has also performed debt beta regressions for listed utilities and GDNs but these are not comparable to the UR’s estimate of debt beta for FE because the underlying firms are not all BBB rated. Further, the cost of debt estimates made at the time of the GD17 Final Determination were based on iBoxx BBB indices, so it is the debt beta regressions using iBoxx BBB data that are most appropriate for considering a debt beta within the UR’s WACC estimate.
867 NoA, EW/S Forrest-1, Table B.2
868 UR R&O on NoA, EW/S Earwaker, paragraph 4.25.
persuasive, as the outturn debt betas are higher in the period following 2008.\textsuperscript{869}

7.116 We note that FE submitted that the period 2008 – 2012 was an ‘outlier period’, rather than the period before the financial crisis.\textsuperscript{870} However, FE did not provide a rationale for this.\textsuperscript{871} Moreover, on an unadjusted basis (ie without excluding certain data points), our view is that FE’s evidence does not demonstrate that a debt beta of 0.10 was wrong. This can be seen from Figure 4 below, which demonstrates that a debt beta of 0.10, indicated by the blue line, is not out of line with the market data.

**Figure 4:** FE’s debt beta regression of BBB iBoxx data against the FTSE all–share

![Figure 4: FE’s debt beta regression of BBB iBoxx data against the FTSE all–share](source: NoA, EW/S Forrest-1, Figure B.1.)

7.117 Third, whilst we note that the cost of debt for FE is not part of this appeal, in our view FE’s proposed remedy of changing the assumed debt beta from 0.10 to 0.05 to reflect financeability would need to be considered alongside other aspects of the cost of capital calculation, in particular the cost of debt.\textsuperscript{872} As a result, even if we agreed that, as submitted by FE, a reduction in gearing from 55\% to 45\% should be accompanied by a reduction in the debt beta from 0.10

\textsuperscript{869} Further, we note that at the Hearing on 9 March 2017, Mr Forrest confirmed that he did not have statistical evidence that showed that his regressions showed that 0.1 was wrong. (FE hearing transcript, 9 March 2017, page 48)

\textsuperscript{870} FE R/PD, paragraph 5.30. In FE R/S, paragraph 6.68(c), FE claimed that the month October 2008 was an outlier, rather than the period 2008–2012. FE did provide a rationale for excluding October (2008). However, FE did not explain why it considered that a longer period (2008–2012) was anomalous in its response to the PD, compared to its position in the FE R/S.

\textsuperscript{871} Ibid.

\textsuperscript{872} This point can be illustrated by the following equation, which describes the components of debt premium: 
\[
\text{Debt Premium} = \text{default risk premium} + \text{liquidity risk premium} + \text{systematic risk premium}.
\]
to 0.05, further analysis would be required to demonstrate the consequential impact on the WACC. 873,874

7.118 Overall, we consider that FE has not provided persuasive evidence that a reduction in gearing from 55% to 45% should be accompanied with a reduction in the debt beta from 0.10 to 0.05. Moreover, we consider that the UR is within its margin of appreciation in exercising its regulatory judgment when assuming that modest changes in gearing do not require adjustments to the pre–tax WACC, given that this is in line with the CAPM model.

Our conclusion on Ground 4B

7.119 Our view is that given Moody’s views on the NI gas distribution market, it is likely that a ‘notional’ FE would be financeable at 55% gearing.

7.120 Further, due to the cost of debt headroom, the GDNs are expected to have better finances in GD17 than assumed in the UR’s base case model.

7.121 Notwithstanding whether FE is financeable at 55%, we agree with the UR that it is not wrong to assume that reducing gearing from 55% to 45% will have an immaterial impact on pre–tax WACC. Under the standard cost of capital framework as applied by the UR, FE can improve its financeability metrics by reducing its gearing, and the regulated rate of return will be sufficient to remunerate both equity and debt providers at this reduced gearing.

7.122 This is not a conclusion which would necessarily apply to all financeability scenarios. Conceptually we agree with FE that there may be an impact of a gearing change on the debt beta. In this case, FE has not provided persuasive evidence that the result of a change of the scale of ten percentage points is a reduction in the debt beta from 0.1 to 0.05 with a corresponding increase in the WACC of 12 basis points, because:

(a) FE has not shown what happens to debt beta if gearing moves from 55% to 45% gearing, and therefore its evidence is not directly related to the decision under appeal;

873 In our view, it is inconsistent to lower debt beta without considering the impact of this reduction in systematic risk on the cost of debt. This is because there is i) a direct link between the systematic risk of debt and the cost of debt and ii) a degree of judgment when estimating the cost of debt for an investment grade firm from the market data available.

