BEFORE THE COMPETITION AND MARKETS AUTHORITY

IN THE MATTER OF AN APPEAL

UNDER SECTION 23B OF THE GAS ACT 1986

B E T W E E N : -

WALES & WEST UTILITIES LIMITED

Appellant

and

THE GAS AND ELECTRICITY MARKETS AUTHORITY

Respondent

NOTICE OF APPEAL
ENERGY LICENCE MODIFICATION
RIIO-GD2 PRICE CONTROL (2021-2026)

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Reference: 2663625/JAC/KXL3/RKR

Table of Contents

Part/Section	Title	Page No.
Part I	**Introduction**	1
1	Overview	1
2	Request for permission to appeal	5
3	Scope of the appeal	6
4	Context of the appeal – uncertainty and risk in the gas distribution sector	8
5	Contact Details	21
Part II	**The Legal Framework**	22
1	Overview	22
2	The Statutory Framework	23
3	Grounds of Appeal	27
4	Standard of Review	29
Part III	**Heads of Appeal**	32
A	Cost of Debt	32
B	Cost of Equity	63
C	Repex	79
D	Licence Conditions and Revenue Uncertainty	121
E	Ongoing Efficiency	152
F	Tax Clawback	167
Part IV	**Summary of Relief Sought**	172
Part V	**Statement of Truth**	175
Annex 1	**Summary of Supporting Evidence**	176

Annex 2	**Chronology**	177
Annex 3	**Glossary**	179

PART I. INTRODUCTION

1 OVERVIEW

1.1 The Appellant in this appeal is Wales & West Utilities Limited (**WWU**).

1.2 WWU is authorised, by way of a gas transporters' licence treated as granted under section 7 of the Gas Act, to convey gas through pipes to any premises in the area specified in Schedule 1 of the licence (the 'authorised area') and to any pipe-line system operated by any other gas transporter (the **WWU licence**).

1.3 The WWU licence, together with other relevant assets, was transferred to WWU by Transco plc (as it then was) on 1 May 2005 pursuant to a Hive Down Agreement dated 31 August 2004 and the consent of Ofgem dated 26 April 2005.

1.4 As the holder of a gas transporters' licence and owner and operator of a regional gas distribution network (which was previously owned and operated by Transco plc) WWU is subject to a regulated price control set by Ofgem.

1.5 WWU's gas distribution network covers the areas of Wales and the South West of England, as illustrated in the map below.

Map of WWU Area - Wales & South West of England including depots and main cities in area

1.6 The gas distribution network consists of approximately 35,000km of gas pipe-lines within a geographical area which covers approximately 42,000km and has a population of 7.5 million people. The network is used to transport gas to around 2.5 million gas supply points in homes and businesses. WWU does this for around 66 gas shippers – that use its network pursuant to the regulated industry arrangements.

1.7 WWU's headquarters are in Newport, South Wales and it directly employs around 1600 personnel undertaking activities of the licensed gas distribution business. It has a stable workforce with low staff turnover of 6% (as at 31 March 2020) compared to a UK industry average of 15%.

Gas Distribution Business

1.8 WWU is responsible for managing gas flows and storage from seventeen National Grid Offtakes[1] to premises of final consumers and/or other pipe-line systems. As the volume of gas conveyed through the network fluctuates during the course of the day it is necessary for WWU to maintain gas supply to all parts of the network to meet the peak aggregate demand.

1.9 System Operation covers the activities required to operate the gas distribution network to ensure that supply and demand requirements are being met.

1.10 Among other things System Operation includes –

(a) Maintaining and developing a System Architecture that enables WWU to forecast future customer demand, identify physical network investment needs to support load growth, booking capacity to ensure sufficient gas is available on the National Grid Offtakes and develop and implement operational strategies for daily balancing.

(b) Balancing the network on a daily basis (System Balancing) in accordance with the industry requirements and processes as set out in the Uniform Network Code.

(c) Being responsible for fiscal metering at the NG Offtakes, monitoring gas quality, and being the contact point for power station operations and biomethane entry points on the network.

1.11 In addition to the above, other principal activities include –

[1] These are sites at which gas flows from the National Transmission System (**NTS**) to the Gas Distribution Networks (GDN). GDN operators book NTS capacity at these sites to ensure that they can meet their regulatory and legal obligations. Measurements from these sites are key in determining the flows of gas and the calorific values of gas which are used for downstream billing purposes.

(a) Providing a 24-hour emergency response for all gas escapes reported by the public within its area irrespective of the cause of the escape and irrespective as to whether the escape is from WWU's network, from networks of other independent gas transporters (**IGT**s) within WWU's area, or from an installation belonging to a final consumer. The time taken from receipt of an emergency call to attending the site is closely monitored and reported against specified standards to the Health and Safety Executive (**HSE**) and Ofgem.

(b) Providing gas connection services which encompasses the supply and laying of gas mains and service pipes to connect domestic and non-domestic premises within its area and the provision of related services to independent gas connection service providers and to IGTs to facilitate their gas connection activities.

(c) The provision of metering services which include the installation, maintenance and removal of gas meters pursuant to contractual arrangements with gas meter owners and their asset managers.

1.12 WWU is responsible for the construction, replacement and maintenance of the gas distribution network. It has a mains replacement programme in place – see Part III, Section C for further detail.

Company Performance

1.13 WWU is a high performing company in relation to totex efficiency and has consistently been ranked as an upper quartile company throughout GD1 and for GD2, setting the benchmark at the 85th percentile driving performance for the industry. WWU is currently on track to achieve all primary regulatory output targets for RIIO-GD1 across safety, reliability, environment and customer service (save for one output relating to the fuel poor network extension scheme which has been directly impacted by the Covid-19 pandemic).

1.14 WWU is focussed on delivering outstanding levels of customer service to the communities that rely on it, and particularly the most vulnerable in society. It has been awarded the Institute of Customer Service ServiceMark and is accredited as meeting the standards for the British Standard for Inclusive Service Provision (BS18577).

1.15 It also has a leading gas safety record. The Royal Society for the Prevention of Accidents (ROSPA) awarded it the prestigious Gold Award in 2020 for the seventh successive year and achieved ‘Gold Medal Status’ ((which is only awarded after five consecutive Gold Awards), in recognition of its health and safety performance and commitment. WWU also won the prestigious ROSPA Oil & Gas Sector award in 2019 & 2020 for industry-leading health and

safety performance. WWU is accredited with ISO 45001 (occupational health & safety) and ISO 55001 (international certificate of asset management).

1.16 WWU is committed to playing its part in helping the UK get to Net Zero. Alongside other UK gas networks, it is exploring the use of hydrogen and biomethane to replace natural gas, the role that Smart Hybrid Heating systems will play in the future, and has developed an industry leading model – the 2050 Energy Pathfinder, to help inform local and national Government and utilities investment decisions.

1.17 As the energy sector changes, the company is developing a sustainable workforce which reflects the diverse communities it serves. WWU is training the next generation of gas engineers and has recruited over 160 apprentices since starting operations in 2005 – representing 10% of its team. This colleague focussed approach is recognised by Investors in People, and the company holds the Silver accreditation against the Investors In People Standard, demonstrating their commitment to good people management.

1.18 WWU is also committed to supporting the communities it operates in. To support those most in need during the Coronavirus pandemic, it launched the Safe and Warm Fund, which helps organisations on the front line continue their work. Alongside other charitable efforts, this saw the company named a Business in the Community Responsible Business Champion – exemplifying best practice in responsible business.

2 REQUEST FOR PERMISSION TO APPEAL

2.1 WWU wishes to appeal the decision made, and published by Ofgem on 3 February 2021, under section 23(1)(a) of the Gas Act to modify the conditions of the WWU licence to give effect to the price control (referred to generically as RIIO-GD2) for the period 1 April 2021 to 31 March 2026 (the **RIIO-GD2 Decision**)[2].

2.2 Section 23B(2) of the Gas Act provides that an appeal may be brought by a relevant licence holder (within the meaning of section 23).

2.3 Section 23(10)(b) provides that a relevant licence holder is –

> 'in relation to the modifications of a condition of a particular licence (other than a standard condition) means the holder of that particular licence.'

2.4 The RIIO-GD2 Decision relates to the modification of the non-standard conditions of the WWU licence. WWU is a relevant licence holder for the purposes of the RIIO-2 Decision.

2.5 Accordingly, under and in accordance with section 23B(1) and (3) of the Gas Act, WWU seeks permission of the CMA to bring an appeal against the RIIO-GD2 Decision in its capacity as a relevant licence holder under section 23(10)(b). If permission is granted, WWU brings an appeal against the RIIO-GD2 Decision in that capacity.

[2] Tab A9.1: Ofgem – RIIO-2 Statutory Licence Modification Notice – Gas Transporter Special Conditions and Standard Special Conditions.

3 SCOPE OF THE APPEAL

3.1 The appeal is brought by WWU in respect of Ofgem's decisions on six separate (but interconnected in certain respects) aspects of the RIIO-GD2 price control for WWU – which we refer to as the heads of appeal.

3.2 The six heads of appeal are –

(a) Cost of Debt: Ofgem has erred in both law and policy in that it has failed to provide an adequate cost of debt allowance for WWU. It has misdirected itself in law and failed to give effect to its financing duty, and as a result has determined an allowance for all GDNs based on an average of the actual cost of debt of a group of companies in circumstances where the effect of that approach is to over-remunerate some companies while penalising others. The approach discriminates against WWU. In addition, Ofgem has adopted an irrational and inconsistent policy of not taking account of derivatives in assessing the cost of debt. This head of appeal is set out in more detail at Part III, Section A.

(b) Cost of Equity: Ofgem has erred in both law and policy by determining a cost of equity allowance that is too low. The cost of equity determined by Ofgem is significantly lower in the GD2 price control than it was in GD1, and the difference is largely due to methodological changes which are undermined by a series of fundamental errors. Further, Ofgem reduces the cost of equity on the basis of an expected outperformance adjustment, a policy which undermines incentives and harms long-term consumers welfare. In addition, it has failed to make an appropriate choice of point estimate from within the range of estimated values of the cost of equity, by failing to have due regard to the risks to future investment in the gas distribution sector at this time. This head of appeal is set out in more detail at Part III, Section B.

(c) Repex: Ofgem has erred in both law and policy as it has failed to provide an adequate allowance for WWU to undertake its repex work. In determining WWU's allowance for repex work, Ofgem has failed to take account of, or place appropriate weight on, the increased costs faced by WWU in the RIIO-GD2 period for meeting its legal obligations in relation to the decommissioning of old iron mains pipes in its network over the course of that period, as well as replacing other metallic pipes to ensure the safety and reliability of its network. This head of appeal is set out in more detail at Part III, Section C.

(d) Licence Conditions and Revenue Uncertainty: Ofgem has erred in both law and policy in adopting a regulatory approach under which key aspects of the RIIO-GD2 price control framework are set out in an unprecedented number of subsidiary documents (a

number of which have not yet been finalised or shared with WWU) with which WWU is required to comply but which can unilaterally be changed by Ofgem by direction. This approach creates regulatory uncertainty leading to regulatory risk and revenue uncertainty. This head of appeal is set out in more detail at Part III, Section D.

(e) Ongoing Efficiency: Ofgem has erred in both policy and law by setting an ongoing efficiency challenge which is too high. The method used by Ofgem to set the challenge contains a number of errors which mean that its analysis is incorrect both in principle and in application. These errors include taking account of irrelevant factors, ignoring relevant factors, building in inconsistencies and contradicting both empirical evidence and the purpose of Ofgem's underlying totex approach. This head of appeal is set out in more detail at Part III, Section E.

(f) Tax Clawback: Ofgem has erred in both law and policy by adopting a policy of requiring derivatives to be included in the calculation of tax clawback, which may have a material impact on WWU's allowed revenues. Taking derivatives into account for this purpose is inconsistent with Ofgem's policy of not including them when calculating the cost of debt; the inconsistency cannot be justified and is therefore irrational. In addition, Ofgem's change of policy has taken place following a failure to consult and is also in breach of an existing legitimate expectation. This head of appeal is set out in more detail at Part III, Section F.WWU has been materially affected by the RIIO-GD2 decision and the licence modifications which implement the decision. Furthermore Ofgem's errors in relation to each of the above aspects of the RIIO-GD2 price control are material and have a material effect on WWU's RIIO-GD2 price control allowances.

3.3 The grounds of appeal, reasons and supporting evidence are contained in this Notice of Appeal and in the Supporting Evidence (including witness statements and experts' reports) listed in Annex 1.

4 CONTEXT OF THE APPEAL - UNCERTAINTY AND RISK IN THE GAS DISTRIBUTION SECTOR

4.1 This is a statutory appeal against the RIIO-2 Decision through which Ofgem has sought to implement the RIIO-GD2 price control. Whilst such appeals are not new to the CMA, the context in which the RIIO-GD2 price control has been conducted is novel.

4.2 It is shaped by the unprecedented challenges brought about by the government's recent policy commitments in respect of the mitigation of climate change, in particular the legal obligation to meet the Net Zero Carbon targets and the context of the government's white paper on energy. The potential impact of these commitments on the gas distribution sector is significant and forms a clear backdrop to the price control.

4.3 WWU has therefore set out in this Notice of Appeal the underlying statutory, regulatory and policy context, the new uncertainties to which this gives rise and the consequent risks for ongoing investment in gas distribution to which Ofgem should have had proper regard and should have given adequate weight to when taking its decisions in respect of the regulatory allowances for RIIO-GD2. In particular, the very pressing need to take steps now to ensure that long-term investment continues to take place to enable the country to meet its new targets.

4.4 It is a key feature of this appeal that, in WWU's submission, Ofgem has failed to have due regard to or give adequate weight to these matters. The CMA is requested to bring a fresh perspective to the issues in this case in order to fulfil its statutory obligations under section 23D of the Gas Act.

The issue in summary

4.5 On 27 June 2019, the UK became the first economy in the world to commit to the legally binding target of 'at least 100%' reduction of greenhouse gas emissions – known as 'Net Zero' – by 2050, thereby ending its contribution to global emissions[3]. This increased the previous target of 'at least 80%' imposed by the Climate Change Act 2008. Achieving Net Zero would be considered a major policy achievement, signifying the UK's global leadership in the protection of the environment and responsiveness to the challenge of climate change.

4.6 However, while the move towards Net Zero brings opportunities in the area of new technologies, it also gives rise to a threat to traditional industries, characterised in this case by a proposed shift away from natural gas. Since the distribution of gas constitutes the entire business of GDNs, this generates – and is perceived by the investment community to

[3] Tab M1: UK Government – UK becomes first major economy to pass net zero emissions law.

generate – considerable uncertainty and risk. Moreover, that risk is not all 'distant' and 'future', but will begin to crystallise during the GD2 period, when initial government policy decisions begin to take effect.

4.7 In combination with this risk, gas distribution networks, adapted to deliver other fuels such as hydrogen, have the potential to play an important role in delivering Net Zero. GDNs understand the proposed shift away from natural gas or to blending of natural gas with hydrogen and the impact both policy decisions will have on their longer term activities. Insofar as their operations are supported to enable investment in the adaptations necessary to support this transition, they are committed to playing their part in the Net Zero future. There are uncertainties around this, based on potentially competing technologies and the adoption of different possible solutions, but GDNs believe that there is a significant continued role for them to play. In the meantime, the gas distribution networks remain critical national infrastructure which needs to be safely maintained, and also developed and upgraded, for this role and ultimately this future to be realised.

4.8 The radical uncertainties, the risks to which they give rise, and the need to maintain ongoing long-term investment and incentivise additional required investment, in spite of the underlying risk environment, are – or ought to be – fundamental features of regulatory decision-making in respect of RIIO-GD2.

The policy in outline

4.9 The UK Government is in the process of framing and adapting policy standards necessary to effect Net Zero and combat the impacts of climate change.

4.10 In its recently published Energy White Paper, the government expressed the view that meeting its proposed standards would require 'whole new industries, technologies and professions' to be created through a combination of innovation and investment[4].

4.11 This is reflected in the ambitious nature of policies proposed so far which, for GDNs, are signalling a clear move away from natural gas. For example, the government has expressed commitment to a 'Future Homes Standard', which will require all new homes built from 2025 to be equipped with low carbon heating rather than fossil fuel heating such as natural gas boilers.

[4] Tab E56: HM Government – Energy White Paper: Powering our Net Zero Future, p. 2.

4.12 This raises the question as to what might replace them, with low carbon options including electrification, heating networks and hydrogen boilers[5].

4.13 It is clear from its consultation and the government response that the Future Homes Standard will not mandate a specific technology, and will likely involve a mix of technologies, though electrification via heat pumps is expected to be 'primary'[6]. If there was ever any doubt over whether existing homes would also be affected by similar policies, the government has made clear that Net Zero demands a complete transition away from using natural gas boilers on the gas grid[7].

4.14 In November 2020, the Prime Minister published his 'Ten Point Plan', revealing a host of further strategies representing the UK Government's commitment to reduce emissions. Linking to the Future Homes Standard, it includes targets to install 600,000 heat pumps every year by 2028.

4.15 The plan also devotes significant attention to the production and use of hydrogen. The plan proposes a target generation of 5GW of hydrogen production capacity by 2030, the development of the first fully hydrogen-heated town by the end of the decade and, notably, the roll-out of industry testing from 2023 to allow up to 20% blending of hydrogen into the gas distribution grid for all homes[8]. Aiding these developments, the government plans to publish a Hydrogen Strategy in 2021 and to allow consultation on the strategy before finalising the appropriate business models in 2022[9].

4.16 Whilst electrification has been cited as being the potential 'primary' method used within homes in the future, it is clear that decarbonised gas solutions have not been ruled out and, on the contrary, are due to be closely investigated.