874 We also note in passing that technically when reducing debt beta, one should also go back to the equity betas in the original comparator set (used for estimating asset beta). These observed equity betas should then be unlevered using the revised debt beta, to arrive at a comparator set of asset betas which is consistent with the reduced debt beta assumption. However, it is not clear that either the UR or FE have done this, and hence we do not consider that this point is relevant to our decision.
(b) FE’s empirical analysis has not shown that a debt beta of 0.10 is wrong; and

(c) FE’s proposed remedy of changing the assumed debt beta from 0.10 to 0.05 to reflect financeability would need to be considered alongside other aspects of the cost of capital calculation, in particular the cost of debt.

7.123 Overall, our view is that it is likely that FE would be financeable at 55% gearing. Moreover, if FE does face financeability issues, the UR was not wrong to assume that FE can address this by reducing gearing to 45%.

**Conclusion on Ground 4**

7.124 For the reasons given above, our conclusion on Ground 4 is that the GD17 Decision in relation to asset beta and financeability was not wrong. Accordingly, we do not allow the appeal, and confirm the GD17 Decision, to that extent.\(^\text{875}\)

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\(^\text{875}\) Article 14D(5) of the Gas Order provides that to the extent that the CMA does not allow the appeal, it must confirm the decision appealed against.
8. Remedies

Introduction

8.1 We have found the UR to be wrong in respect of Ground 1C and Ground 2 of the appeal. In respect of Ground 1C, at paragraph 4.97 we have concluded that the GD17 Decision in relation to the Opex allowance was wrong to the extent that it omitted an allowance for GIS costs and sought to determine the matter through the Uncertainty Mechanism. In respect of Ground 2A, at paragraphs 5.103 to 5.109 we have concluded that the GD17 Decision in relation to the connection incentive was wrong to the extent that the UR had used incorrect HA data to set the connection target. In respect of Ground 2B, at paragraphs 5.146 to 5.150 we have concluded that the GD17 Decision in relation to the connection incentive was wrong to the extent that the UR had applied the non–additionality rate of 25%.

8.2 Following our provisional determination, we sought views on the design of an appropriate remedy, and on how the remedy should be implemented.

8.3 Where the CMA allows, to any extent, an appeal in relation to a price control decision, it must do one or more of the following:

(a) Quash the decision (to the extent that the appeal is allowed).

(b) Remit the matter back to the UR for reconsideration and determination in accordance with any directions given by the CMA.

(c) Substitute the CMA’s decision for that of the UR (to the extent that the appeal is allowed) and give any directions to the UR or any other party to the appeal.876

8.4 We set out below CMA’s approach to the design and implementation of the remedies required to correct the errors we have found.

Design and implementation of the remedies

8.5 In light of our final determination, we set out below the remedies we have decided in respect of Grounds 1C, 2A and 2B. The price control will otherwise continue in its current form because we have found that the UR was not wrong on the other grounds of this appeal. Consequently, we have not

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876 Article 14E(1) and (2) of the Gas Order.
allowed the appeal on those grounds and have confirmed the GD17 Decision to that extent.877

Ground 1C

8.6 We have decided to quash the GD17 Opex Decision in relation to the Opex allowance to the extent that it omitted an allowance for GIS costs and that the UR sought to determine the matter through the Uncertainty Mechanism.

8.7 For the reasons set out below, we have concluded that the correct level of GIS costs should be based on the 2014 actual GIS costs, rolled forward in accordance with the bottom–up approach as followed elsewhere in the GD17 Decision.

8.8 We set out our reasoning below as to the level of the GIS allowance. In the present case, as explained below, our conclusion as to the level of the GIS allowance means that it is not necessary or appropriate to remit the matter back to the UR for reconsideration and determination, or to substitute the CMA’s decision for that of the UR.

8.9 In this section we consider:

(a) The Parties’ submissions to this appeal as to the level of GIS costs;878

(b) Our assessment of the submissions, and our decision on the remedy for the error in respect of GIS costs; and

(c) Our approach to remedy implementation.

Parties’ submissions

8.10 We outline below the different numbers as to the levels of GIS costs which were presented by the Parties. We first set out the approach proposed by the UR, which was based on the UR’s approach to other categories of Opex, and which it used to derive an additional allowance for GIS costs within the GIS Decision. We then explain the level of costs proposed by FE, and explain why FE’s submission in respect of the level of GIS costs is higher than the level within the GIS Decision.

877 Article 14D(5) of the Gas Order.
878 Both the UR and FE made reference to other documents in their submissions to this appeal, including the GIS Decision. We have taken account of the analysis within the GIS Decision and FE’s Business Plan to the extent required to assess an appropriate remedy and where indicated in submissions to this appeal.
8.11 The UR submitted that, in setting a remedy for Ground 1C, we should have regard to the GIS Decision. The GIS Decision made an allowance for GIS costs within the GD17 price control.