4.17 Whichever methods are adopted, UK industries will – as recognised by the government – be faced with an influx of new technological challenges and forms of competition. Whilst representing opportunities to combat environmental threats, these render the progression timeline and anticipated outcomes inherently uncertain. It is vital that the extent and focus of

[5] Tab M2: Committee on Climate Change: Reducing UK emissions Progress Report to Parliament, p. 56

[6] Tab M3: Ministry of Housing, Communities and Local Government: Government Response to the consultation on the Future Homes Standard, pp. 15-16

[7] Tab E56: HM Government – Energy White Paper: Powering our Net Zero Future, p. 109

[8] Tab M4: Department for Business, Energy & Industrial Strategy: Policy Paper: The Ten Point Plan for a Green Industrial Revolution.

[9] Tab M4: Department for Business, Energy & Industrial Strategy: Policy Paper: The Ten Point Plan for a Green Industrial Revolution.

this uncertainty is acknowledged and given due weight in the price control, to ensure that the underlying infrastructure remains appropriately financed and the path to Net Zero supported.

Technology risk

4.18 It must be noted from the outset that WWU is not disputing the necessity of new technologies, nor the need for an ambitious programme of government action. For these, the need is clear. There is evidence that a 'broad' programme is vital to the success of emerging technologies and systems[10]. The Committee on Climate Change has itself observed that the timescales required for the commercialisation of new technologies means that it is unlikely all developments will make their intended difference by 2050[11]. Though increasing uncertainty at a general level, a broad approach ensures that adequate avenues are opened to enable a collective difference to be made.

4.19 However, WWU does propose to demonstrate that the policy reliance on nascent technologies in the move to Net Zero poses an unprecedented risk to GDNs and Ofgem failed to have proper regard or give adequate weight to these in its GD2 decision-making.

4.20 As reflected in the policy framework above, a government decision is yet to be made on the intended balance between electrification and hydrogen in decarbonised heating[12]. The differing status in technology development makes the weighting of this balance difficult to predict.

4.21 For example, whilst hydrogen blending has been proposed to begin from 2023, the introduction of hydrogen as a primary heating mechanism remains at present in the innovation, development and testing phase[13], and the government has highlighted that the 'practicalities and cost' of safe conversion and replacement of existing networks to operate with pure hydrogen still needs to be fully evaluated[14]. The prototype development of 'hydrogen-ready boilers' is due to conclude in summer 2021, from which the government will determine whether such boiler methods are to be encouraged or required in due course[15]. Conversely, though currently used by less than 1% of homes in England, electric heat pumps are already available and have been proven commercially viable[16].

[10] Tab M5: Vivid UKERC: Accelerating innovation towards net zero emissions.

[11] Tab M6: Committee on Climate Change: Net Zero: The UK's contribution to stopping global warming, p. 184

[12] Tab M6: Committee on Climate Change: Net Zero: The UK's contribution to stopping global warming, p. 181

[13] Tab M7: National Grid - Press release: National Grid to launch £10m trial project to test if hydrogen can heat homes and industry.

[14] Tab E56: HM Government – Energy White Paper: Powering our Net Zero Future, p. 112

[15] Tab E56: HM Government – Energy White Paper: Powering our Net Zero Future, p. 113

[16] Tab E56: HM Government – Energy White Paper: Powering our Net Zero Future, p. 110

4.22 Notably, there does exist another decarbonisation option which must be factored into this balance – that is, the use of biogas. Obtained from a mixture of organic waste and plant-based biomass products, biogas has proven its versatility with potential to be used in power generation, hydrogen production and development of new materials[17]. In its biomethane form, it has been shown to be capable of being injected into the natural gas grid network to accelerate decarbonisation through maximising the use of existing infrastructure[18].

4.23 However, the level to which biomass production can be increased is 'finite'[19], rendering biomethane a limited resource. This suggests that it may be a helpful short-medium term supplement for natural gas, or accompaniment to electrification, but it is not considered to hold the same long-term and large-scale potential as a transition to clean hydrogen, which consumers could rely upon in a very similar way to natural gas[20]. Given its scarcity and cross-sector uses, the extent of biomethane's long-term contribution to the gas sector can only be speculative. Thus, though welcome, its use subjects the future balance of decarbonisation technologies to further unpredictability.

4.24 Clearly, there is a policy *intention* for both the electricity and gas sector to play a primary role in the movement towards Net Zero, but there exists a unique uncertainty surrounding what this role will look like for the gas industry. Clarification can only be obtained through further government policy aimed specifically at GDNs which, subject to the current practical restraints, is suspended in a waiting game.

4.25 The timing uncertainties and unpredictability of outcomes which arise from the government's policy reliance on nascent technologies are further reflected in *Figure 1* below, published in the Committee on Climate Change's Net Zero 2019 report[21]. It shows the timeline for decisions relating to natural gas replacement or decarbonisation as they are recommended to be made, indicating that decisions on decarbonisation methods for the gas industry are potentially forecast to run until 2030.

[17] Tab E56: HM Government – Energy White Paper: Powering our Net Zero Future, p. 53

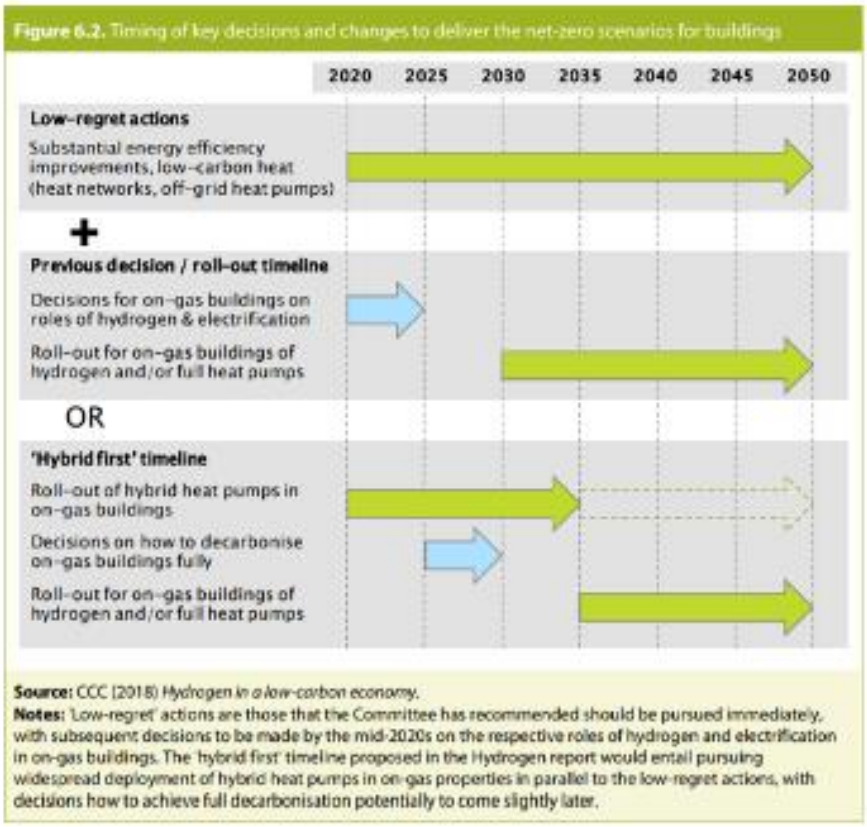
[18] Tab E56: HM Government – Energy White Paper: Powering our Net Zero Future, p. 111

[19] Tab M6: Committee on Climate Change: Net Zero: The UK's contribution to stopping global warming, p. 148

[20] Tab E56: HM Government – Energy White Paper: Powering our Net Zero Future, p. 112

[21] Tab M6: Committee on Climate Change: Net Zero: The UK's contribution to stopping global warming, p. 183

Figure 1



4.26 It is important to remember that, although subject to significant regulatory oversight and control, each GDN is an independent business with short, medium and long-term goals and the need to take action now in order to meet them. The reality that their future role will be potentially undetermined for a decade or more creates a context of radical uncertainty in which operational planning and investment, including in preparation for a hydrogen transition, could be rendered extremely challenging.

4.27 In order to better demonstrate the reality of these challenges, one only needs to look to the legal framework outlining the health and safety obligations of GDNs.

4.28 Some regulations are far-reaching and all-encompassing; under the Gas Safety (Management) Regulations 1996 (GSMR), GDNs are required to prepare and uphold an approved 'safety case' to ensure the safe conveyance of gas through the network. Furthermore, the Pipelines Safety Regulations 1996 impose a variety of obligations on pipeline operators, spanning from design and construction, to maintenance and decommissioning requirements. Other frameworks are more specific in direction, such as those under the Pressure Systems Safety Regulations 2000, designed to prevent injury following pressure system failure.

4.29 The 'safety case' required under the GSMR is subject to a review every three years, and is expected to sufficiently address and incorporate all operational and material changes[22]. Accordingly, where GDNs are involved in the practical implementation of new technologies, they will continue to be responsible for maintaining these high standards of reliability and health and safety whilst imposing on consumers only reasonable costs. To the extent that the current infrastructure and established 'safety case' has been designed and constructed with natural gas in mind, this reveals layers of operational and construction risk. For example, it has been suggested that hydrogen behaves and responds differently to natural gas; its smaller molecular size means it is more prone to leakage from some pipes[23]. The practical challenge of repurposing the networks for hydrogen is therefore amplified by the complex web of legal obligations underpinning its execution.

4.30 If not appropriately repurposed for hydrogen, or if other technologies take precedence over hydrogen in the UK's future energy mix, there is a risk that gas networks may need to be decommissioned[24]. This highlights the significance of the risk posed by the above uncertainty, though the UK gas grid is notably much more developed than other countries and as such presents a more stable platform on which a transition to hydrogen may be made[25].

4.31 Ultimately, long-term investment and support will be essential for GDNs to adequately meet required standards and ensure consumers are protected. Yet, the level of uncertainty surrounding the future is such that investor confidence in the gas industry, previously regarded as a relatively 'safe' investment, could be eroded.

Consumer demand risk

4.32 A risk which appears to be running in parallel to the technological move away from natural gas, is a reduction in consumer demand for it. Recent figures suggest that 85% of homes are connected to the gas grid[26], but there is a risk that this figure will decrease subject to the influence of government policy discouragements and alternative advancements.

4.33 This is reflected in *Figure 2* below, which illustrates the projected demand for gas over the Net Zero transition period, as published in National Grid's Future Energy Scenarios report 2019[27].

[22] Tab M9: WWU - EMTN 2019 - Information Memorandum, p. 55.

[23] Tab M10: Frazer Nash Consultancy - Logistics of Domestic Hydrogen Conversion – report prepared for Department of Business, Energy and Industrial Strategy EIS, p. 19

[24] Tab M6: Committee on Climate Change: Net Zero: The UK's contribution to stopping global warming, p. 181

[25] Tab M6: Committee on Climate Change: Net Zero: The UK's contribution to stopping global warming, p. 185.

[26] Tab E56: HM Government – Energy White Paper: Powering our Net Zero Future, p. 99

[27] Tab M11: National Grid - Future Energy Scenarios Report 2019.

Figure 2(a): Total GB Gas Demand

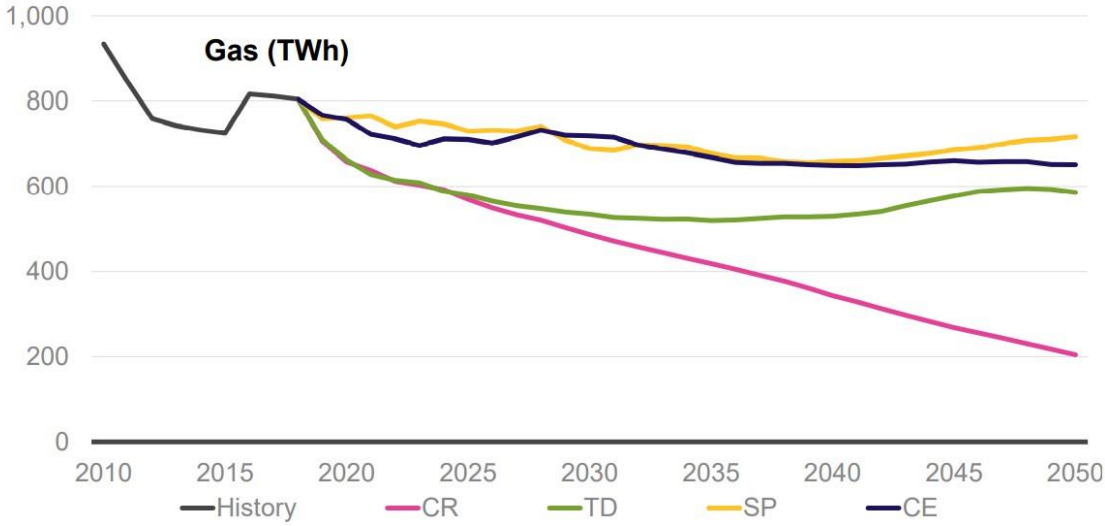
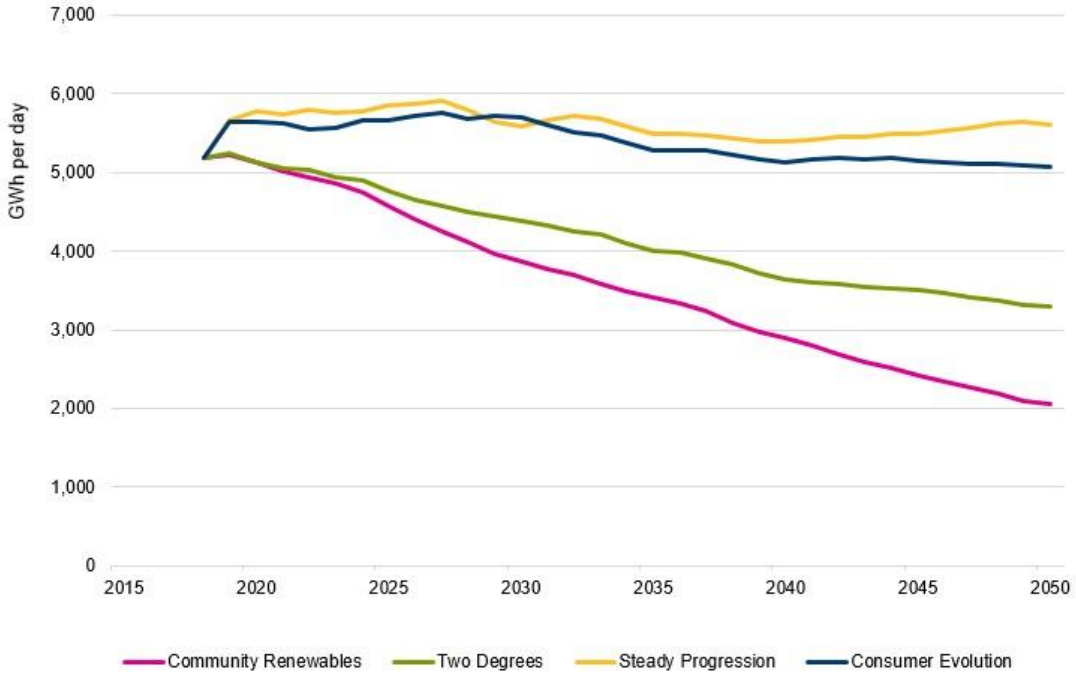


Figure 2(b): Gas 1-in-20 Peak Demand



4.34 Though varying in degrees, all scenarios considered highlight the expected decline in total GB annual demand for natural gas arising due to the prioritisation of solar and wind on the market as an alternative to power generation. *Figure 2(a)* demonstrates that by 2026, representing the end of RIIO-GD2, the volume of gas flowing through the networks could be either around 600TWh or closer to 750TWh. This presents a c25% variation in outcome which

is a significant variation in infrastructure business, and reinforces the uncertainty facing the gas sector throughout the RIIO-GD2 period.

4.35 Due to its practical uncertainties, the demand for a clean hydrogen gas network is not presently strong enough to provide a commensurate upside to the downside risk posed by the decrease in total GB natural gas demand. This triggers operational risk as the ability for GDNs to plan for the future and communicate a structural plan to alleviate customer concerns is undermined.

4.36 Financially, a decrease in consumer demand will naturally lead to a smaller consumer base, and by implication require costs to be increased per consumer. This may create financial instability for GDNs through an anticipated increase of bad debts, and enhanced attraction towards alternative technologies with more competitive prices.

4.37 Adding to these financial pressures, there is a risk that investors might interpret any reduction in consumer gas consumption as an undermining of the sustainability of the sector. Moody's Investors Service have highlighted that the 14% reduction in gas consumption identified between 2010-2018 signals a continued reduction over the coming period[28]. Investors could interpret such comments as an indication that the credit quality of the gas sector may also reduce, with an unfavourable effect on both debt and equity pricing. Such perceptions are already being reflected in a growing shift from fossil fuel based companies, contributing to additional uncertainty over whether GDNs will be able to raise sufficient debt finance in 5-10 years' time.

4.38 Notwithstanding the above uncertainties and the need for GD2 decision-making to take account of long-term investment and funding, in some scenarios *peak* demand grows in the 2020s due to increased demand for flexible power generation (*Figure 2(b)*). Given that consumer charges are 95% capacity based, and so are dependent upon the peak demand patterns, the short-medium term cash flow risk to GDNs is in reality limited.

4.39 Unlike natural gas, there will always be a demand for electricity, emphasised by the accelerated development of electrification. Government predictions indicate that the move towards Net Zero will lead to a potential doubling in electricity demand, as clean electricity becomes the 'predominant' form of energy[29]. Renewable electricity generation faces its own challenges though, with solar and wind power reliant upon inconsistent weather patterns that cannot be controlled. To facilitate meeting the increased demand for electricity, there is an

[28] Tab M12: Moody’s Investors Service - Credit Opinion: Wales & West Utilities Finance plc, update to credit analysis.