8.12 In determining the level of GIS costs, the UR followed the ‘bottom–up’ approach which it also followed in determining other aspects of operating costs, for example the costs which were the subject of appeal in Ground 1E. The bottom–up approach followed by the UR set an assumption for costs within GD17 based on a base year of 2014 costs, rolled forward for inflation.

8.13 On this basis, the GIS Decision allowed £853,000 across GD17 for GIS costs.\textsuperscript{879} The UR explained that this figure was based on the 2014 actual figures of £142,188.\textsuperscript{880} It concluded that this was a suitable assumption, although it considered that this could be seen as including some ‘inefficient’ costs, as it considered that FE had acknowledged that some of the Land and Property Services (LPS) mapping costs in 2014 would not be repeated. However, it concluded that, based on the evidence provided, there was no need to change from its approach of applying 2014 actual figures to GD17.\textsuperscript{881}

8.14 In FE’s appeal, it proposed that it should be allowed the amount set out in its Business Plan, which was £1.11 million. FE’s submission was higher than the UR’s proposed GIS allowance of £853,000 in the GIS Decision, which the UR based on rolling forward actual GIS costs as described in more detail below. In its reply to the UR R&O on the NoA, FE gave a number of reasons why it considered that GIS costs should be expected to increase in GD17. These were based on its Business Plan, where it identified higher costs in respect of:\textsuperscript{882}

\begin{itemize}
  \item[(a)] LPS mapping, which FE quantified as a £1,500 per annum increase in each year of GD17 to reflect ongoing increases in the network size;
  \item[(b)] GIS support, which FE stated was contracted until 2017 and estimated to increase by 10% thereafter;
  \item[(c)] GIS development, which FE stated would increase in cost in preparation for GD23;
\end{itemize}

\textsuperscript{879} GIS Decision, paragraph 2.56.
\textsuperscript{880} £142,188 multiplied by 6 years equals £853,128.
\textsuperscript{881} GIS Decision, paragraph 2.55.
\textsuperscript{882} FE R/S, paragraph 3.84.
(d) Positional improvement, which was a one–off implementation of a Global Navigation Satellite Systems project which FE considered would cost £60,000 over two years.

8.15 FE’s Business Plan included its assessment of GIS costs for the GD17 Period, which were higher than the 2014 base year costs, primarily for the reasons listed in paragraph 8.14. Under the UR’s bottom–up approach, changes can be made to the allowance to reflect differences in efficient costs between the base year and the period of the price control, where there is evidence that this is appropriate in light of the factors which are expected to influence costs over the relevant period.

8.16 In the GIS Decision, the UR stated that FE’s expectation of the cost increases had not been evidenced by their historic costs; there was a lack of evidence of a strong link between actual evidence of network and customer growth in respect of the actual costs incurred between 2013 and 2015 and the forecast costs for 2016; and that growth of the network did not necessarily equate to increasing costs. The UR stated that given the nature of the costs, it would not have expected them to vary significantly with the size of the network, and there had been no evidence to the contrary.

8.17 The UR concluded that under its bottom–up approach, it would expect to see a ‘clear justification from the company as to the reasons for the increase’ and in this case that the justification was ‘inadequate’. The UR therefore decided not to make any adjustments to the ‘bottom–up’ calculation for GIS costs, and as a result the GIS Decision assumed £853,000 for GIS costs.

Our assessment

8.18 We note that the UR used the approach of setting 2014 as its base year for a number of cost categories. This is addressed in our assessment of Ground 1E: the Omission Error (see paragraphs 4.170 to 4.177). The UR used a single base year to set Opex, and we concluded that in so doing the UR was within its margin of appreciation in exercising its regulatory judgment. We note that in this appeal FE has not challenged the UR’s bottom–up approach as applied more broadly in setting allowances for GD17. Given that the UR’s approach in its GIS Decision is consistent with this approach, it seems to us that the allowance of £853,000 which the UR derived using the bottom–up approach is a suitable starting point for our assessment of GIS costs in GD17.

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883 FE R/S, paragraph 3.84, FE’s Business Plan, appendix 12, pages 28 to 31 and GIS Decision, tables 1 and 2.
884 GIS Decision, paragraph 2.52.
885 GIS Decision, paragraph 2.36.
886 CMA Provisional Determination (PD), paragraph 4.172.
8.19 We next consider the reasons stated by FE for an increase in GIS costs across GD17 relative to the assumption of £853,000 that is identified under the bottom–up approach and the 2014 base year. In order to find that an adjustment should be made to the bottom–up cost assumptions, we would expect FE to demonstrate both that there are circumstances relevant to GD17 which imply higher costs in this category, and also that these would not be able to be offset by cost savings in other areas.