[29] Tab M12: Moody’s Investors Service - Credit Opinion: Wales & West Utilities Finance plc, update to credit analysis.

invaluable role that gas networks can play through flexible power generation, by storing solar and wind power as a gas and so maintaining a reserve for future electricity use.

4.40 Yet, even peak demand is projected to decline again in the 2030s due to energy efficiency measures, new nuclear commissioning and increased interconnection to Europe. This reinforces the importance of taking necessary steps today, to counteract the anticipated future decline in peak natural gas demand and ensure long-term investment continues to take place.

4.41 Without direction for future investment opportunities, the gas industry could be facing reduced capital expenditure and the resulting risk of plateauing or shrinkage of regulated asset value (RAV) through the potential for gas infrastructure to become 'stranded assets'[30]. This will be further compounded by the end of the Health and Safety Executive's Repex programme, broadly complete by 2032, with the associated capital spend not continuing into the RAV.

4.42 The combination of falling demands for natural gas, technological and policy uncertainties surrounding its replacement, and the potential impact upon investor perception of the sustainability of the gas sector – considered more closely below – demonstrate that GDNs are in an increasingly precarious position at the beginning of GD2 as compared to other utility sectors.

The investor perspective

4.43 Despite such uncertainty, WWU believes that it will maintain a vital role in the future of the energy industry. Its belief in the network's potential is highlighted by its collaboration with the other GB GDNs to develop Gas Goes Green, a programme designed to create pathways for Net Zero in the gas sector through maximising engineering expertise and collaboration[31]. Nonetheless, WWU recognises that certain levels of long-term capital expenditure and investor support are required for progress to be made. This, as indicated above, is potentially problematic.

4.44 For investors, the attractiveness of any investment over any other corresponds to their assessment of comparative levels of expected risk and return, as opposed to the levels of internal confidence of the sectors they invest in.

4.45 Here, investors are faced with a risk and return assessment for a sector whose future is being rendered more uncertain by government policy decisions, leading to forecast reductions in customer demand and suggestions that there is at least a possibility of networks being

[30] Tab M13: S&P Global Ratings - Various Rating Actions Taken On UK Gas Networks amid Upcoming Regulatory Review and Tougher Operating Conditions, p. 4.

[31] Tab M14: Energy Networks Association - Gas Goes Green: Delivering the Pathway to Net Zero.

decommissioned if not repurposed using currently under-developed methods[32]. This does not provide existing or future investors with reassurance that there will be a sufficient customer base or operational stability to enable recovery of returns.

4.46 In contrast, clear policy direction in the electricity sector has led to additional investment in renewable generation capacity[33]. Further to this, Ofgem have recently published an open letter on a green recovery scheme designed to accelerate electricity network investment to support its transition to Net Zero[34]. As it currently stands, there is no equivalent support mechanism provided by Ofgem in the gas sector. The comparative absence of regulatory incentive to invest in the gas sector, combined with the unpredictability of its future role, triggers legitimate concerns for GDNs that investor confidence and subsequent support will only reduce.

4.47 Such concerns are effectively and articulately reflected in Standard & Poor's trusted assessment of the current landscape[35] -

> 'We are starting to see increasing differentiation across network types in terms of energy transition, and in our view gas networks may come under increasing pressure. While GDNs benefit from a supportive regulatory framework in the U.K., uncertainty about the long-term future role of gas in the U.K. fuel mix may pose a risk for gas infrastructure, which could become stranded assets over time. We believe this may well start weighing on regulatory returns and investments in gas over future regulatory periods, more so than for electricity. We recognize that the networks are reacting to the challenge as they try to adjust to the new environment. Hydrogen or biogas could help reposition gas infrastructure in the long term, given their more environmentally friendly footprint, but the technology is not yet sufficiently mature to bring down costs. We cannot say today if these future promising developments will fully offset the risks in the coming decade. Although the RIIO-2 methodology includes initial guidance for companies, this risk is not yet fully reflected in regulatory framework and in our ratings, and we view it as a rising risk for the sector.'

4.48 Arguably, conclusions on investor interpretation and intention are merely speculative at this point in time, and Ofgem is likely to point to the uncertainty mechanisms incorporated within its RIIO-GD2 proposals to indicate that it has appropriately accounted for gas sector risk. However, GDN concerns and support by credit commentators surrounding the instability of future investment in gas and the insufficiency of regulatory proposals are not merely educated assumptions –

[32] Tab M6: Committee on Climate Change: Net Zero: The UK's contribution to stopping global warming, p. 181

[33] Tab M26: ENA – Letter to Ofgem – Long Term Risks Facing GDNs and the RIIO-GD2 Cost of Capital.

[34] Tab M16: Ofgem - Open letter on the Energy Network Association (ENA) Green Recovery Scheme.

[35] Tab M13: S&P Global Ratings - Various Rating Actions Taken On UK Gas Networks amid Upcoming Regulatory Review and Tougher Operating Conditions, p. 4.

> 'The laws of thermodynamics are sometimes paraphrased as: 1) you can't win, 2) you can't break even, 3) you have to play. Being an investor in regulated networks feels a lot like that at the moment. Except for the last part.'

4.49 This quotation was extracted from the ENA Investor Survey undertaken in the context of RIIO-GD2, seeking views on Ofgem's Draft Determination[36]. It highlights the importance of returns to investors, and recognition by investors that they retain the option not to invest. A closer assessment of investor responses to Ofgem's RIIO-GD2 proposals suggest that, unless concerns are addressed, a withdrawal or avoidance of investment might be the preferred option.

4.50 93% of investors surveyed considered there to have been an increase in risk associated with investing in regulated networks over the past decade, with Net Zero being stated as a key contributing factor alongside macro-economic risks such as Covid-19 and Brexit[37]. While all utility networks will transform to some extent over the transition to Net Zero, in assessing the specific risks relating to decarbonisation investors unanimously held that the risks were greater for GDNs than other networks[38].

4.51 Crucially, investors did not think that the returns provided by Ofgem's proposed regulatory framework for RIIO-GD2 were appropriately balanced against the level of risk presented by the transition, with two thirds of respondents considering the allowed returns for GDNs to be 'inadequate'[39]. With insufficient attention being directed to long-term investment needs[40], despite Ofgem's own acknowledgement that investment decisions for Net Zero will need to be taken outside of the price control period[41], this investor feedback serves to underline the growing uncertainty noted above.

4.52 The ENA Investor Survey, combined with the views of influential credit rating commentators, provides additional justification for WWU's RIIO-GD2 appeal. It reflects the direct influence that Ofgem policy has on investor perception of risk, and as such the future prospects of GDNs to obtain the support needed to prepare for Net Zero. WWU submit that the RIIO-GD2 proposals must be re-aligned to take proper account of the uncertainties facing GDNs and

[36] Tab M24: ENA - Investor views of risk for Gas Distribution Networks under RIIO-GD2, p. 27.

[37] Tab M24: ENA - Investor views of risk for Gas Distribution Networks under RIIO-GD2, p. 8.

[38] Tab M24: ENA - Investor views of risk for Gas Distribution Networks under RIIO-GD2, p.9

[39] Tab M24: ENA - Investor views of risk for Gas Distribution Networks under RIIO-GD2, p.2

[40] Tab M24: ENA - Investor views of risk for Gas Distribution Networks under RIIO-GD2, p.20

[41] Tab M16: Ofgem - Open letter on the Energy Network Association (ENA) Green Recovery Scheme.

investors in the context of Net Zero by 2050, and to provide the requisite clarity and reassurance that the regulatory relationship is trusted to provide.

Conclusion

4.53 Ultimately, if WWU is to be prepared for the move to Net Zero, and ready to play its part in that important transition, the gas industry needs to be properly funded, and if the gas industry is to be properly funded investors need to be willing to invest.

4.54 This willingness to make long term investments and ability to secure long term funding in GD2 has been called into question via reductions in gas consumption across GD1, predicted reductions in consumer demand, and the gas industry's future dependence upon policy frameworks that are currently in flux, new technological developments and changing uses of infrastructure.

4.55 In its formulation of the GD2 allowances, Ofgem retained the power – and valuable opportunity – to renew investor confidence in the gas sector through providing allowances sufficient to offset rising uncertainty. However, the returns proposed under Ofgem's regulatory framework have shown to create more concern than they have alleviated, the consensus being that Ofgem have failed to have proper regard to or give sufficient weight to the unique risks faced by the gas industry.

4.56 As such, it is a key feature of this appeal that WWU is asking the CMA to do what Ofgem failed to, and take this future uncertainty into account by restoring an appropriate balance between risk and return.

5 CONTACT DETAILS

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PART II. THE LEGAL FRAMEWORK

1 OVERVIEW

1.1 In this section, we set out the legal framework governing this appeal and the legal principles to be applied by the CMA in determining the appeal.

1.2 This includes, in particular –

(a) the statutory framework under which Ofgem is empowered to make, and matters to which it must have regard in making, licence modifications;

(b) the statutory grounds of appeal that apply under the applicable statutory framework; and

(c) the standard of review to be applied by the CMA in considering and determining this appeal.

2 THE STATUTORY FRAMEWORK

2.1 The statutory framework governing the making of licence modifications which are the subject of the appeal and the making of the appeal is set out in the Gas Act.

Principal Objective/Statutory Duties

2.2 Ofgem has a duty under section 4AA(1B) to carry out its 'gas functions'[42] in the manner which it –

> 'considers is best calculated to further the principal objective, where appropriate by promoting effective competition between person engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas conveyed through pipes.'

2.3 Ofgem's principal objective is –

> 'to protect the interests of existing and future consumers in relation to gas conveyed through pipes…'

2.4 Section 4AA(1A) of the Gas Act confirms that the 'interests of existing and future consumers' are –

> 'their interests taken as a whole, including:
>
> (a) their interests in the reduction of gas-supply emissions of targeted greenhouse gases;
>
> (b) their interests in the security of the supply of gas to them; and
>
> (c) their interests in the fulfilment by the Authority, when carrying out its designated regulatory functions, of the designated regulatory objectives.'

2.5 In performing this duty Ofgem shall have regard to –

(a) the need to secure that, so far as is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met[43];

(b) the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed on it by or under the cited legislation cited[44];

[42] That is the functions under Part 1 of the Gas Act and functions under the Utilities Act 2000 which relate to gas conveyed through pipes.

[43] Section 4AA(2)(a) of the Gas Act

[44] Section 4AA(2)(b) of the Gas Act.

(c) the need to contribute to the achievement of sustainable development[45]; and

(d) the interests of individuals who are disabled or chronically sick, of pensionable age, have low incomes, reside in rural areas[46].

2.6 Also in carrying out its gas functions in accordance with the other provisions of section 4AA, Ofgem must have regard to –

'(a) the principles under which regulatory activities should be transparent, accountable, proportionate, consistent, and targeted only at cases in which action is needed; and

(b) any other principles appearing to [Ofgem] to represent best regulatory practice.'[47]

Licence Modifications

2.7 Section 23(1)(a) of the Gas Act provides that Ofgem may –

'make modifications of the conditions of a particular licence'

2.8 Where, following a statutory consultation under section 23(2) to (4) of the Gas Act, Ofgem decides to proceed with the making of licence modifications of any licence it is required under section 23(7) of the Gas Act to –

(a) publish the decision and the modifications;

(b) state the effect of the modifications;

(c) state how it has taken account of any representations made to the statutory consultation; and

(d) state the reason for any differences between the modifications being made and those set out in the statutory consultation.

2.9 On 3 February 2021, Ofgem published its decision to proceed with the making of modifications of the conditions of the gas transporters' licence held by WWU.[48]

[45] Section 4AA(2)(c) of the Gas Act.

[46] Section 4AA(3) of the Gas Act (which also confirms that it is not to be taken as implying that regard may not be had to the interests of other descriptors of consumer).

[47] Section 4AA(5A) of the Gas Act.

[48] Tab A9.1: Ofgem – RIIO-2 Statutory Licence Modification Notice – Gas Transporter Special Conditions and Standard Special Conditions.

2.10 Ofgem has, in accordance with sections 23(8) and (9) of the Gas Act, specified that the modifications are to take effect on 1 April 2021.

Appeal to the CMA

2.11 Section 23B of the Gas Act provides for an appeal to be made to the CMA against a decision made by Ofgem under section 23 to modify the conditions of a licence.

2.12 Among others, an appeal can be made by a relevant licence holder - which has the meaning given to in Section 23(10) of the Gas Act.

2.13 WWU is making this appeal in its capacity as a relevant licence holder.

2.14 Section 23B(3) states that the permission of the CMA is required for the bringing of an appeal.

2.15 In relation to an appeal brought by a relevant licence holder, the CMA may only refuse permission where the appeal is brought for reasons that are trivial or vexatious or where the appeal has no reasonable prospect of success.[49]

2.16 WWU submits that neither of these apply in respect of this appeal being made by WWU.

2.17 Section 23D(2) of the Gas Act confirms that in determining the appeal, the CMA shall have regard to the same extent as is required of Ofgem, to the matters to which Ofgem must have regard –

(a) in the carrying out of its principal objective under section 4AA;

(b) in the performance of its duties under that section;

(c) in the performance of its duties under section 4A[50]; and

(d) in the performance of its duties under section 132(1) and (2) of the Energy Act 2013[51].

2.18 Further, as provided for by section 23D(3) of the Gas Act, in determining the appeal the CMA –

[49] Section 23B(4)(d) of the Gas Act.

[50] Ofgem's duties under this section are to consult with the Health and Safety Executive (HSE) about all gas safety issues which may be relevant to the carrying out of its gas functions and to take into account any advice given by the HSE about any gas safety issue in carrying out its gas functions.

[51] The statutory duties referred to apply where the Secretary of State has designated a strategy and policy statement and no such statement has yet been designated.

(a) may have regard to any matter to which Ofgem was not able to have regard in relation to the decision which is the subject of the appeal; but

(b) must not, in the exercise of this power, have regard to any matter to which Ofgem would not have been entitled to have regard in reaching its decision had it had the opportunity to do so.

2.19 Section 23E of the Gas Act applies where the CMA allows an appeal to any extent.

2.20 Where the appeal is in relation to a price control decision, the CMA must do one or more of the following –

(a) quash the decision (to the extent that the appeal is allowed);

(b) remit the matte back to Ofgem for reconsideration and redetermination in accordance with any directions given by the CMA;

(c) substitute the CMA's decision for that of Ofgem (to the extent the appeal is allowed) and give any directions to Ofgem or any other party to the appeal.[52]

[52] Sections 23E(1) and (2) of the Gas Act.

3 GROUNDS OF APPEAL

3.1 Section 23D(4) provides that the CMA may allow the appeal where it is satisfied that the decision which is being appealed against was wrong on one or more of the five grounds listed in that section.

3.2 The five grounds are –

> '(a) that the Authority has failed properly to have regard to any matter which is mentioned in section 23D(2) (as to which see paragraph 2.11 above);
>
> (b) that the Authority failed to give appropriate weight to any such matter;
>
> (c) that the decision was based, wholly or partly, on an error of fact;
>
> (d) that the licence modifications fail to achieve, in whole or in part, the effect stated by the Authority;
>
> (e) that the decision was wrong in law.'

Grounds (a) and (b) - Failure to have regard, or give due weight to, statutory duties

3.3 These two grounds of appeal can essentially be considered together as if they were a single composite ground, since there is in practice little difference between them.

3.4 The starting point is that, as noted above, *'In determining an appeal the CMA must have regard, to the same extent as is required of the Authority, to the matters to which the Authority must have regard'* in the carrying out of its principal objective, and performance of its duties, under the Act[53].

3.5 The legal effect of this is that, in determining the appeal, the CMA must put itself in Ofgem's shoes, apply the same statutory duties that Ofgem did when making the decision that is being appealed, have regard to all the matters that Ofgem was required to have regard to for the purposes of compliance with those duties, and do so '*to the same extent*'.

3.6 What this means in practice is that the CMA, as a specialist economic regulator in its own right, and (unlike a court) is to assume Ofgem's role, re-consider the case as if it were the primary decision-maker, and reach its own expert judgment as to what constitutes 'proper' regard or 'appropriate weight' in respect of any matter. This function is commonly described as determining a 'merits' appeal.

[53] Section 23D(2).

3.7 The CMA shares this understanding of the purpose and effect of the legislation –

> 'We agree that we are not limited to reviewing the decision on conventional judicial review grounds and that we are not only able, but required [by statute], to consider the merits of the decision under appeal, albeit by reference to the specific grounds of appeal laid down in the statute.'[54]

Ground (c) - Error of Fact

3.8 A valid ground of challenge exists where there is any error of fact underlying a price control decision and it can be demonstrated that the error of fact resulted in the decision that is being challenged and is a material error.

Ground (d) – Failure to achieve claimed effect

3.9 This ground of appeal is applicable where the licence modifications being made by Ofgem do not, in whole or in part, achieve the effect claimed by Ofgem.

Ground (e) – Wrong in law

3.10 In essence a decision will be '*wrong in law*' if it could successfully be challenged in a court of law on any of the legal grounds applicable in respect of Ofgem decisions[55].

[54] Tab M32: CMA – Northern Powergrid v the Gas and Electricity Markets Authority – Final Determination, para 3.23; and Tab M33: CMA – British Gas Trading v the Gas and Electricity Markets Authority – Final Determination, para 3.24

[55] These will include (non-exhaustively) any grounds of challenge that relate to an alleged breach of public law, incompatibility with EU law, or failure to comply with the Human Rights Act 1998.

4 STANDARD OF REVIEW

4.1 The 'standard of review' that the CMA is required to apply in its consideration and determination of whether Ofgem is wrong on one of the prescribed statutory grounds has been deliberated and settled upon by the CMA in previous regulatory appeals.

4.2 The starting point is the meaning of the word *'wrong'* – as the CMA may allow the appeal where it is satisfied that the decision appealed against is wrong on one or more of the prescribed statutory grounds.