8.20 We agree with the UR that within the overall framework of a bottom–up approach, it is for the company to demonstrate that there are particular, one–off reasons why the bottom–up approach is not suitable for a particular cost item. Otherwise, the bottom–up approach will overstate costs, as costs will only increase relative to the baseline.

8.21 In respect of LPS mapping, GIS support and GIS development, FE has indicated that costs may rise, in part as a result of an increased number of connections, which represents a change in circumstances relative to the base year, and therefore could support an increase in costs. However, FE has not explained the causal link between increased network connections and the level of proposed cost increases. In addition, FE has not explained why it is not able to identify offsetting cost savings, in particular given that the data on actual costs indicates that it achieved lower costs than £142,000 per annum in respect of GIS before and after 2014.887

8.22 FE’s only example of a step increase in the activities required relative to 2014 is the ‘positional improvement’ cost. In our view, that in itself does not justify an increase to the baseline cost allowance for the following reasons:

(a) First, the UR has indicated in the GIS Decision Paper that other GDNs have not claimed ‘one-off’ costs relating to this item, from which we infer that that a diversion from the standard approach is not justified; and

(b) Second, the evidence indicates that FE may be able to outperform and deliver efficiencies in other areas, as the total cost in 2014 is the highest out of the years 2012 to 2016.888

8.23 In its submissions, FE has provided a number of reasons why costs might increase in GD17, both to reflect a larger network and to reflect a one–off cost. Its submissions show that costs may increase in four areas, but the

887 See table 2 and paragraph 2.48 of the GIS Decision. Whilst there is some fluctuation over time within the individual line items, the data within the GIS Decision indicates that aggregate GIS costs were higher in 2014, compared to 2012, 2013, 2015 and 2016.

888 See table 2 and paragraph 2.48 of the GIS Decision. Whilst there is some fluctuation over time within the individual line items, the data within the GIS Decision indicates that aggregate GIS costs were higher in 2014, compared to 2012, 2013, 2015 and 2016.
submissions are in our view not based on sufficient economic or technical analysis of the linkages between GIS costs and network size to justify a divergence from the bottom–up approach. In addition, FE has not indicated it has taken any steps to mitigate these costs or to demonstrate that it has sought to identify efficiencies which might offset the effect of cost increases. This is particularly relevant in the context that the UR has provided analysis indicating that FE has actually managed the network based on lower GIS costs in GD14 than the UR has allowed based on the use of a 2014 baseline.

8.24 Overall, in our view FE’s case is not sufficiently compelling such as to justify a divergence from the approach taken in respect of other cost items. We have therefore used the 2014 actual costs as a baseline and agree with the UR that this results in a GIS allowance of £853,000.

8.25 In the ED1 Determinations, we recognised the risk of knock–on effects changing one aspect of a complex regulatory decision might have. The principle we adopted in those cases and we adopt here is to consider on a case–by–case basis any evidence submitted to the CMA regarding links between the parts of the decision which are challenged and parts which are not. However, based on submissions in this appeal, we concluded that changing the GIS costs would not have consequential effect on other parts of the UR’s determination.

Implementation of the remedy

8.26 We conclude that the level of GIS costs should be set based on the bottom–up approach, and that using 2014 actual costs results in a GIS allowance of £853,000. Ordinarily, we would proceed either to remit the matter back to the UR or to substitute the CMA’s decision for the UR’s decision, in either case with directions as to the implementation of our remedy. However, in the present case we note that the figure we have reached is the same as that reached by the UR in the GIS Modification. In those circumstances, we have decided to take a proportionate approach, namely to quash the GD17 Decision and to note that the remedy of £853,000 which we would otherwise direct to be implemented is already in place. Accordingly, it is not necessary or appropriate to remit the matter back to the UR or to substitute the CMA’s decision for the UR’s decision.

889 CMA BGT ED1 Determination, paragraph 3.50 and CMA Npg ED1 Determination, paragraph 3.49.
890 CMA BGT ED1 Determination, paragraph 3.52 and CMA Npg ED1 Determination, paragraph 3.51.
**Ground 2A**

8.27 In respect of Ground 2A, we have decided to quash the GD17 Decision in relation to the connection incentive to the extent that the UR had used incorrect HA data to set the connection target. We have also decided to remit the matter back to the UR for reconsideration and determination and to give directions including: that the UR recalculate the connection target from 20,450 to the figure which would result from the UR’s connections model, having corrected the error in respect of HA data identified in the Final Determination, make the consequential change to allowed revenue in GD17 and proceed with the necessary modification of FE’s Licence.\(^{891}\)

8.28 In chapter 5 we describe the error that we found in respect of HA data. We have calculated that the incorrect treatment of HA data resulted in a connection target of 20,450 which, absent the HA data error and using the approach outlined in paragraph 5.56, would have been calculated as 19,403. We have also reviewed the impact of the connection target on the price control more broadly, and we note that a consequence of changing the connection target is that there would be an effect on the level of certain cost items which are defined by reference to the number of connections.