4.3 The CMA has confirmed this to mean that it must focus on the decision made by Ofgem, rather than to try and re-make a decision for itself *de novo*. Hence, the CMA has stated –

> 'We do not consider that an appeal under [the statute] involves a rehearing where it is open to us to decide matters afresh untrammelled by GEMA's decision…
>
> Nor do we consider that we are required in the present context to have conducted a re-run of GEMA's original decision-making process or to held a de novo hearing of all the evidence. The CMA must limit its consideration to the specific grounds of appeal set out in [the statute], to the extent that such grounds are raised by the appellants…'[56]

4.4 In its determination on the gas price control appeal made by Firmus Energy, the CMA confirmed this position –

> 'We would also note 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'[57]

4.5 It also agreed 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.'[58]

4.6 In the same appeal by building on its interpretation of the concept of a decision that is 'wrong', drawing guidance from appeals brought under the Communications Act 2003 (which requires

[56] Tab M32: CMA – Northern Powergrid v the Gas and Electricity Markets Authority – Final Determination, paras 3.35-3.36; and Tab M33: CMA – British Gas Trading v the Gas and Electricity Markets Authority – Final Determination, paras 3.36-3.37.

[57] Tab M23: CMA – Firmus Energy (Distribution) Limited v Northern Ireland Authority for Utility Regulation – Final Determination, para 3.21.

[58] Tab M23: CMA – Firmus Energy (Distribution) Limited v Northern Ireland Authority for Utility Regulation – Final Determination, para 3.16.

consideration of appeals on the merits by reference to whether the decision under appeal was wrong), and considering the approach taken by the CMA in the two previous regulatory appeals under from the GB framework, the CMA adopted the following eight principles to describe the applicable standard of review –

> '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.'
>
> '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. '
>
> '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. It must show that its proposed alternative price control measure should be adopted.'
>
> 'Usually an appellant will succeed by demonstrating the flaws in the decision and the merits of an alternative solution. Also, 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. Disposal of the appeal without substituting an alternative decision is not unknown, but is expected to be rare.'
>
> '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.'
>
> '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.'
>
> '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.'
>
> '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.'[59]

[59] Tab M23: CMA – Firmus Energy (Distribution) Limited v Northern Ireland Authority for Utility Regulation – Final Determination, para 3.20.

4.7 The CMA adopted a similar approach in the last regulatory appeal on price control made by SONI Limited.[60]

[60] Tab M17: CMA - SONI Limited v Northern Ireland Authority for Utility Regulation – Final determination, para 3.27.

PART III. THE HEADS OF APPEAL

A. COST OF DEBT

A1 OFGEM'S APPROACH TO THE COST OF DEBT

A1.1 In its RIIO-2 framework consultation, Ofgem outlined the following principles applicable to its cost of debt allowance –

(a) consumers should pay no more than an efficient cost of debt,

(b) the cost of debt allowance should be a fair and reasonable estimate of the actual cost of debt likely to be incurred by a notionally geared, efficient company,

(c) companies should be incentivised to obtain lowest cost financing without incurring undue risk,

(d) the calculation of the allowance should be simple and transparent while providing adequate protection for consumers.[61]

A1.2 In its following publications, Ofgem explained that it considered its first principle to apply in aggregate rather than at the level of individual networks.[62]

A1.3 Ofgem proposed three possible options for a cost of debt allowance, including a pass-through which would exactly match the actual cost of debt to each company.[63] However, in its RIIO-2 Framework Decision, Ofgem ruled out this option, saying that it would not provide sufficient incentives and therefore would not satisfy the third principle.[64] But it did not consider any alternative specifications of the pass-through allowance that would have incentive properties.

A1.4 At the next stage, in its Sector Specific Methodology Decision, Ofgem gave its reasons why the allowance should not be company-specific –

(a) networks and their shareholders are best placed to manage financing risk,

(b) consumers in different locations should not be exposed to paying different charges due to different financing risk strategies of management and/or shareholders,

[61] Tab A1.1: Ofgem – RIIO-2 Framework Consultation, para 7.11

[62] Tab A4.3: Ofgem – RIIO-2 Draft Determinations - Finance Annex, Appendix 4, p.207

[63] Tab A1.1: Ofgem – RIIO-2 Framework Consultation, paras 7.17−7.28

[64] Tab A1.1: Ofgem – RIIO-2 Framework Consultation, para 6.23

(c) Ofgem should only seek to involve itself in company financing decisions where it observes a market failure or unacceptable levels of risk to consumers, and it did not currently do so,

(d) where possible, it saw benefit in regulatory stability, consistency and predictability.[65]

A1.5 Based on this reasoning, Ofgem decided to maintain the overarching RIIO-GD1 full indexation approach.[66] It noted that the same ten-year trailing average benchmark as in GD1 was unlikely to cover the cost of efficiently raised debt –

> '[A] benchmark based on a 10-year trailing average would be likely to undercompensate for sector efficient debt costs in RIIO-2.'[67]

A1.6 Therefore, Ofgem decided to recalibrate the index –

> 'Our intention is to broadly match debt allowances with sector expected efficient debt costs for RIIO-2 through the calibration of the index.'[68]

A1.7 The outcome of the calibration was Ofgem's proposal in its Draft Determinations to use a 10−14-year trailing average of iBoxx GBP utilities 10+ with a 17 basis points allowance to compensate companies for the additional costs of borrowing.[69]

A1.8 At the Final Determination stage, Ofgem increased the allowance for the additional costs of borrowing to 25 basis points and provided an additional premium of 6bps to smaller GDNs that are expected to issue debt less frequently.[70]

A2 THE WWU COST OF DEBT POSITION

A2.1 The following paragraphs summarise in brief the current position. More detail on how WWU's debt has evolved since the company's formation in 2005 can be found in the witness statement of Mr Ian Weldon.

[65] Tab A3.4: Ofgem – RIIO-2 Sector Specific Methodology Decision - Finance, para 2.26

[66] Tab A3.1: Ofgem – RIIO-2 Sector Specific Methodology Consultation Decision – Core Document, p.118

[67] Tab A3.1: Ofgem – RIIO-2 Sector Specific Methodology Consultation Decision – Core Document, para 12.14

[68] Tab A3.1: Ofgem – RIIO-2 Sector Specific Methodology Consultation Decision – Core Document, para 12.15

[69] Tab A4.3: Ofgem – RIIO-2 Draft Determinations - Finance Annex, p.13

[70] Tab A5.9: Ofgem – RIIO-2 Final Determinations - Finance Annex (REVISED), pp.9–10

GD1

A2.2 WWU noted in its business plan submission in December 2019 that the average cost of debt, in RPI real terms during GD1 was expected to be 4.30% (compared to an estimated average RPI real allowed cost of debt over GD1 of 2.17%).

A2.3 During GD1, a significant shortfall in the allowance for cost of debt developed due to a significant and sustained decline in market nominal interest rates leading to a lower revenue allowance in real terms for cost of debt while WWU's actual cost of debt was fixed in real terms at higher rates since 2007. However, WWU continued to take key remediation actions in the capital structure throughout the second half of GD1, including, a commitment to lower leverage by March 2021.

A2.4 Rating agencies have acknowledged mitigating steps taken by WWU on capital structure throughout GD1 and expect continued flexibility on shareholder distributions for GD2.

GD2

A2.5 New debt projected to be raised in GD2 is expected to be lower than the £666m (noted in the business plan submitted to Ofgem) due to earlier than planned debt issuance undertaken in GD1. New debt raised in GD1, together with other remediation measures, should lead to a lower overall cost of debt in GD2 assuming inflation at rates adopted by Ofgem in the Price Control Financial Model issued on 3rd February 2021.

A2.6 However, there will continue to be a shortfall, estimated at £[✂] p.a. in the allowance of cost of debt because Ofgem's methodology does not fully compensate efficiently raised debt and derivatives on a company specific basis in the context of notional leverage.

A3 BACKGROUND TO THE APPEAL ON THE COST OF DEBT

A3.1 This head of appeal can be simply summarised. It begins with a general principle which ought to be uncontroversial. Ofgem was required to set, and WWU was entitled to the benefit of, a price control incorporating a reasonable allowance for the company's cost of debt. In order to be reasonable, a cost of debt allowance should enable a company to recover its efficiently-incurred financing costs.

A3.2 WWU's case is that Ofgem has failed to abide by this principle because it failed to determine an allowance that is reasonable for WWU, and has instead set an allowance that falls short of what was required to enable the company to recover its efficiently-incurred financing costs. It has done so because it based its determination on a flawed indexation methodology, which

was irrational as a matter of law and lacked any valid policy justification. This inevitably led to an outcome that was in error.

A3.3 The consequence of this error is to '*leave WWU with a significant shortfall in its efficient cost of debt of approximately [✂] a year over the RIIO-GD2 price control period. This shortfall has a material impact on financeability*'.[71]

The Nature of this Head of Appeal

A3.4 It is essential to be clear at the outset what WWU is **not** saying in this head of appeal. It is **no part** of WWU's case to claim that –

(a) regulators can never use indexation (or an equivalent) to set a cost of debt,

(b) licence holders should be able to recover their actual cost of debt on a pass-through basis, regardless of whether or not that cost was efficiently incurred, or

(c) a company is not responsible for risks relating to its choice of capital structure.

A3.5 What WWU says is that Ofgem's **specific approach** to indexation, in the **gas distribution** sector **at this time** is fundamentally flawed, and that it gives rise to an allowed cost of debt which does not permit WWU a reasonable allowance in respect of its efficiently-incurred cost of debt.

The Nature of Ofgem's Errors

A3.6 In determining what a reasonable allowance entails, any regulator would have to exercise its judgment. WWU does not complain about decisions lying within the proper scope of Ofgem's regulatory judgment. Instead, this head of appeal is concerned with a series of errors made by Ofgem which take it outside that area of judgment; errors which render Ofgem's decision unlawful, and which in any event place the decision outside the range of any reasonable policy discretion available to a regulator.

A3.7 As WWU will demonstrate, the consequence of these errors is that Ofgem's decision on the cost of debt was fundamentally 'wrong' in the meaning of that word in section 23D of the Gas Act 1986.

A3.8 The errors relate to both law and policy, and infect every element of Ofgem's decision-making process. Expressed in terms of the statutory grounds of appeal set out in the Act, these errors give rise to a determination of the cost of debt that was wrong in law (section 23D(4)(e)),

[71] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 7.2

based on errors of fact (section 23D(4)(c)), failed properly to have regard to Ofgem's statutory duties (section 23D(4)(a)), and failed to give the appropriate weight to relevant aspects of its statutory duties (section 23D(4)(b)).

A3.9 The purpose of the statement of facts and grounds which follows is to explain to the CMA why it should reach the conclusion that Ofgem's determination of the cost of debt was wrong, and describe the actions that WWU invites the CMA to take in order to ensure that Ofgem's failure is remedied.

A3.10 In support of these arguments, WWU has submitted the witness statement of Mr Ian Weldon and a report from Oxera on the Cost of Debt. They should be regarded as an integral part of this Notice of Appeal. The key elements of Oxera's report have been summarised here, but a comprehensive restatement of its content and that of the witness statement is not given in this section, and the CMA is respectfully requested to read them in full, together with this section.

The Structure of this Head of Appeal

A3.11 For the purposes of assisting the CMA to consider these issues, we have divided the material into three main sections –

(a) **Misinterpretation of statutory duties** (section A4). Ofgem's first, fundamental, error is to misinterpret its own statutory duties. The duties are intended in law to dictate how it exercises its policy discretion. But it has failed to understand the nature of its duty to ensure that companies are financeable, and gives less weight to that duty than the Act requires. That error is compounded because Ofgem also appears to assume, wrongly as a matter of law, that its duties can be satisfied by reference to notional constructs rather than the actual licence holders that it regulates. These errors lie at the root of its other flawed decisions.

(b) **Irrational reliance on a cost of debt index** (section A5). The use of indexation would not be invalid per se, so long as the index provided a reasonable proxy for the cost of debt of each efficient company within the relevant sector. But Ofgem's index does not do this, and indeed cannot do so. Therefore it is irrational in its design and calibration, and unsuitable for use in the gas distribution sector. It lacks any support in economic theory, or any rational validity. The consequences of its use are unlawful discrimination against WWU and a breach of statutory duty.

(c) **Irrational failure to take account of derivatives** (section A6). Ofgem fails to take into account most derivative positions entered into by companies. In this, it follows its past practice. But that past practice does not justify an ongoing failure to treat derivatives as part of the normal operational financing of regulated entities, or to recognise that index-

linked debt (for which Ofgem makes allowance) is not functionally distinct from nominal rated debt plus derivatives (for which no allowance is made). Ofgem's policy is based on sustaining an irrational distinction between categories of financial instruments that should be treated as equivalent.

A3.12 Immediately following these sections, we identify an alternative approach that WWU considers is best designed to avoid the errors made by Ofgem while being consistent both with the legal framework and sound regulatory policy – **WWU's Proposed Approach** (section A7). This section also describes the remedy to which WWU invites the CMA to give effect.

A4 OFGEM'S MISINTERPRETATION OF ITS STATUTORY DUTIES

A4.1 Ofgem imposes a price control by modifying the licence conditions of the regulated company. By this means it sets a legally-binding framework that gives effect to the price control during the relevant control period.

A4.2 It is this licence modification decision that triggers the statutory right to make this appeal to the CMA. And the function of modifying licences must be exercised, like all of the functions Ofgem has under the Gas Act, in accordance with its principal objective and general duties (together, **the statutory duties**) which are found at section 4AA of that Act.

A4.3 Ofgem must correctly interpret and apply the statutory duties. Their interpretation is not a matter over which it has discretion – it is a question of law, to be determined for the purposes of these appeal proceedings by the CMA in its role as the appellate tribunal. Ofgem, like all other public bodies required to comply with duties imposed by statute, must get the law right[72]. Furthermore, the CMA itself is subject to the same statutory duties in determining this appeal by virtue of section 23D(2) of the Act.

A4.4 If Ofgem incorrectly interprets and applies its duties, it has 'misdirected itself' as to the law, and the decisions which flow from that misdirection will inevitably be unlawful.

A4.5 The meaning and effect of the statutory duties is sometimes the source of dispute, including in cases before the CMA. But so far as they are concerned with decisions relating to the cost of capital, there is nothing unduly complex or difficult about them, and no major problem with their interpretation should arise.

The Statutory Duties

[72] *'It is now settled law that an administrative or executive authority entrusted with the exercise of a discretion must direct itself properly in law' – R v Barnet LBC ex p Shah* [1983] 2 AC 309 (per Lord Scarman at 350D).

A4.6 So far as relevant to this head of appeal, there are four main components of the statutory duties –

(a) A principal objective '*to protect the interests of existing and future consumers in relation to gas*' (section 4AA(1)). It should be noted that the reference to both existing and future consumers means that Ofgem is required to act in a way that protects consumers over both the long-term as well as the short-term.

(b) A description of certain factors which are deemed to be in the interests of consumers for the purposes of the principal objective. These include '*the reduction of gas-supply emissions of targeted greenhouse gases*' and '*the security of the supply of gas to them*' (section 4AA(1A)).

(c) A duty on Ofgem to exercise its functions in a manner which is '*best calculated to further the principal objective*' (section 4AA(1B)).

(d) '*In performing…*' that duty – in other words, in acting to further the principal objective – a requirement to '*have regard to…the need*' to achieve certain specified outcomes (section 4AA(2)).

A4.7 In this context, the key element of the specified outcomes referred to above is clearly the duty at section 4AA(2)(b) of the Act (the **financing duty**). The full subsection is reproduced immediately below, with the financing duty emphasised –

> '(2) In performing the duties under subsections (1B) and (1C), the Secretary of State or the Authority shall have regard to –
>
> (a) the need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
>
> (b) the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under this Part [and other relevant Acts]; and
>
> (c) the need to contribute to the achievement of sustainable development.'

A4.8 There are three features of this to which we draw particular attention.

A4.9 **First**, it applies to 'licence holders'. Plainly this means actual licence holders, those to whom Ofgem has granted a licence. It is not a sufficient discharge of the duty to ensure that a mere 'notional' licence holder is financeable if it does not share the fundamental characteristics of the actual licence holder in relation to which Ofgem is acting. In addition to the clear meaning of the statutory words – and supporting their purpose and effect – basic public law principles

apply. Among other things, these require Ofgem to have regard to all relevant circumstances of each company. Those circumstances must be allowed to shape its decisions. It cannot disregard them because they do not fit a desired notional template which Ofgem has devised. Ofgem must take licence holders as it finds them.

A4.10 **Second**, it is concerned with the licence holders being able to *'finance the activities which are the subject of obligations*' imposed on them (emphasis added). It therefore expressly draws attention to the obligations placed on licence holders under the regulatory regime and the need for companies to have adequate allowances to support compliance. A key obligation is the requirement to use reasonable endeavours to maintain an investment grade credit rating.[73] The legal effect of the financing duty is that this becomes an obligation that the company must be funded to meet. If it cannot maintain an investment grade rating, it will not be able to finance its activities and the principal objective will not be met.

A4.11 **Third**, there is no tension, trade-off or hierarchy between the financing duty and the consumer objective. The Act makes clear that the requirement to fulfil the financing duty is a sub-set of fulfilling the overarching consumer objective – it is to be achieved 'in performing' the duty to further that objective, and must therefore be consistent with it. The reason is obvious. It is in the consumer interest for licence holders to be placed in a position where they can carry on their activities in accordance with their obligations. It cannot be in the consumer interest for licence holders to be underfunded and consequently at risk of being unable to meet their obligations. Moreover, since the consumer interest expressly includes the interests of future as well as current consumers, this means that Ofgem must look to the long-term financeability of each licensee, as well as its ability to finance its operations in the immediate future.

A4.12 None of these basic points of interpretation is surprising or radical, and none of them should be controversial. They simply follow the plain language of the statute, given a common sense meaning, consistent with the general law. They give effect to all the words of the statute, and do not require anything to be 'read-in' to it.