8.29 We received submissions from FE and the UR on how we should implement the remedy.\(^{892}\) FE proposed that we should make an Order to quash the 20,450 figure, replace with 19,403, and change the licence to make the consequential changes to the incentive and the associated cost items. FE submitted that all the consequential revisions were clearly identifiable and could be made by the CMA. FE submitted four assumptions within the price control model which it considered should be amended to reflect the change to the connection incentive. FE did not agree that we should remit the changes to the UR, as it raised the risk that the UR would re-open issues leading to unnecessary cost, uncertainty and delay.

8.30 The UR proposed that we should quash and remit with directions to remedy the error. It told us that it would not be feasible for the CMA to include the linked changes as there was insufficient time prior to the statutory deadline for determining the appeal. It also told us that it would need to undertake an audit of the HA data to confirm its accuracy so any concerns the CMA might have about the implication for time and resources were academic. It also said that

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\(^{891}\) We have also given directions on procedural matters regarding consultation and publication on the UR’s website.

\(^{892}\) FE R/APD and UR R/APD.
the connection incentive mechanism was in any case being remitted and the revised connection target could be brought within this.

8.31 In its response to the amended provisional determination, FE identified a number of areas where consequential amendments would need to be made as a result of changing the level of HA data. The UR made similar submissions, but also identified some other areas which might require amendment. We decided that it would not be practicable for us to implement these changes within the time available for remedies. In addition, we note that the UR stated that it wished to have the time to complete an audit of the FE data, and we agree that this could form part of the process of correcting for the HA error.

8.32 Having considered the Parties’ submissions, we have decided to remit the matter back to the UR for reconsideration and determination with directions, as summarised at paragraph 8.27 above, to the UR. The directions also address the implementation of the remedy, and require back-dating to the beginning of the price control period (ie 1 January 2017). Our directions in respect of Ground 2A require the UR to correct the specific aspect of the connection incentive calculation which was wrong. This will change the level of the connection incentive, and will require consequential changes within the price control that are directly linked to the GD17 connection target. In our view, no other changes to the connection incentive or price control would be required to remedy the HA error.

8.33 We expect that the changes required to implement the remedy on Ground 2A should be relatively straightforward. However, given that the UR will also be reviewing the connection incentive in the context of the non-additionality error under Ground 2B below, we are not requiring the UR to meet a separate timetable and issue a separate licence modification. We would expect the UR to recalculate the connection incentive having corrected the HA error and implement the licence modification no later than it completes its analysis in respect of Ground 2B, and in our directions we require the UR to complete the process within the same timetable.

Ground 2B

8.34 In respect of Ground 2B, we have decided to quash the GD17 Decision in relation to the connection incentive to the extent that the UR had applied the non-additionality rate of 25%. In our provisional determination, we proposed to remit the matter back to the UR for reconsideration and determination in accordance with directions we may make.
8.35 The UR agreed that it would be appropriate for the matter to be remitted back to the UR. The UR submitted that it would not be appropriate for the CMA to substitute its decision for the UR’s decision, because further work would be required. The UR submitted that it would be best placed to undertake that work.

8.36 FE disagreed with our proposal, and submitted that instead, the CMA should quash the GD17 Decision and take its own decision on non–additionality. FE stated that the UR was not the appropriate body to re–determine non–additionality: the appeal exposed a significant lack of rigour in the UR’s approach; and the UR’s past record did not provide FE with confidence that any further decision by the UR would be based on sufficiently thorough evidence. FE submitted that the CMA had all the evidence before it that it needed to make a Decision, and therefore requested that the CMA quash the GD17 Decision insofar as it related to non–additionality and substitute the CMA’s own decision for that of the UR.

8.37 In our view, to impose a remedy, we would need to decide the appropriate level for the non–additionality rate within the timeline for this appeal. Our assessment is that further evidence is required to support the decision to apply a non–additionality rate. We do not therefore agree with FE that we have sufficient evidence to make a decision. Our view remains that remittal back to the UR is the most appropriate approach.

8.38 In respect of Ground 2B, we have decided to remit the matter back to the UR for reconsideration and determination and to give directions, which include: that the UR undertake further analysis to determine and calculate a revised non-additionality rate; calculate the consequential effects; and proceed with the necessary modification of FE’s licence. We are also requiring the UR to backdate the resulting licence modification to the commencement of the price control. Under this approach, the current form of the price control will continue in the period between our Final Determination and any change that may arise following reconsideration and determination by the UR, as we consider that there would not be any further benefit in making an interim change to the licence.

8.39 Our directions require the UR to reconsider and determine the appropriate non–additionality rate. We recognise that there may be other parts of the GD17 price control which are directly linked to the level of the non–additionality rate. Where this is the case, we require the UR to calculate the consequential effects and make the associated changes alongside the

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893 We have also given directions on procedural matters regarding consultation and publication on the UR’s website.
changes to the non–additionality rate. Our analysis of Ground 2B did not indicate that there were other aspects of the broader regulatory regime for GD17 which were linked to the non–additionality assumption and which would need to be changed along with any change to the non–additionality rate. Therefore, whilst we have allowed for the possibility of consequential effects within our directions, our expectation is that any changes would be limited to a change to the non-additionality rate and the direct effect on revenues associated with the connection incentive.

8.40 Our directions also address the timing of the implementation of the remedy. We consider that the UR should make and publish the final decision in respect of the determination of the appropriate non–additionality rate within six months from the date of the CMA’s Order.894 A further period will then be required to implement the statutory consultation895 and licence modification. We expect this should take no longer than three months, and accordingly have directed the UR to complete the process within nine months.

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894 FE submitted to us that the licence modification process should be completed within six months, in order to provide it with an understanding of the outputs it is required to deliver (letter from FE to CMA, 22 June 2017). Whilst we agree that there should be no unnecessary delay, we consider that the final determination on the revised non-additionality rate should be sufficient to provide this understanding, and that six months appropriately balances the need for completion of the process and the time required for the UR to identify suitable evidence and modelling, including public consultation, prior to determining the non-additionality rate.

895 As required by Article 14 of the Gas Order.
9. **Costs**

9.1 The legislation (and associated CMA Rules and guidance) makes provision for (a) the payment of the CMA’s costs, (b) the payment by one party of the costs of another party (*inter partes* costs) and (c) related ancillary matters.\(^{896}\)

9.2 The CMA is reserving its position on costs and will consult the parties prior to making a written order, once those costs and appropriate apportionment between parties have been determined.\(^{897}\)

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\(^{896}\) See Gas Order, Schedule 3A, paragraph 12; CC14, Rule 19, and CC15, paragraphs 5.1–5.8.

\(^{897}\) CC15, paragraph 5.5.
### Appendix A: Timeline of GD17 process

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>January-March 2015</td>
<td>Responses received on overall approach.</td>
</tr>
<tr>
<td>17 April 2015</td>
<td>Publication of update on overall approach for GD17 price control, including a revised timeline for business plan submission.</td>
</tr>
<tr>
<td>14 May 2015</td>
<td>Publication of final GD17 business plan data templates with associated RIGs (regulatory instructions and guidance).</td>
</tr>
<tr>
<td>30 June 2015</td>
<td>Initial set of documents provided by GDNs.</td>
</tr>
<tr>
<td>30 September 2015</td>
<td>Remaining documents including main business plans and completed business plan data templates provided.</td>
</tr>
<tr>
<td>16 March 2016</td>
<td>Publication of GD17 Draft Determination.</td>
</tr>
<tr>
<td>31 May 2016</td>
<td>Consultation on GD17 Draft Determination closed.</td>
</tr>
<tr>
<td>15 September 2016</td>
<td>Publication of GD17 Final Determination.</td>
</tr>
<tr>
<td>14 October 2016</td>
<td>Consultation on related licence modifications ended.</td>
</tr>
<tr>
<td>28 October 2016</td>
<td>Publication of Decision Paper on Licence Modifications pursuant to the GD17 Final Determination and other Regulatory Decisions (the GD17 Decision).</td>
</tr>
<tr>
<td>1 January 2017</td>
<td>GD17 Price Control took effect for FE and PNGL.</td>
</tr>
<tr>
<td>1 January 2018</td>
<td>GD17 Price Control to take effect for SGN.</td>
</tr>
</tbody>
</table>