Ofgem's Interpretation

A4.13 But Ofgem does not interpret the financing duty in this way. In fact it has had little to say about the duty at all. A striking fact is that within the several hundred pages of documentation which constitute the Final Determination, Ofgem makes no reference to the financing duty or any of the other statutory duties which are required, in law, to shape the decision that it makes[74]. Nor

[73] Tab M28: WWU - Gas Transporters Licence – Standard Special Condition A38 (Credit Rating of the Licensee).

[74] Except when summarising consultation responses submitted by others. Ofgem itself had nothing to say on the subject.

does it do so in its statutory notice of the price control licence modifications under section 23 of the Act, or the 'reasons and effects' document which accompanies it.

A4.14 Any reader looking to the Final Determination or the licence modification decision will find no guidance as to how Ofgem interprets the duties, how they have shaped its policy choices, or how it considers that the final outcome gives best effect to them. This is a surprising position to be adopted by a regulator bound by a set of statutory duties under law. Among other things, Ofgem's failure to explain these matters is a fundamental breach of its public law duty to give adequate reasons for the decisions comprised in the price control.[75]

A4.15 The principal document in which Ofgem directly addressed the subject of its statutory duties was in the Sector Specific Methodology. Absent any further indication from it of how the duties are applied, this must be taken to represent an understanding that it carried forward to its later decisions. It therefore merits quoting in full –

> 'Some responses raised questions about our financeability duty. Section 3A of the Electricity Act 1989 and section 4AA of the Gas Act 1986 set out Ofgem's principal objective and general duties. The relevant wording in relation to Ofgem's financeability duty in both Acts provides that "the Authority shall have regard to……(b) the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed……".
>
> The financeability duty requires us to "have regard to" the need to ensure that licensees are able to finance their activities, rather than a duty to ensure or secure the financeability of licensees. While financeability is an important consideration, and one that we take very seriously, it is not the only consideration to which our attention is directed by statute. The relevant sections of the Electricity Act and Gas Act, and relevant CMA authorities, require us to weigh these considerations in the round.
>
> We therefore believe that a continued focus on the notional company for setting price control parameters is appropriate in light of our financeability duty and our other duties. We will consider actual company debt positions and structures to inform the notional structure and to inform our views on potential increased monitoring of actual companies with a less comfortable credit profile. However, we do not believe that we are required to

[75] As to the scope and effect of that duty, see *Nzolameso v City of Westminster* [2015] UKSC 22 (per Lady Hale at [32]) – '*It must be clear from the decision that proper consideration has been given to the relevant matters required by the Act…It has long been established that "an obligation to give reasons for a decision is imposed so that the persons affected by the decision may know why they have won or lost and, in particular, may be able to judge whether the decision is valid and therefore unchallengeable or invalid and therefore open to challenge"…Nor, without a proper explanation, can the court know whether the authority have properly fulfilled their statutory obligations.*'

> "ensure" or "secure" that all licensees are actually financeable in any and all circumstances (whatever risks they have taken or however inefficient they may be).
>
> An obligation to "ensure" or to "secure" actual company financeability would have the effect of the consumer underwriting all financing decisions of networks despite companies, their boards and management being better placed to manage risks associated with these decisions and benefitting from additional returns if those decisions lead to outperformance.'[76]

Errors in Ofgem's Interpretation (1) – Misunderstanding the financing duty

A4.16 Ofgem's approach to the interpretation of its financing duty involves a serious misstep. The misstep is to focus almost exclusively on the words 'have regard to' in the financing duty. Ofgem uses this to seek to downplay the status of the duty, rendering it just one among many factors to which regard must be had ('*not the only consideration to which our attention is directed*').

A4.17 Consequently, Ofgem suggests in the second paragraph of the quotation above that it is entitled to engage in trading-off the financing duty against other duties, and that it may not be required to ensure that companies are able to finance their activities where it deems that other considerations should take precedence (*'weigh these considerations in the round'*).

A4.18 We would make the following observations –

(a) The words 'have regard to' may in some statutory contexts indicate a factor that needs to be taken into account, without importing any requirement in relation to the weight to be attached to it or an outcome that is to be achieved.

(b) However, the words can never be taken in isolation, and like all statutory words must be read in the context in which they are used in order to understand their legal purpose and effect. The use of those words in the context of section 4AA(2) of the Act is both clear and distinctive.

(c) What Ofgem must have regard to in the case of the financing duty is the *'need to secure'* – i.e. the necessity of ensuring – that licence holders are able to finance their activities. The weight to be given to the matter of financing is therefore clearly written onto the face of the statute.

(d) That weight is expressed in words which indicate a mandatory outcome that must be achieved, and not a discretionary objective capable of being sacrificed in favour of other

[76] Tab A3.1: Ofgem – RIIO-2 Sector Specific Methodology Consultation Decision – Core Document, paras 12.76 to 12.79

priorities.

(e) To test this it is useful to compare the financing duty to the duty immediately adjacent to it – the duty to have regard to *'the need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met'*[77]. This has the same place in the overall structure of duties, uses the same introductory words (*'need to secure'*), and can therefore be taken as being intended to have equivalent legal status and effect.

(f) Two conclusions can be drawn from the comparison –

(i) First, self-evidently, the objective of securing that all reasonable demands for gas are met represents a required outcome which is fundamental both to the operation of the gas industry and the satisfaction of the public interest, and is not merely a desirable aim that is capable of being traded-off against other things. The financing duty exists on the same level.

(ii) Second, to the extent that Parliament intends to qualify the duty in respect of meeting demands for gas, it does so expressly – by reference both to what is '*reasonable*' and what is '*economical*' – using words written into the duty itself. No similar qualifications appear in the financing duty.

A4.19 For context, it should be noted that, in the Act as originally enacted in 1986, the financing duty was (together with the duty to ensure that all reasonable demands for gas were met) one of two primary duties to which all other duties were subject.

A4.20 Following later amendments to the Act, which established the principal objective of protecting consumers, these duties became embedded in the duty to further that overall objective as described above. But this was not an attempt to reduce them to a lesser status. As the use of the phrase *'need to secure'* clearly indicates, they are still regarded as both fundamental and necessary. The amendment merely reflects the fact that they are subsumed within the more general requirement to protect the interests of consumers, and constitute two ways (essential but not exhaustive) by which that requirement is to be fulfilled.

A4.21 For further context, it should be noted that when other statutes wish to indicate a downgraded form of the financing duty falling short of an obligation to ensure that regulated entities are able to finance their activities, they do so in clear terms.

A4.22 For instance, the financing duty on the Office of Rail and Road is expressed as a duty '*to act*

[77] Section 4AA(2)(a) of the Act

in a manner which [it] considers will not render it unduly difficult for persons who are holders of network licences to finance any activities or proposed activities of theirs…'[78] (emphasis added). This negatively expressed duty – in effect, to avoid making it too difficult for a licence holder to obtain the funding it needs – is plainly designed to be weaker than the positive duty placed on Ofgem under the Act.

A4.23 Taking all of these points together, it is clear from Ofgem's own statement about its statutory duties that, by focusing almost exclusively on the words '*have regard to*', and taking them in isolation of the wider context of the statutory drafting in which they sit, it has misdirected itself as to the meaning of its financing duty and regards that duty as being considerably weaker than it actually is. That is an error of law.

A4.24 By misunderstanding its own duties in this manner, Ofgem has made a serious error and this error infects the rest of its decision and it a root cause of the other errors.

Errors in Ofgem's Interpretation (2) – Failure to have regard to all relevant circumstances

A4.25 An equally significant error in Ofgem's approach lies in its failure to apply the financing duty in the correct manner. The duty is expressed as a *'need to secure that licence holders are able to finance the activities which are the subject of obligations…*' (emphasis added). In this formulation, the plural includes the singular[79] – 'licence holders' therefore means all licence holders together and each licence holder individually.

A4.26 Since the financing duty applies to each licence holder, and since its effect in respect of any decision by Ofgem to set a price control must be that the licence holder should be allowed to earn revenues sufficient to enable it to finance its activities, two public law duties also have effect –

(a) Ofgem is required to have regard to all relevant circumstances. The question of what is relevant – and therefore must be taken into account – is a question of law[80].

[78] Section 4(5)(b) of the Railways Act 1993. In addition, the regulatory framework for national air traffic control services, which underpins the current price control reference in to the CMA in that sector, expresses the financing duty in equivalent terms – *'to secure that licence holders will not find it unduly difficult to finance activities authorised by their licences'* (section 2(2)(c) of the Transport Act 2000).

[79] Section 6(c) of the Interpretation Act 1978

[80] *'If the exercise of a discretionary power has been influenced by considerations that cannot lawfully be taken into account, or by the disregard of relevant considerations required to be taken into account (expressly or impliedly), a court will normally hold that the power has not been validly exercised.'* De Smith's Judicial Review, 8th edition, paragraph 5-130.

(b) For the purpose of having regard to all relevant circumstances, Ofgem has a duty of 'sufficient enquiry' (the so-called '*Tameside* duty') – it must take reasonable steps to acquaint itself with all relevant information[81].

A4.27 It is difficult to see how this duty can be satisfied by Ofgem's approach to determining the cost of debt. That approach makes provision for the notional company, based on the average costs of those included in Ofgem's sample (the **sector average**)[82]. By definition, it is not responsive to the circumstances of individual companies. It takes those circumstances into account only in respect of the calculation of the average, but does not then make any adequate adjustment for company-specific positions[83]. To the extent to which actual licence holders deviate from the notional position, their circumstances are largely disregarded.

A4.28 In its statement in relation to the statutory duties (quoted above), Ofgem sought to justify this fundamentally problematic position in the following terms –

> '…we do not believe that we are required to "ensure" or "secure" that all licensees are actually financeable in any and all circumstances (whatever risks they have taken or however inefficient they may be).
>
> An obligation to "ensure" or to "secure" actual company financeability would have the effect of the consumer underwriting all financing decisions of networks…'

A4.29 In this statement, it will be noted, Ofgem seeks to do three things.

A4.30 **First**, it sets up a 'straw man'. It says that the financing duty cannot have the meaning claimed for it – a meaning in which Ofgem is required to have regard to the financeability of individual companies it regulates, taking into account their particular circumstances – because if it did so it would mean that Ofgem would be required to keep afloat companies that had made bad financing decisions.

A4.31 However, it has never been suggested by WWU – nor, to the best of its knowledge, by any other GDN – that this is a consequence of the financing duty. The nature of the duty is to put companies in a position in which they 'are able' to finance their activities. It is not suggested

[81] After *Secretary of State for Education and Science v Tameside MBC* [1977] AC 1014 – *'the question for the court is, did the Secretary of State ask himself the right question and take reasonable steps to acquaint himself with the relevant information to enable him to answer it'* (per Lord Diplock at 1065B).

[82] Referred to as the 'sector average' in this Notice of Appeal as a convenient shorthand, but in fact including transmission (electricity and gas) licence holders as well as GDNs. The sector average is therefore not calculated by reference to the GDN (or gas) sector alone.

[83] Except to the minor and inadequate extent of making a 6 basis point adjustment for infrequent issuers of debt. As to this, see further below.

that this is an obligation, in all events, to hold companies harmless against any management failings or inefficiency.

A4.32 While Ofgem directs attention towards an extreme scenario, it avoids addressing the question of what the financing duty requires in cases where licence holders have entered into financing arrangements that are reasonable and efficient, but differ from those of the 'notional' company that Ofgem seeks to regulate. It offers no explanation why Ofgem should be entitled, contrary to the terms of the duty and its public law obligations, to disregard the actual circumstances of the company in such cases.

A4.33 **Second**, which both follows from and is implicit in the above, Ofgem operates on the basis of the underlying assumption – which it appears to treat as self-validating – that any deviation from the position of the notional company is a deviation from the 'correct' or 'efficient' position.

A4.34 However, it does not follow, whether as a matter of logic or real world practice, that a sector average reflected in the cost of debt of the notional company represents 'efficiency', or that a departure from it represents either inefficiency or (as the case may be) super-efficiency. Even if Ofgem wishes to start with a notional construct, its duty of sufficient enquiry means that it is required to ask itself why the position of individual companies might differ from the notional, and whether they remain efficient regardless of that difference, having regard to all of their relevant circumstances. Only once it has had all due regard to the position of actual licence holders can it be said that it has discharged this duty.

A4.35 **Third**, Ofgem presents the consequences of having regard to the circumstances of individual companies as if they would always be adverse to consumers – '*the consumer underwriting all financing decisions*'. There is no recognition of the situation (considered in more detail below) in which allowing all companies the cost of debt attributable to the notional company means that some companies receive a windfall at the expense of customers.

A4.36 In short, taking all of these points together, nothing in Ofgem's published position supplies any valid reason for departing from the clear and obvious meaning of the financing duty and of the public law obligations arising in relation to it.

A4.37 Ofgem is required to act consistently with that duty in respect of each company, and in doing so to have regard to all of the relevant circumstances of that company. In practice, it is clear that, by applying the notional cost of debt to all licence holders, Ofgem is failing to have due regard to the individual circumstances of each company. That is an error of law.

A5 OFGEM'S IRRATIONAL DESIGN OF A COST OF DEBT INDEX

A5.1 To state the point again, it is no part of WWU's case that regulators can never use indexation for the purpose of setting a cost of debt. This head of appeal is brought on the basis that the approach taken by Ofgem, in the gas distribution sector at the present time is wrong as a matter of law and policy.

A5.2 For the purposes of assisting the CMA to consider these issues, we have divided the argument into a number of sub-headings identifying different errors made by Ofgem. However, to a large extent this is for the purpose of convenience in analysis and ease of presentation. Certainly, each of these errors can be viewed as a discrete failure, and WWU's case is that any one of them, taken alone, would be sufficient to invalidate the decision on the cost of debt and merit remedial action. Nonetheless, many of them are overlapping, and all are cumulative in terms of their contribution to what is ultimately wrong with the use of the index.

A5.3 One way of viewing these errors is that each represents a different facet of, or perspective on, the underlying failure of Ofgem to interpret its statutory duties correctly and apply them to the specific circumstances of WWU. The CMA is invited to consider each of them separately, but also read them together for a full understanding of the reasons for this head of appeal.

The Nature of the Index

A5.4 To recap, Ofgem's to the indexation of the cost of debt can be summarised as follows –

> '…[a] full indexation approach to the cost of debt regulatory revenue allowance based on a 10−14-year trailing average of iBoxx GBP Utilities 10+ with a 25bps premium for the additional costs of borrowing and a 6bps premium to infrequent issuers.[84] Ofgem followed a 'bottom-up' calibration approach—it aimed to set the allowance in a way that would on average in RIIO-2 be expected to match the average actual cost of debt (adjusted for differences between actual and notional gearing) of the transmission and gas distribution network companies weighted by their regulated asset values (RAVs).'[85]

Inherent Irrationality

A5.5 **First**, since Ofgem's index calculates a cost of debt based on the average of the costs of debt of the companies comprised in it, it begs a question: why should a sector average constitute the 'right' or 'reasonable' cost of debt allowance for any individual company?

[84] Tab A5.9: Ofgem – RIIO-2 Final Determinations – Finance Annex (Revised), pp. 9–10.

[85] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 1.2

A5.6 By way of answer, Ofgem seems to suggest that the average represents a position of efficiency – '*full indexation…can be calibrated to provide a good estimate of efficient sector debt costs*'[86].

A5.7 However, Ofgem offers no rationale which credibly explains why a sector average cost of debt determined by its index should represent the position of an efficient company. Nor could it do so, since as a matter of logic there is no reason why an average of industry actual costs should correspond to a position of efficiency. If the average did happen to approximate to the efficient costs of any given company that would be a matter of coincidence rather than a logical result from the use of such an index.

A5.8 In consequence, Ofgem's approach is rely upon a mathematical construct that has no inherent representative value – i.e. it corresponds to no underlying quality which allows significance to be attached to it for the purposes of regulatory policy decisions. The sector-wide average that it generates does not represent an 'efficient' company raising 'efficient' debt; nor is it a proxy for the position of a notional company that has followed an objectively normative treasury strategy (since no such thing exists); nor could it serve to model a company that has acted in accordance with regulatory incentives set for it (since the index is imposed *ex post facto*).

A5.9 Ofgem's method of indexation could therefore only work as the basis for setting the cost of debt if it made appropriate adjustments to the outturn allowance to ensure that actual licence holders could finance their debt. Without such an adjustment the policy is irrational in the strict sense, and in accordance with the meaning which that term bears in public law[87].

No Basis in Economic Theory

A5.10 **Second** – which follows, unsurprisingly from the first point – this approach to the design and calibration of an index is not supported by any underpinning in economic theory. It '*lacks economic principles*'[88]. There is no theoretical support in academic literature for the concept that a sector average should have any representative value in terms of efficiency.

A5.11 Oxera summarise the point as follows –

> 'This approach is not underpinned by sound economic principles or reasoning about the total costs that an efficient network is likely to incur in financing its functions.[89] Instead of

[86] Tab A3.1: Ofgem – RIIO-2 Sector Specific Methodology Consultation Decision – Core Document, para 12.11

[87] In other words, *Wednesbury* unreasonable

[88] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 3.47

[89] Ofgem has four principles, based on which it chose its approach to the cost of debt allowance…However, they do not provide any specifics about Ofgem's assumptions on the total costs that an efficient network is likely to incur in financing its functions.

> considering the range of possible costs of debt that an efficient licensee could have, Ofgem relies on the empirical observation that in RIIO-2, under this approach, the allowance is expected to approximately match the actual cost of debt of transmission and gas distribution networks on average, weighted by the networks' RAV.'[90]

A5.12 In short, the approach has no valid grounding in economic theory or regulatory policy. Ofgem would not determine price control allowances for any other category of cost on the same basis.