1 Compiled from GD17 documents included in the NoA
# Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>15% Assumption</td>
<td>The assumption in the UR’s connection target that 15% of OO properties passed would not connect to the gas network in the long run.</td>
</tr>
<tr>
<td>ACRT</td>
<td>Annual Cost Reporting Template.</td>
</tr>
<tr>
<td>AFR</td>
<td>Audit, Finance and Regulation.</td>
</tr>
<tr>
<td>Appeal</td>
<td>FE’s NoA and related documents.</td>
</tr>
<tr>
<td>BGE</td>
<td>Bord Gáis Éireann Limited, a company registered in the Republic of Ireland.</td>
</tr>
<tr>
<td>Business Plans</td>
<td>Submissions made to the UR from the GDNs during the GD17 process, including detailed business plans with projected costs.</td>
</tr>
<tr>
<td>Capex</td>
<td>Capital expenditure.</td>
</tr>
<tr>
<td>CAPM</td>
<td>Capital Asset Pricing Model</td>
</tr>
<tr>
<td>CAT</td>
<td>Competition Appeal Tribunal.</td>
</tr>
<tr>
<td>CC</td>
<td>Competition Commission.</td>
</tr>
<tr>
<td>CC14</td>
<td>See the Rules</td>
</tr>
<tr>
<td>CC15</td>
<td>See the Guidance</td>
</tr>
<tr>
<td>CCNI</td>
<td>Consumer Council (Northern Ireland).</td>
</tr>
<tr>
<td>CMA</td>
<td>Competition and Markets Authority.</td>
</tr>
<tr>
<td>CMA BGT ED1</td>
<td>CMA, British Gas Trading Limited v The Gas and Electricity Markets Authority, September 2015.</td>
</tr>
<tr>
<td>CMA NPg ED1</td>
<td>CMA, Northern Powergrid (Northeast) Limited and Northern Powergrid (Yorkshire) plc v the Gas and Electricity Markets Authority, September 2015.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>-------------------------</td>
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</tr>
<tr>
<td>Connection Incentive</td>
<td>A per connection allowance recoverable for the connections of domestic owner occupied properties intended to cover a GDN’s sales-related costs.</td>
</tr>
<tr>
<td>Defence</td>
<td>Collective term for the UR’s submissions and representations during the appeal.</td>
</tr>
<tr>
<td>DNV.GL analysis</td>
<td>Analysis submitted by FE to the UR in response to the GD17 Draft Determination and commissioned from DNV.GL.</td>
</tr>
<tr>
<td>ED1 Determinations</td>
<td>The CMA NPg ED1 Determination and the CMA BGT ED1 Determination are together referred to as the ED1 Determinations.</td>
</tr>
<tr>
<td>FE</td>
<td>Firmus Energy (Distribution) Limited.</td>
</tr>
<tr>
<td>FE Licence</td>
<td>The Gas Conveyance Licence originally granted to FE in March 2005 and modified in each price control period.</td>
</tr>
<tr>
<td>FE Licence Area</td>
<td>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.</td>
</tr>
<tr>
<td>FE R/S</td>
<td>FE’s Reply to the UR’s R&amp;O on NoA submitted on 14 February 2017</td>
</tr>
<tr>
<td>Forecast Horizon</td>
<td>The length of time into the future that forecasts are prepared.</td>
</tr>
<tr>
<td>FTE</td>
<td>Full time equivalent employees.</td>
</tr>
<tr>
<td>Gas Functions</td>
<td>The UR’s powers and duties under the Gas Order and the Energy Order.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GB GDNs</td>
<td>The GDNs operating the 8 gas distribution networks in GB, namely National Grid, Northern Gas Networks, Wales &amp; West and SGN.</td>
</tr>
<tr>
<td>GD14</td>
<td>The price control which applied to GDNs in Northern Ireland from 1 January 2014 to 31 December 2016.</td>
</tr>
<tr>
<td>GD17</td>
<td>The price control which applies to GDNs in NI from 1 January 2017 until 31 December 2022.</td>
</tr>
<tr>
<td>GD17 Decision</td>
<td>Licence Modifications Pursuant to the GD17 Final Determination and other Regulatory Decisions, Decision Paper, 28 October 2016 - The decision of the UR dated 28 October 2016 on the modifications to be made to the gas conveyance licences of the NI GDNs under Article 14 of the Gas Order to give effect to the GD17 price control determination.</td>
</tr>
<tr>
<td>GD17 Draft Determination</td>
<td>Price Control for Northern Ireland’s Gas Distribution Networks GD17 Draft Determination, 16 March 2016 - The Draft Determination of the UR dated 16 March 2016 published the UR’s draft determination for the GD17 price control determination for consultation.</td>
</tr>
<tr>
<td>GD17 Final Determination</td>
<td>Price Control for Northern Ireland’s Gas Distribution Networks GD17 Final Determination, 15 September 2016, - The Final Determination of the UR dated 15 September 2016 detailed the final determination on the GD17 price control determination, and published the associated licence modifications for consultation.</td>
</tr>
<tr>
<td>GD17 Period</td>
<td>The period over which the GD17 price control will apply (1 January 2017 until 31 December 2022).</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>GD23</td>