Skewed Results

A5.13 **Third**, even if – contrary the previous two points – an average of the sector actual cost of debt could *in principle* serve as a proxy for the cost of debt of an efficient company, it is impossible in practice for any such proxy to be derived from Ofgem's index.

A5.14 The reason for this is clear. The companies whose costs of debt are included in the index have varying characteristics which make them unsuitable for direct comparison with each other. NGET is included, although its corporate characteristics, and the activity of electricity transmission which it undertakes, are quite distinct from those of GDNs. The GDNs which were hived-down from National Grid in 2005 (such as WWU) are included together with those hived-down in 2016 (Cadent), even though the simple fact of these timing differentials drive significant variations in the cost of debt.

A5.15 Moreover, the allowed cost of debt as generated by the index is driven primarily by the actual costs of debt of the two largest companies with characteristics most dissimilar to WWU –

> 'Ofgem's RIIO-2 cost of debt allowance is largely driven by the cost of debt of the largest companies. 47% of the estimate is driven by the actual cost of debt of National Grid (NGET and NGGT).[91] 23% more is driven by the cost of debt of Cadent Gas.'[92]

A5.16 In its report on a reference into Bristol Water plc in 2015, the CMA said the following –

> 'If the cost of debt for both small and large companies were used to decide the cost of debt for all companies then, in the absence of [a small company premium], smaller companies would tend to face an assumed cost of debt that is lower than their actual financing costs on average, over time. In contrast, larger companies would tend to face an assumed cost of debt that is higher than their actual financing costs on average, over time.'[93]

[90] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 3.13

[91] Based on 'Ofgem FD' RAV scenario in RIIO-2

[92] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 3.17

[93] Tab M31: CMA – Bristol Water plc – A reference under section 12(3)(a) of the Water Industry Act 1991 (Report), para 10.65

A5.17 This observation was made in the context of the discussion of a small company premium. But the underlying principle recognised by the CMA – and also acknowledged by Ofgem in making its adjustment for infrequent issuance and special treatment of SHE-T – is directly applicable to this appeal. Namely: if the costs of debt of companies which are non-comparable because they have fundamentally different characteristics are used to calculate a single sectoral cost of debt, the outcome will necessarily be skewed against some companies and in favour of others. In those circumstances it is inevitable that some companies will be unable to recover their actual efficient costs of debt, with an adverse impact on their financeability.

A5.18 Ofgem has stated that it will consider '*unusual company specific circumstances if appropriate and justified*'[94]. However, it has failed to have proper regard to the problem of individual licence holder financeability, or to realise that its failure to do so invalidates its approach to indexation and entails a breach of its financing duty. Ofgem's index is designed to accommodate the cost of debt of a number of companies which have radically different characteristics and therefore are entirely unsuitable for inclusion in an index designed to produce a single sector cost of debt allowance. As noted above, WWU is fundamentally distinguishable from the companies whose costs of debt largely drive the output of the index, whether by virtue of size (NGET/Cadent), different sectoral characteristics (NGET), or different timing of debt issuance (Cadent).

A5.19 The last of these is especially important in driving the outcome of indexation – '*In particular, the results are affected by specific circumstances of the timing of Cadent's hive-down from National Grid in 2016. Cadent's debt portfolio is significantly more recent than that of other networks due to its hive-down*'[95].

A5.20 WWU, which was hived-down from National Grid in 2005, raised its post-acquisition finance in the very different interest rate environment that existed before the financial crisis. Cadent, which was hived-down in 2016, has a portfolio which predominantly consists of debt issued after that date and therefore able to take advantage of the historically unprecedented low rates available in the post-crisis period, as well as being in a position to seek to match *ex ante* the approach which Ofgem had signalled in GD1. '*As a result, Cadent's actual cost of debt is lower than that of most other networks.*'[96] These differences are merely adventitious, and say nothing about the relative efficiency of the companies' debt at issuance.

A5.21 Even if this had not been the case, it would have been inappropriate for Ofgem to construct an index as it has, since its effect is to –

[94] Tab A5.9: Ofgem – RIIO-2 Final Determinations – Finance Annex (Revised), para 2.58

[95] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 3.20

[96] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 3.21

> '…set a cost of debt allowance that is largely driven by the cost of debt of a small number of the largest companies in the industry, thereby exposing the smaller companies to the choices of financing strategies of the larger companies, which is a factor wholly outside those small companies' control.'[97]

A5.22 However, once the radically different characteristics of companies which are included in the index is taken into account, the index becomes unsuitable at an even more fundamental level. The effect of the index as designed is to treat the actual costs of debt of the companies in the index as if it they were commensurate with each other, when in fact, because of significant differences in the timing and circumstances of debt issuance, they are not.

A5.23 Ofgem nodded in the direction of the need to recognise differences in circumstances between companies when it allowed a 6 basis point uplift in the cost of debt for those companies likely to engage in infrequent issuance[98]. It ought, however, to have followed through the logic of its own position and understood the extent to which the more fundamental differences between those companies represented in the index undermined its validity as a tool for setting a sector cost of debt allowance.

Unlawful Discrimination

A5.24 **Fourth** – which follows inevitably from the third point – the effect of Ofgem's approach to the indexation of the cost of debt is to discriminate between companies without any objective justification. Specifically it discriminates against WWU.

A5.25 In law, Ofgem is subject to a series of related legal obligations not to adopt policies that have discriminatory effect. Notably –

(a) As a matter of public law, it is required to treat like cases alike[99] and different cases differently[100] – '*treating like cases alike and unlike cases differently is a general axiom of rational behaviour*'[101]. This application of the 'principle of equality' is a subset of the

[97] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 3.15(a)

[98] Tab A5.9: Ofgem – RIIO-2 Final Determinations – Finance Annex (Revised), p. 10

[99] *'It is a cardinal principle of public administration that all persons in a similar position should be treated similarly'* (per Lord Donaldson in *R (Cheung) v Hertfordshire CC* (1986), quoted by Burnton J in *R (Middlebrook Mushrooms) v Agricultural Wages Board of England and Wales* [2004] EWHC 1447 (Admin) at [74]).

[100] *'Like cases should be treated alike, and different cases treated differently. This is perhaps the most fundamental principle of justice' – AM (Somalia) v Entry Clearance Officer* [2009] EWCA Civ 634 (per Elias LJ at [34]).

[101] *Matadeen v Pointu* [1999] 1 AC 98 (per Lord Hoffman at [9]).

duty to act rationally[102], because any rational decision-maker applies consistent rules to similar cases and does not apply a one-size-fits-all policy to different cases.

(b) Under retained EU law, Ofgem is under a duty '*not [to] discriminate between [natural gas] undertakings as regards their rights or obligations'*[103]. This is a legislative embodiment of the EU law 'principle of equal treatment' which requires that '*comparable situations must not be treated differently and that different situations must not be treated in the same way, unless such treatment is objectively justified*'[104].

(c) Under the European Convention on Human Rights[105], the interference with possessions necessarily entailed by the regulatory interventions comprised in a contemporary price control engages Article 1 Protocol 1 rights and as such is also subject to the prohibition on discrimination found at Article 14. Discrimination in Convention jurisprudence has long been recognised to exist when a blanket approach is applied to persons in different circumstances.[106]

A5.26 In short, unlawful discrimination occurs when there is a difference in the regulatory treatment of companies which cannot be objectively justified. This may be because two companies in the same situation are treated differently, or because two companies in different situations are treated in the same way by the imposition of a one-size-fits-all-policy that fails to respect their distinct circumstances or characteristics.

A5.27 Ofgem's index, by taking a sector average and using it to set the cost of debt allowance for all companies, is discriminatory by design and inevitable outcome. If a sector average is taken, particularly among companies exhibiting widely divergent costs of embedded debt such as those of the GDNs, it is inevitable – a logical and unavoidable consequence of this policy – that some companies will be over- and some under-remunerated. Some will get more than their actual cost of debt and some less. Windfalls and shortfalls are features of the policy, and are unrelated to the relative efficiency of the debt when it was issued.

[102] *'The common law principle of equality is usually no more than a particular application of the ordinary requirement of rationality imposed on public authorities' – R (Gallaher Group) v CMA* [2018] UKSC 25 (per Lord Sumption at [50]).

[103] Article 3(1) of Directive 2009/73/EC, retained by virtue of section 4(1) of the European Union (Withdrawal) Act 2018

[104] *Case C-510/11, Kone OYJ and others v European Commission (Elevators and Escalators Cartel Appeal)* [2014] 4 CMLR 10, para 97.

[105] Ofgem is required by section 6(1) of the Human Rights Act 1998 to act in a manner that is compatible with the Convention rights.

[106] A failure to treat different cases differently is a form of discrimination generally known by the shorthand '*Thlimennos* discrimination', from the leading European Court of Human Rights case of *Thlimennos v Greece* (2001) 31 EHRR 15.

A5.28 This discrimination could still be lawful if it had an objective justification – if the index had a representative value; if it were the benchmark for the efficient cost of debt within the industry. In those circumstances, Ofgem might claim that companies which had a cost of debt that was more or less than the indexed allowance were simply bearing the costs or accruing the benefits that were attributable to under- or out-performance.

A5.29 But no such justification is available. For the reasons already given above, the index does not generate a benchmark for efficiency or any other value-bearing concept. The distribution of companies above and below the line is driven by individual factors, most importantly of all by the timing of hive-down of GDNs from National Grid and therefore of their corporate financing, which have nothing to do with efficiency or any other measure of assumed merit.

A5.30 Oxera clearly reach the same conclusion in their expert report –

> 'In RIIO-2, Ofgem calibrated its trailing average cost of debt allowance to match the weighted average actual cost of debt of transmission and GD networks. As a result of the averaging, the allowance under-remunerates the cost of efficiently raised debt of some licensees and treats others more favourably.'[107]

> 'Ofgem's 'bottom-up' calibration of the cost of debt allowance to the weighted average actual cost of debt across all the licensees in the electricity and gas transmission and GD sectors does not approximate the cost of debt of an efficient company and as a result under-remunerates the cost of efficiently raised debt of some licensees in the GD sector, while treating other licensees more favourably.'[108]

A5.31 In consequence, Ofgem's approach to indexation rewards some companies and penalises others without justification. Moreover, these are not just regrettable outcomes but structural features of its approach – in an index based on an average of actual costs, the penalisation of one company arises *because* of the unnecessary reward of another. They are two sides of the same coin. This is the very definition of unlawful discrimination.

A5.32 For this reason Ofgem's decision is wrong in law. But it ought not to be necessary to appeal to legal principles in order to show that a policy which gives rise to discriminatory outcomes is 'wrong' in the statutory sense. No sound regulatory policy should have such an effect, since it cannot be consistent with the purpose or effect of the statutory duties.

[107] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 2.14 (emphasis added)

[108] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 1.4(b) (emphasis added)

A5.33 In the case of WWU specifically, this leads to the company sustaining what Oxera has called 'windfall losses', which is simply to say that Ofgem has failed to satisfy its financing duty in relation to WWU –

> '…for individual companies the cost of debt index can produce sustained windfall losses relative to their actual cost of efficiently raised debt, as is the case for WWU… this approach does not allow for the recovery of efficient debt costs, simply due to the construction of the index.'[109]

A5.34 It should be noted that nothing in Ofgem's approach can be justified on the basis of benefits to gas consumers. The cost to consumers would have been the same if each company were set an allowance based on its individual, efficient cost of debt. In the aggregate, this generates exactly the same amount as consumers pay under indexation. The only difference is how the receipts from those payments are distributed between licence holders. The effect of the index is to distribute them unfairly.

A5.35 Moreover, since this discriminatory outcome creates an adverse impact on the financeability of any company which is penalised by it, and since the purpose of Ofgem's financing duty is to ensure that licence holders are sustainably financed in the long-term interest of consumers, the effects of the policy are strongly against the consumer interest.

Retrospective Imposition of an Interest Rate Profile Policy

A5.36 **Fifth**, the effect of Ofgem's approach to the indexation of the cost of debt is to impose on the GDNs a retrospective interest rate profile policy.

A5.37 The background context is that all eight of the GDNs in Great Britain were 'hived-down' (sold as separate businesses) by National Grid, their former owner – four (including WWU) in 2005, and the remaining four in 2016. To finance the hive-downs and ongoing operations, each of the GDNs issued equity and debt, some of which was then re-financed post-acquisition.

A5.38 Because the GDNs benefitted from stable regulatory asset values and a predictable long-term programme of mains replacement capital expenditure, the companies had flexibility to adopt a wide range of financing strategies. In the event, each GDN owner took a different approach,

[109] Tab C2: Oxera – RIIO-GD2 Preparation: Cost of Debt Report, p.21

including in relation to its issuance profile and the way in which it managed its interest rate and inflation risk[110].

A5.39 Importantly, each of the strategies was appropriate in principle at the time it was adopted –

> 'All of these strategies had pros and cons, and ex ante, it was not clear which of them an efficient company should have preferred. Furthermore, there was no regulatory policy in relation to the notional interest rate risk profile, against which the licensees could benchmark themselves.'[111]

A5.40 The absence of any regulatory policy on interest rate profile, as observed here by Oxera, is of fundamental importance. WWU's financing strategy involved a decision to fix the long-term interest rate with effect from 2007. In this, it was following an entirely reasonable approach in line both with the legitimate expectations of investors and current regulatory practice –

> 'Investors into long-term infrastructure target predictable cash flows. This principle is recognised and adopted by Ofgem and other regulators in setting cost of debt allowances for infrastructure at a long-term fixed rate. The Ofgem Competition Proxy Model (CPM) is a recent example of this, where the cost of debt allowance for the operational phase is fixed for 25 years.'[112]

A5.41 If Ofgem had set a policy in relation to interest rate risk profiles, as it did in relation to notional gearing, then it would be reasonable to expect that WWU must either have followed it or taken any risks associated with not doing so[113]. However –

> '…it is not possible to define such risks when no justified regulatory policy in relation to interest rate risk profiles is defined ex ante. This is a significant shortcoming in regulatory policy on cost of debt, because interest rate policy is a fundamental feature of financial strategy, in the same way that leverage is. Once debt is incurred, interest rate risk is unavoidable and ex post changes in allowances have material consequences on the licensee.'[114]

A5.42 In the absence of any *ex ante* regulatory policy on interest rate risk profiles which dictated a different outcome, there can be no valid basis for regarding WWU's approach as inefficient or inappropriate. '*The only benchmarkable parameter is the cost of debt at* issuance *(i.e. its yield to maturity), which can be benchmarked against a market index such as iBoxx*' – against this

[110] Tab D1: Oxera – RIIO-2 Cost of Debt Report, paras 2.35 – 2.41

[111] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 2.38

[112] Tab D1: Oxera – RIIO-2 Cost of Debt Report, Executive Summary, para 8

[113] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 2.26

[114] Tab D1: Oxera – RIIO-2 Cost of Debt Report, Executive Summary, para 9

benchmark WWU's portfolio of debt and derivatives can be demonstrated to have been issued at market rates at the time of issuance.[115]

A5.43 And if WWU acted efficiently at the time by reference to the available benchmarks and such regulatory policy as then existed, there can be no valid basis for considering it to be inefficient because of subsequent events –

> 'The evolution of market interest rates since any debt financing strategy, including the interest rate risk profile, was implemented is not relevant to the assessment of whether the debt portfolio was formed efficiently or not. Therefore, any industry-average cost of debt allowance, such as an averaging of the actual cost of debt across licensees, set with the benefit of hindsight as to how market interest rates have evolved would leave some licensees and their investors in more favourable positions than others for reasons unrelated to efficiency.'[116]

A5.44 However, the *ex post* application of an interest rate profile policy is precisely the effect that Ofgem's approach to indexation has in relation to WWU. It implicitly judges WWU's past decisions with the benefit of hindsight, assesses them against a policy that did not exist at the time those decisions were made, and applies consequences on the basis not of the quality of WWU's decision but of how things turned out in the wider market. As Oxera identifies, these outcomes 'would have been different if interest rates went up rather than down, which could not have been known at the time'.[117]

A5.45 The correct word to describe a policy of this nature is 'retrospective'. And retrospective policies are inherently undesirable and destabilising of the regulatory environment. Ofgem's approach to indexation is wrong for that reason in addition to the other errors already identified.

A6 OFGEM'S IRRATIONAL FAILURE TO TAKE INTO ACCOUNT DERIVATIVES

A6.1 Ofgem's approach to derivatives is essentially to treat them as company-specific management decisions which are entirely at the risk of equity investors and so can safely be disregarded by regulators –

> 'There are also differing approaches to the use of derivatives, which would suggest that their use represents company-specific management decisions, the costs or benefits of

[115] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 2.15

[116] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 2.16 (emphasis added)

[117] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 2.41

> which could reasonably be considered to most appropriately reside with equity investors.'[118]

A6.2 At the heart of this approach is a mistake of fact, which has led Ofgem to adopt an irrational and inconsistent policy. The reasons for this are summarised below.

Ofgem's Errors

A6.3 **First**, derivatives are commonly-used and well-understood financial instruments which form a normal, appropriate and desirable part of operational financing for network companies – '*all GD licensees use derivatives to manage their inflation and interest rate risks…there is no single optimal inflation or interest rate risk profile. Therefore companies use derivatives differently. However, all of them agree on the need for the derivatives in principle.*'[119]

A6.4 Accordingly, all the main credit rating agencies take into account derivatives when considering companies' debt portfolios –

> 'All three major credit-rating agencies, S&P, Moody's and Fitch, account for the costs associated with derivatives in their credit-rating assessments, further highlighting that derivatives form a part of the actual cost of debt estimate.'[120]

A6.5 The existence of derivatives as an intrinsic element of network companies' debt financing is therefore a relevant consideration that should have been taken into account by Ofgem for the purposes of its price control determination, in accordance with its legal duty to have due regard to all relevant circumstances of the companies that it regulates.

A6.6 **Second**, all companies have to address the issue of interest rate risk when they raise debt. One way of doing so is by means of index-linked debt. Another is through the issue of nominal-rated debt coupled with derivatives, to create synthetic forms of index-linked debt. These two approaches are functionally equivalent to each other, and therefore offer alternative ways of achieving the same interest rate profile – '*Debt and derivatives can be combined to achieve a specific interest rate profile that can also be achieved using debt only*'[121].

A6.7 Moreover – for reasons which, as Oxera explains in detail, are widely-accepted[122] – synthetic index-linked debt may, in certain market conditions, be either more readily available or more economically advantageous than index-linked bonds. Accordingly: '*it is appropriate for*

[118] Tab A5.9: Ofgem – RIIO-2 Final Determinations – Finance Annex (Revised), para 2.55

[119] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 5.26

[120] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 5.55

[121] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 5.34

[122] Tab D1: Oxera – RIIO-2 Cost of Debt Report, paras 5.40 – 5.47

companies to assess all available markets';[123] and a *'combination of debt instruments and derivatives rather than derivatives alone determine companies' interest rate profiles, and companies use those instruments that appear to be most efficient in their circumstances and at the time required*'[124].

A6.8 As the CMA itself has recognised in a recent working paper, this implies that index-linked debt and synthetic index-linked debt are able to be treated as equivalent options –

> 'The companies may reasonably expect that if issuing straight debt plus a swap instrument were economically equivalent but more flexible than issuing index-linked debt (at any particular moment) these two approaches should be treated equivalently in any assessment of actual costs.'[125]

A6.9 Ofgem, however, erroneously distinguishes between index-linked bonds (which it recognises and takes into account) and the functional equivalent achieved through use of derivatives (which it does not). This is to privilege form over substance, and therefore to make a distinction where there is no difference.

A6.10 As a matter of economic principle: '*it is wrong for Ofgem to differentiate between the outcomes of the two approaches by accounting for different types of bonds but not for derivatives*'[126]. As a matter of law, it is logically inconsistent and therefore irrational, and results in Ofgem failing to have due regard to derivatives as a relevant consideration when determining the allowed cost of debt.

A6.11 Once Ofgem decided to recognise that index-linked debt is a proper form of risk management and should be taken into account in its assessment of the cost of debt, it was obliged to conclude that the use of derivatives to fulfil the same purpose is also a proper form of risk management and should also be taken into account.

A6.12 **Third**, Ofgem engages in further internal inconsistencies of reasoning. For instance, while it generally excludes derivatives, it does make allowance for cross-currency swaps[127], which are relatively complex financial instruments and not used by all companies (including WWU). As Oxera point out, this surprising difference in treatment requires a '*detailed robust*

[123] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 5.41

[124] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 5.40

[125] Tab D34: CMA – Water Redeterminations – Cost of Debt – Working Paper, para 176

[126] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 5.34

[127] Tab A4.3: Ofgem – RIIO-2 Draft Determinations – Finance Annex, Appendix 4, page 204

rationale'[128] which it has nowhere been given. Moreover, for the reasons developed by Oxera, no possible rationale, even if one had been offered, could withstand reasonable scrutiny[129].

A6.13 In addition, Ofgem uses derivatives for the purpose of estimating the cost of mitigating the basis risk between RPI and CPI debt, and for this it makes an allowance – a position which implicitly concedes that companies need to hedge their borrowings via raising different types of debt, that there is a cost associated with that, and that derivatives provide a suitable vehicle at an efficient cost for doing so.

A6.14 Moreover, Ofgem has indicated that it will take into account derivatives for the purpose of calculating tax clawback, as described in the head of appeal set out at section F, and this is entirety inconsistent with its disregard for them when considering the cost of debt.

A6.15 Again, these factors evidence the internal inconsistency, and therefore irrationality, of Ofgem's thinking on the subject of derivatives.

Ofgem's Reasons for Excluding Derivatives

A6.16 As against these points, it is important to consider what reasons Ofgem gives for excluding derivatives, and test whether these can provide any support for its approach when set against the errors identified above.

A6.17 Ofgem has offered four reasons in favour of its approach –

(a) It is in line with '*previous Ofgem exercises and broader regulatory precedent*'.[130]

(b) It is difficult to benchmark derivatives and assess if they have been '*incurred at*' market rates.[131]

(c) Since '*future derivative use is very difficult to predict*', a snapshot of derivatives at a point in time may not offer an accurate picture of their costs or benefits over the long-term.[132]

(d) Companies use derivatives differently.[133]

[128] Tab D1: Oxera – RIIO-2 Cost of Debt Report, Executive Summary para 16(f)

[129] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 5.49

[130] Tab A4.3: Ofgem – RIIO-2 Draft Determinations – Finance Annex,, para 2.56

[131] Tab A4.3: Ofgem – RIIO-2 Draft Determinations – Finance Annex,, para 2.52

[132] Tab A4.3: Ofgem – RIIO-2 Draft Determinations – Finance Annex,, para 2.54

[133] Tab A4.3: Ofgem – RIIO-2 Draft Determinations – Finance Annex,, para 2.55 and Appendix 4, page 204

A6.18 However, none of these reasons provides any support for Ofgem's policy position, either taken alone or, particularly, when set against the fundamental problems with that position outlined above. Below we address each of the reasons in sequence.

A6.19 **First**, as to 'precedent', this is merely a term used by Ofgem to valorise past practice. It implies that the prior history of a policy should be sufficient to justify its continuance. If this were true, all extant policies would be self-validating and require no further consideration.

A6.20 In reality, there is no 'precedent' effect of past practice in any legal or other meaningful sense. Ofgem's prior policies can be changed, frequently are changed, and indeed **must be** changed if they are irrational and therefore wrong. Persistence with a policy that is wrong is merely the continuation of an error, and the fact that the error has been made historically can provide no support for its ongoing repetition into the future.

A6.21 As Oxera have identified, there have in fact been several previous recognitions by Ofgem and other regulators of the legitimacy of the use of derivatives by companies, without that line of thinking ever being followed to its logical conclusion[134]. In any event, Ofgem made a mistake in concluding that it could place weight on its past policy as a reason for continuing to pursue that policy in GD2, in spite of the fundamental errors of reasoning embedded in it.

A6.22 **Second**, with regard to the ability to carry out an efficiency assessment against benchmark data, it is simply an error of fact to treat this as if it posed undue difficulties. In reality, Ofgem has collected significant detail on companies' derivative positions through annual reporting with effect from the 2018/19 regulatory year. It has therefore been able to assess, and has assessed[135], those positions against market benchmark data –

> '…excluding derivatives from the cost of debt allowance is based on Ofgem's position that it is 'difficult to make comparisons and assess if they have been incurred at market rates';[136] however, in fact, derivatives can be effectively benchmarked against market rates and Ofgem has done that.[137] Ofgem has shown throughout the RIIO-2 process that it is capable of benchmarking derivatives, in its analysis of the actual cost of debt across the industry based on the significant detail on individual licensees' derivative positions and interest rate profiles provided through the annual RFPR process.[138, 139]

[134] Tab D1: Oxera – RIIO-2 Cost of Debt Report, paras 5.15 – 5.24

[135] Tab A4.3: Ofgem – RIIO-2 Draft Determinations – Finance Annex, para 5.7

[136] Tab A4.3: Ofgem – RIIO-2 Draft Determinations – Finance Annex, para. 2.52

[137] Tab A4.3: Ofgem – RIIO-2 Draft Determinations − Finance Annex, paras 2.51–2.52

[138] Tab A4.3: Ofgem – RIIO-2 Draft Determinations − Finance Annex, paras 2.51–2.52

[139] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 3(c) (emphasis added)

A6.23 Oxera too were able to assess the efficiency of WWU's debt and derivatives positions against well-established benchmarks for the purpose of conducting their assessment[140] –

> 'We have undertaken a detailed efficiency assessment of WWU's cost of debt including swaps in Oxera's cost of debt efficiency report and found that this portfolio is efficient by reference to the market yields prevailing when the instruments were undertaken, and efficient by reference to peers.'[141]

A6.24 As Oxera have noted, there is nothing inherently difficult about this task when compared to other analyses that Ofgem has carried out for the purposes of its GD2 Final Determinations, including: '*benchmarking TOTEX, considering Engineering Justification Papers, calibrating rewards and penalties for output delivery incentives to the consumer value produced or assessing requests for Network Innovation Allowance (NIA) funds*'[142]. Put simply, an efficiency assessment of swap portfolios against market benchmarks should not be regarded as falling outside the scope of the normal efficiency assessments that a regulator might expect to carry out for price control purposes, and is no more complex than many other analyses which would be considered normal regulatory business for that purpose.

A6.25 **Third**, as to future derivative use, and the question of long-term costs or benefits, these are quite capable of being re-assessed in each five-yearly price control. Moreover, as Oxera have noted '*Ofgem did not rule out cross-currency swaps on this basis, which are relatively complex derivatives*'[143]. If cross-currency swaps can quite properly be taken into account in GD2, there is no reason of principle why other derivatives cannot.

A6.26 **Fourth**, the existence of company-specific positions in relation to derivatives does not provide any basis for excluding them. There is no single optimal position in relation to the management of inflation or interest rate risk, just as there is no single *ex ante* valid strategy for debt financing in general. Companies are entitled to make choices and are likely to adopt different positions. Not only does this provide no sound reason for excluding derivatives in their entirety, but as a matter of logic it indicates only that Ofgem should consider the company-specific information that it already has before it when deciding on the cost of debt allowance for any company.

Conclusion

A6.27 Ofgem's approach to derivatives involves the persistence of its perspective that these are, for some reason, a special category of financial instruments to be treated as entirely distinct from

[140] Tab C2: Oxera – RIIO-GD2 Preparation: Cost of Debt Report.

[141] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 5.8

[142] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 5.14

[143] Tab D1: Oxera – RIIO-2 Cost of Debt Report, para 5.10

companies' other debt financing arrangements, and which in any event defy normal regulatory analysis and efficiency challenge.

A6.28 WWU's case is that this is fundamentally wrong as a matter of fact, and that derivatives should not be regarded separately from the underlying debt to which they relate, but must be viewed as intrinsic to a company's debt financing. From this basic error of fact flows Ofgem's other errors, which lead it, inconsistently and irrationally, to disregard derivatives when they are a relevant factor which it is required in law to take into account when determining the cost of debt.

A7 WWU'S PROPOSED APPROACH

A7.1 WWU's case is that, in the light of the analysis set out in this section A, and having regard to the supporting expert and witness evidence, Ofgem's RIIO-2 full indexation approach is not appropriate for determining the cost of debt in the GD sector, and the decision by Ofgem to give effect to it by virtue of the modifications to WWU's licence is wrong in accordance with section 23D of the Act. WWU invites the CMA to find accordingly.

A7.2 With regard to an appropriate remedy, WWU submits that there is a clear alternative approach that would be fully consistent with the statutory duties. This would entail the determination of an embedded debt allowance for WWU, taking full account of its derivative portfolio, but set at the benchmark rates at the dates of issuance or (if lower) at actual rates.

A7.3 The main characteristics of this approach would be as follows –

(a) For **embedded debt**, the allowed cost of embedded debt would be set equal to the actual cost of debt (and derivatives) only in situations where debt and derivatives were undertaken at rates below the benchmark (i.e. the iBoxx index). In situations where embedded debt and derivatives were undertaken at rates above the benchmark, the allowance should be capped at the benchmark rates level. This implies that any debt outperformance benefits would be transferred to consumers at the next price control review, while underperformance would be at the sole expense of WWU.

(b) For **new debt**, in order to preserve efficiency incentives for the future, an indexed benchmark allowance would be set. This would allow WWU to benefit from outperformance within the price control period, while future benefits would be transferred to customers as described above. In the case of underperformance, the company would lose out, both within the period as well as in subsequent price control periods, as the allowed cost of embedded debt would be capped at the benchmark.

A7.4 WWU submits that this remedy –

(a) would be consistent with Ofgem's and the CMA's statutory duties under the Act, and in particular satisfy the requirements of the financing duty, by ensuring that WWU is able to finance the activities which are the subject of obligations placed on it under the statutory regime;

(b) would ensure that WWU recovered no more than its efficient cost of debt, and thereby protect consumers, while also ensuring that they benefit from outperformance and are protected against under-performance;

(c) is practicable to deliver, given that the information to carry out the assessment of efficiency is already available, and Ofgem has demonstrated that it is able to carry out (and has carried out) efficiency assessments in relation to debt and derivatives;

(d) respects the particular characteristics of the gas distribution sector at this time, in which a company-specific allowance for the cost of debt is, because of the different histories and characteristics of companies in the sector, more appropriate for the circumstances of WWU than an allowance based on indexation;

(e) avoids all of the errors made by Ofgem;

(f) is otherwise appropriate for the reasons set out more fully by Oxera[144].

A7.5 WWU therefore requests that the CMA quashes Ofgem's decision in relation to WWU's cost of debt allowance, and either substitutes its own decision to replace that allowance with one calculated in the manner described above, or alternatively remits the matter to Ofgem with a direction that Ofgem must do so.

[144] Tab D1: Oxera – RIIO-2 Cost of Debt Report, paras 6.1 – 6.9

B. COST OF EQUITY

B1 INTRODUCTION TO THE APPEAL ON THE COST OF EQUITY

B1.1 The true cost of equity is not known and must be estimated. Regulators typically calculate the cost of equity using the standard model known as the Capital Asset Pricing Model (CAPM), using the following formula –

$$CoE = RFR + \{Equity\ Beta * (TMR - RFR)\}$$

B1.2 The key components in this formula are the risk-free rate (**RFR**), the total market return (**TMR**) and the equity beta. Ofgem's determination of each of these parameters is part of the subject-matter of this head of appeal (respectively, sections B2 to B4).

B1.3 Regulators typically derive from their use of the CAPM a range of possible values for the cost of equity. They then have to identify where within that range is the appropriate point (the **point estimate**) at which to determine the cost of equity. Ofgem's decision in respect of the point estimate is also part of the subject-matter of this head of appeal (section B5).

B1.4 Ofgem's estimate for the cost of equity in GD2, in the light of its decisions on these matters, is 4.55%. This is a very significant reduction in the cost of equity when compared with GD1, where the cost of equity allowance (adjusted for the change of inflation measure) was 7.60%.[145]

B1.5 Out of this 305 basis point reduction in the cost of equity when compared with GD1, only 98 basis points are attributable to changes in the underlying data. The remaining 207 basis points are a consequence of changes by Ofgem to its methodology – which is to say, policy changes. WWU's principal contention under this head of appeal is that there is no adequate justification for these policy changes or for the substantial reduction in the cost of equity to which they give rise.

B1.6 In addition, Ofgem has chosen to reduce the cost of equity by a further 0.25% under what it calls an 'expected outperformance adjustment'. In making this adjustment, Ofgem anticipates that WWU will outperform its allowances in the GD2 period, and reduces the cost of equity by an assumed value for that outperformance before it has even occurred. That decision, which WWU contends is fundamentally in error, is also the subject-matter of this head of appeal (section B6).

[145] Tab E1: Oxera – Cost of Equity Report, Executive Summary, para 1.4.

B1.7 WWU's case is that, expressed in terms of the statutory grounds of appeal set out in the Act, Ofgem has made errors which give rise to a determination of the cost of equity that was wrong in law (section 23D(4)(e)), based on errors of fact (section 23D(4)(c)) and wrong on the grounds that it failed properly to have regard to Ofgem's statutory duties (section 23D(4)(a)) or to give the appropriate weight to relevant aspects of its statutory duties (section 23D(4)(b)).

B1.8 As to these –

(a) With respect to error of law, WWU incorporates here by reference (without repeating it) the analysis that is set out in section A5 of this Notice of Appeal with regard to Ofgem's misinterpretation of its statutory duties. That misinterpretation must be assumed to have infected Ofgem's thinking, methodology and decisions in relation to the cost of equity in the same manner and as it did in relation to the cost of debt.

(b) With respect to errors of fact, WWU has identified underlying flaws in Ofgem's analysis and reliance on data.

(c) With respect to failure to have proper regard or give appropriate weight to the statutory duties, WWU refers to the financing duty and the principal objective as particular parts of the statutory duties to which, if proper regard and appropriate weight had been given, Ofgem could not have made the decisions that it has in relation to the cost of equity.

B1.9 The effect of these decisions is to significantly impair WWU's equity financeability and contribute to a weakening of its debt financeability.

B1.10 [✂][146]

B1.11 [✂]

B1.12 The purpose of the statement of facts and grounds which follows is to explain to the CMA why it should reach the same conclusions, and describe those actions that WWU invites the CMA to take in order to ensure that Ofgem's failure is remedied.

B1.13 In support of these arguments, WWU has submitted three separate reports from Oxera on: (i) the Cost of Equity, (ii) the Expected Outperformance Adjustment, and (iii) Financeability. They should be regarded as an integral part of this Notice of Appeal. Their key elements have been summarised in this section, but a comprehensive restatement of their content is not provided

[146] [✂]

here, and the CMA is respectfully requested to read and consider those reports in full, together with this section.

B2 THE RISK FREE RATE

B2.1 For the purposes of the CAPM, the risk-free rate (**RFR**) means the expected return on a zero-beta portfolio. In other words, the RFR is intended to represent the return on a riskless asset. The question is how best to calculate that return.

Ofgem's Approach

B2.2 Ofgem's approach during GD2 is a significant departure from its previous approaches. During the GD2 period, it intends to update its calculation of the cost of equity on an annual basis.[147] For these purposes it uses what it calls the 'WACC allowance model'.[148] Within that model, the spot yield on index-linked gilts (**ILG**s) is treated by Ofgem as a proxy for the risk-free rate.