<td>The next price control which will apply to GDNs in NI from 1 January 2023 and beyond.</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross domestic product.</td>
</tr>
<tr>
<td>GDN</td>
<td>Gas distribution network operator.</td>
</tr>
<tr>
<td>The GDNs</td>
<td>The three distribution licence holders in NI.</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographic Information System.</td>
</tr>
<tr>
<td>GIS Consultation</td>
<td>The consultation, launched by the UR on 31 January 2017, to modify FE’s licence to make an allowance within Opex of £853,000 for GIS costs.</td>
</tr>
<tr>
<td>GIS Costs</td>
<td>Costs for GIS support and maintenance, GIS licences, GIS development, software licences for other smaller IT systems, and Landweb fees are collectively known as GIS Costs.</td>
</tr>
<tr>
<td>GIS Oversight Error</td>
<td>FE’s alleged error of the omission of professional and legal costs associated with the GIS mapping software in the UR’s bottom up analysis.</td>
</tr>
<tr>
<td>HA</td>
<td>Housing Association. A private, not-for-profit organisation that provides low-cost social housing in NI.</td>
</tr>
<tr>
<td>ICON</td>
<td>iCON Infrastructure Partners</td>
</tr>
<tr>
<td>I&amp;C</td>
<td>Industrial and commercial.</td>
</tr>
<tr>
<td>LIBOR</td>
<td>London InterBank Offered Rate. It is the primary benchmark for short term interest rates, calculated from the average of interest rates estimated by each of the leading banks in London which they would be charged were they to borrow from each other.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Licence Areas</td>
<td>The specific geographic areas that the <strong>GDNs</strong> each have exclusive licences for gas distribution in <strong>NI</strong></td>
</tr>
<tr>
<td>LPS</td>
<td>Land and Property Services</td>
</tr>
<tr>
<td>McNicholas</td>
<td>McNicholas Construction Services Ltd.</td>
</tr>
<tr>
<td>NI</td>
<td>Northern Ireland.</td>
</tr>
<tr>
<td>NIE</td>
<td>Northern Ireland electricity.</td>
</tr>
<tr>
<td>NPV</td>
<td>Net present value.</td>
</tr>
<tr>
<td>OO</td>
<td>Domestic owner occupied.</td>
</tr>
<tr>
<td>Opex</td>
<td>Operating expenditure.</td>
</tr>
<tr>
<td>Opex Allowance</td>
<td><strong>UR’s</strong> decision on the allowance for Opex.</td>
</tr>
<tr>
<td>Parental recharge</td>
<td>The costs associated with the central services costs previously provided by <strong>FE’s</strong> parent company.</td>
</tr>
<tr>
<td>The Parties</td>
<td>The <strong>UR</strong> and <strong>FE</strong> collectively.</td>
</tr>
<tr>
<td>Period Contract Overview</td>
<td><em>The Period Contract Overview: GD17 Supplementary Paper – June 2015</em>, submitted by <strong>FE</strong> to the <strong>UR</strong> during the <strong>GD17</strong> process.</td>
</tr>
<tr>
<td>PMICR</td>
<td>Post-Maintenance Interest Cover Ratio.</td>
</tr>
<tr>
<td>PNGL</td>
<td>Phoenix Natural Gas Limited.</td>
</tr>
<tr>
<td>RAB</td>
<td>Regulatory asset base</td>
</tr>
<tr>
<td>The Rules</td>
<td><strong>Competition Commission Energy Licence Modification Appeals Rules</strong> (CC14).</td>
</tr>
<tr>
<td>SSE</td>
<td>Scottish and Southern Energy</td>
</tr>
<tr>
<td>SGN</td>
<td>SGN Natural Gas Limited.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Side Letter</td>
<td>A letter from the <strong>UR</strong> to <strong>BGE</strong> dated 24 March 2005. This letter confirmed, amongst other things, that the licence allowed accumulation of under–recoveries.</td>
</tr>
<tr>
<td>Totex</td>
<td>Total expenditure, ie the sum of <strong>Capex</strong> and <strong>Opex</strong>.</td>
</tr>
<tr>
<td>TRV</td>
<td>Total Regulatory Value: the depreciated asset value plus any incentive adjustments including the profile adjustment.</td>
</tr>
<tr>
<td>UKRN</td>
<td>UK Regulator’s Network.</td>
</tr>
<tr>
<td>UR</td>
<td>Northern Ireland Authority for Utility Regulation.</td>
</tr>
<tr>
<td>UR's R&amp;O on NoA</td>
<td>The <strong>UR's</strong> Representations and Observations on the <strong>NoA</strong> submitted on 19 January 2017.</td>
</tr>
<tr>
<td>UR's Rejoinder</td>
<td>The <strong>UR's</strong> rejoinder to <strong>FE's Reply</strong> submitted on 27 February 2017.</td>
</tr>
<tr>
<td>WACC</td>
<td>Weighted average cost of capital. The WACC is an estimate of the percentage return that a company needs to generate, in order to provide a fair return to its debt and equity providers. The WACC therefore combines an estimate of the cost of debt and the cost of equity into a single figure, using the relative proportions of debt and equity (the gearing).</td>
</tr>
</tbody>
</table>