B2.3 In previous price controls, Ofgem determined a figure for the RFR across the control period, and that figure was significantly higher than the spot yield on ILGs. As Oxera observe –

> 'It can be seen that before 2019 the regulatory allowance for the RFR was set above the spot yields on government bonds. The average gap was 149bp over 10Y ILGs and 131bp over 20Y ILGs. The gap had previously avoided the underestimation of RFR in the CAPM framework.'[149]

B2.4 The choice by Ofgem to use ILGs to serve as a proxy for the RFR is therefore a change in regulatory policy which has significant implications for the cost of capital in GD2. Ofgem arrives at an initial RFR of -1.6%. Oxera estimate that it will negatively impact the cost of equity by -0.45%[150].

Ofgem's Errors

B2.5 This new policy involves two fundamental and related errors.

B2.6 **First**, Ofgem, has failed to take into account that government bonds have particular qualities which increase demand – for instance the fact that financial institutions are required to hold

[147] Tab A5.9: Ofgem - RIIO-2 Final Determinations – Finance Annex (Revised), para. 3.6.

[148] Tab A5.8: Ofgem - RIIO-2 Final Determinations – WACC Allowance Model.

[149] Tab E1: Oxera – Cost of Equity Report, para 5.42.

[150] Tab E1: Oxera – Cost of Equity Report, Executive Summary, Figure 1.1.

them in order to fulfil regulatory requirements[151] – and so drive down their yields below the true risk-free rate. This effect is known as the 'convenience premium' –

> 'Government bonds have special properties (noted in detail below) that create excess market demand. Bond yields and bond prices are inversely related, so when this excess demand pushes the price higher, the bond yield falls below a normal market-clearing price based on risk-free cash flows. These effects are collectively known as the convenience premium, and push the rate of return on bonds below a true RFR.'[152]

B2.7 **Second**, it is an assumption of the CAPM that investors can both borrow and lend at the risk-free rate. However, as Oxera observe, '*even investors with the highest creditworthiness face significantly higher borrowing rates than those faced by the governments with high credit ratings*'.[153] Consequently, it is inappropriate to use government bond yields as a proxy for the RFR.

B2.8 By way of a cross-check on its choice of the risk-free rate, Ofgem uses the long-term Sterling Overnight Index Average (**SONIA**) swap rate. But this also is an error, as it fails adequately to take into account the fact that there are '*severe data quality issues with longer-term SONIA swaps*'[154], and that the Bank of England itself considers the SONI swap rate to be unreliable beyond the five-year time horizon[155]. In addition it fails to have regard to the fact that '*the swap rates observed by Ofgem could have been driven by various factors that are specific to the swaps but not to the underlying SONIA rates*'[156].

B2.9 A better cross-check would be to consider the risk-free rate that equity analysts covering the listed UK utilities use for the purposes of the CAPM. These are nearly always higher than the yields on 10-year index-linked gilts. Oxera's analysis demonstrates that the difference '*ranges between 0bp and 214bp and averages at 101bp*'.[157]

B2.10 This issue of the under-estimation of the RFR has not previously arisen because, as already noted above, Ofgem has in past price controls set a risk-free rate materially higher than the spot yield on ILGs –

> 'These allowances were not explicitly set to compensate for the convenience yield and the gap between the risk-free financing rates available to sovereigns and investors. However, they

[151] Tab E1: Oxera – Cost of Equity Report, para 5.9.

[152] Tab E1: Oxera – Cost of Equity Report, para 5.6.

[153] Tab E1: Oxera – Cost of Equity Report, para 5.29.

[154] Tab E1: Oxera – Cost of Equity Report, para 5.52.

[155] Tab E1: Oxera – Cost of Equity Report, paras 5.52 – 5.53.

[156] Tab E1: Oxera – Cost of Equity Report, para 5.55.

[157] Tab E1: Oxera – Cost of Equity Report, para 5.39.

worked to ensure that the imperfection of the spot sovereign yields as a proxy for the RFR in the CAPM was mitigated.'[158]

B2.11 What is wrong in the GD2 price control decision, therefore, is that Ofgem has failed to make any provision with equivalent effect, and does not adjust the spot rates of ILGs to compensate for the extent to which, without that adjustment, they understate the true risk-free rate.

Remedy

B2.12 This error can be remediated in one of two ways –

(a) By adopting a **bottom-up** approach, which starts with the spot yields on ILGs, but adds a factor adjusting for the existence of the convenience premium. Oxera's analysis of this method of remediation provides an estimate of the RFR of -0.99%.[159]

(b) By taking an alternative **top-down** approach, and seeking to identify a better proxy for the true risk-free rate. Oxera have identified that a more accurate proxy may be found by using AAA-rate corporate bonds (which are free of the convenience premium) subject to adjustments for factors such as liquidity premia and default risk. Using the iBoxx £ corporate AAA 15+ index, Oxera calculate an estimate of the RFR of -0.96%.[160]

B2.13 WWU therefore invites the CMA to conclude that Ofgem's approach to determining the RFR is wrong, and that the correct RFR lies in the range -0.96% to -0.99%.

B3 THE TOTAL MARKET RETURN

B3.1 For the purposes of the CAPM, the total market return is the inflation-adjusted (real) expected return for an investor who invests in a diversified market portfolio. A 'diversified' portfolio only bears general market risk, as all idiosyncratic risks of individual securities are diversified away. TMR is used as the baseline for determining the required return on equity for an individual company, as investors are only compensated for risk relative to market risk. Adjustment for that relative risk is through the equity beta, addressed in section B4 below.

Ofgem's Errors

B3.2 Ofgem has made two significant errors in its estimation of the TMR.

[158] Tab E1: Oxera – Cost of Equity Report, para 5.43.

[159] Tab E1: Oxera – Cost of Equity Report, paras 5.68 – 5.69.

[160] Tab E1: Oxera – Cost of Equity Report, paras 5.70 – 5.71.

B3.3 **First**, it has relied on an incorrect measure of inflation. The estimation of the TMR relies on historical data relating to market returns. However, these data are expressed in nominal terms and the TMR is calculated in real terms. Real returns are important because the regulatory price control attempts to compensate investors in real terms. Therefore, since real returns in historical data sets are unobservable, nominal returns must be adjusted by the inflation rate.

B3.4 The best measure of inflation is the one that reflects investor expectations at the time of the investment, and this is best embodied in the RPI measure of inflation, as RPI was the measure relied upon by investors in their original investment decisions. However, Ofgem relies upon a 'backcast' CPI series of historical inflation. This is an experimental series that was developed by the Office for National Statistics for research purposes, and seeks to project retrospectively the CPI measure of inflation. It has had to be corrected for some identified errors, and there is an active debate among members of the Advisory Panel on Consumer Prices – Technical regarding the methodology for replacing the full backcast of CPI by a newly-modelled series. The current backcast clearly does not correspond to the contemporaneous investor expectations of inflation.[161]

B3.5 The backcast series is less reliable than RPI for the purposes of making inflation adjustments to historical data expressed in nominal terms. Oxera have analysed the effect of the use of this measure of inflation and observe that '*The clear implication of using the backcasted CPI series for inflation is a downwards bias in the expected TMR*'.[162]

B3.6 **Second**, Ofgem has made errors in calculating the nominal market returns by using incorrect and statistically biased averaging techniques. This also creates a downward-biased estimate of TMR for reasons explained in detail by Oxera[163].

Remedy

B3.7 Ofgem's estimate for the TMR range in its GD2 Final Determination is 6.0–7.0% (CPIH-real). Oxera have calculated that when appropriate compensating adjustments have been made for the errors identified above, the correct range for the TMR is 7.0–7.5%.[164]

B3.8 WWU therefore invites the CMA to conclude that Ofgem's approach to determining the TMR is wrong, and that the correct TMR lies in the range 7.0–7.5%.

[161] Tab E1: Oxera – Cost of Equity Report, paras 6.2 – 6.11.

[162] Tab E1: Oxera – Cost of Equity Report, para 6.12.

[163] Tab E1: Oxera – Cost of Equity Report, paras 6.13 – 6.30.

[164] Tab E1: Oxera – Cost of Equity Report, paras 6.53 – 6.55.

B4 THE EQUITY BETA

B4.1 For the purposes of the CAPM, the equity beta measures the risk of an equity investment relative to a diversified market portfolio. Since this is affected by the level of gearing, the equity beta captures both financial risk (dependent on a company's capital structure) and business risk.

B4.2 Therefore the purpose of calculating an asset beta is to remove the financial risk component embedded in the equity beta in order to identify the systematic risk attributable to a firm with zero debt. The accurate calculation of the asset beta also requires an accurate estimate of the debt beta.

B4.3 WWU's case is that Ofgem has made fundamental errors in its calculation of both the asset beta and the debt beta, and has in consequence incorrectly estimated the equity beta for the purposes of the CAPM.

The Asset Beta

B4.4 Ofgem has made three fundamental errors in its calculation of the asset beta.

B4.5 **First**, it has used a sample of comparators which is not appropriate and therefore leads to an invalid result. This arises because, for the purposes of assessing the asset beta of an industry, it is necessary to look at a sample of companies in the industry. Ofgem looked at a sample that consisted of two listed companies in the energy sector (National Grid and SSE), and three listed companies from the water sector (Pennon, Severn Trent and United Utilities).

B4.6 This was an error. Ofgem should have appreciated that, given the particular risk profile of the gas distribution sector at the current time – for reasons largely relating to the UK's 'net zero' policies and their impact on the sector, as set out fully in section 4 of this notice of appeal – water companies were not a valid comparator for GDNs. In summary: '*the rapid technological change and an increased focus on decarbonisation suggest that the fundamental risk of energy networks is greater than that faced by water networks*'.[165]

B4.7 In consequence, water companies are subject to lower systematic risk and their asset betas should be expected to be lower than those of GDNs. Indeed, on a comparison with National Grid, '*National Grid's asset beta is higher than the average asset beta of UK water companies for all estimation windows*'.[166]

[165] Tab E1: Oxera – Cost of Equity Report, para 7.10.

[166] Tab E1: Oxera – Cost of Equity Report, para 7.14.

B4.8 Therefore Ofgem's disproportionate reliance on data relating to water companies in its sample has resulted in an erroneously low estimate of the asset beta for GDNs.

B4.9 **Second**, while one means of broadening the sample and incorporating into it more directly comparable companies is to include international energy network companies[167], it is necessary to screen those companies to ensure that they have the appropriate characteristics to qualify as a reasonable comparator for GDNs. For reasons that are explained by Oxera, Ofgem and its advisors failed to do this when they considered a sample of European network companies[168] and in addition chose to place weight on a comparison with the French energy market which has particular protective characteristics that distinguish it sharply from the risk faced by UK companies[169].

B4.10 **Third**, Ofgem relied on an invalidly large estimation window of 10 years when reviewing data for its calculation of the beta. A longer time period would in many circumstances be desirable by providing more data points, but changes in systematic risk over time, including structural breaks within the 10-year period, make a long estimation window inappropriate[170].

The Debt Beta

B4.11 Ofgem has adopted a debt beta range of 0 – 0.15 with a point estimate of 0.075. However, the top end of the range is a significant over-estimate due to mistakes in the work carried out by consultants which underpins the high end of the range adopted by Ofgem in the Final Determinations. The reasons for these errors have been identified by Oxera[171]. The point estimate is therefore in error[172] as the range is narrower and lower and the mid-point will come down. Oxera have identified no evidence that would support a debt beta higher than 0.05.

Remedy

B4.12 These several errors in the assessment of the asset beta and debt beta can be corrected in the manner described by Oxera in their Cost of Equity Report, translating into an equity beta range of 0.83 – 0.91.[173] WWU therefore invites the CMA to conclude that Ofgem's approach to determining the equity beta is wrong, and that the correct equity beta lies within this range.

[167] Tab E1: Oxera – Cost of Equity Report, para 7.16.

[168] Tab E1: Oxera – Cost of Equity Report, paras 7.17 – 7.20.

[169] Tab E1: Oxera – Cost of Equity Report, paras 7.23 – 7.28.

[170] Tab E1: Oxera – Cost of Equity Report, paras 7.29 – 7.32.

[171] Tab E1: Oxera – Cost of Equity Report, paras 7.33 – 7.44.

[172] Tab E1: Oxera – Cost of Equity Report, para 7.45.

[173] Tab E1: Oxera – Cost of Equity Report, paras 7.46 – 7.56.

B5 THE POINT ESTIMATE

B5.1 The cost of equity is estimated via the CAPM with uncertainty and estimation techniques that result in a range of potential values. It is therefore necessary for Ofgem to choose the point estimate for the cost of equity from within that range.

B5.2 It is accepted by WWU that this decision involves the exercise of discretion, and that there is no single 'correct' answer. However, like all exercises of discretion, Ofgem is required to make its choice in accordance with the proper application of its statutory duties, having due regard to all relevant matters. This it has failed to do.

Ofgem's Errors

B5.3 One relevant consideration is the well-established argument that regulators should **err on the side of caution** in choosing the point estimate. This means privileging the risk of setting the point estimate 'too high' rather than of setting it 'too low'. It is commonly described as 'aiming up'. The rationale for aiming up is grounded in Ofgem's statutory principal objective; notably that aspect of the principal objective that requires it to protect the interests of future as well as existing gas consumers. This rationale is usefully summarised by Oxera as follows –

> 'The primary intuition behind aiming up is that selecting a cost of capital at the middle of the range of estimates risks being below the true cost of capital and hence risks undercompensating investors for the level of risk that they assume. Subsequent underinvestment threatens long-term consumer welfare.'[174]

> 'Selecting the point estimate within the range requires striking a balance between higher consumer prices in the short term and reducing the risk of underinvesting in assets that deliver the consumer benefits of network resilience and enhancement…this trade-off is particularly important over the long term, as the rational response to an allowed return lower than the cost of capital would be to develop business plans that minimise investment, posing a risk to reliability and innovation in the sector.'[175]

B5.4 Ofgem's approach to the question of aiming up, as described in its RIIO-2 Final Determination, is ambiguous. However, the following facts and conclusions can be drawn from it –

(a) Ofgem appears to accept the conclusion of the National Audit Office that it aimed up on the cost of equity in RIIO-1.[176] It also considers that it may similarly be aiming up in RIIO-2: '*Our final view in these FDs is arguably consistent with a degree of aiming*

[174] Tab E1: Oxera – Cost of Equity Report, para 8.17.

[175] Tab E1: Oxera – Cost of Equity Report, para 8.51.

[176] Tab A5.9: Ofgem – RIIO-GD2 Final Determinations – Finance Annex (Revised), para 3.184.

up'.[177] From these facts it can only be inferred that Ofgem has no objection to aiming up as a matter of principle.

(b) Ofgem understands the rationale for aiming up, and the CMA's previously-expressed conclusion that aiming up has been common practice among economic regulators in the past, both of which it quotes.[178]

(c) However, Ofgem's main argument appears to be in favour of setting the cost of equity at the mid-point of the range, which it calls '*an aim straight approach*'[179].

(d) Its reason for adopting this approach is expressed as follows – '*The design of the RIIO-2 price control includes several features, such as UMs, to protect network companies and consumers from uncertainty regarding investment during the RIIO-2 period to deliver, for example, net zero. This flexibility weakens the argument that allowed returns should materially exceed the cost of capital.*'[180]

B5.5 It is at this last step that Ofgem lapses into error, and this is predominantly for two reasons.

B5.6 **First**, Ofgem characterises aiming up as a process of setting an allowed return that '*materially exceeds*' or entails a '*material premium above*' the cost of capital – as if for emphasis, it makes this point three times in a single paragraph.[181] But this is a basic conceptual error. The rationale for aiming up is not about setting the point estimate above the actual cost of equity – the issue is precisely that the *actual* cost of equity cannot be identified with certainty – but about setting the allowed cost of equity to ensure that, having regard to the return required by investors in the light of their perceptions of risk, they are willing to continue to invest.

B5.7 Ofgem's use of language, presenting aiming up as a matter of *excess*, reveals either a serious misunderstanding of the concept or a predisposition against it. In either case, it is an error, because it operates on the related assumptions that the actual cost of equity is the mid-point in the range (a fact that cannot be known) and that everything above the mid-point must *ipso facto* be a premium (which therefore does not follow). Having thus mischaracterised both the status of the mid-point and the nature of aiming up, Ofgem cannot have been thinking clearly and rationally about whether it was the right policy to aim up in GD2.

[177] Tab A5.9: Ofgem – RIIO-GD2 Final Determinations – Finance Annex (Revised), para 3.184.

[178] Tab A5.9: Ofgem – RIIO-GD2 Final Determinations – Finance Annex (Revised), paras 3.181 – 3.182.

[179] Tab A5.9: Ofgem – RIIO-GD2 Final Determinations – Finance Annex (Revised), para 3.182.

[180] Tab A5.9: Ofgem – RIIO-GD2 Final Determinations – Finance Annex (Revised), para 3.182.

[181] Tab A5.9: Ofgem – RIIO-GD2 Final Determinations – Finance Annex (Revised), para 3.183.

B5.8 **Second**, Ofgem concludes that aiming up is unnecessary in GD2 because the price control contains sufficient uncertainty mechanisms '*regarding investment during the RIIO-2 period to deliver, for example, net zero*'.[182]

B5.9 This fails to take into account that the main purpose of aiming up is to secure investment over the long-term, not merely during the next control period. The uncertainty mechanisms in GD2 cannot by themselves answer the question of whether aiming up is merited.

B5.10 More importantly, but in the light of this long-term perspective, there is no evidence that Ofgem has had any adequate regard to the particular circumstances of the gas distribution sector at the present time. These are outlined in more detail in section 4 of this Notice of Appeal, and the CMA is invited to read this head of appeal in the light of that section. But in brief they are as summarised in the following paragraph.

B5.11 The gas distribution sector faces a unique combination of circumstances with respect to long-term investment. On the one hand, the government's net zero policies pose real risks for the future of natural gas, not least as a domestic fuel. On the other hand, gas distribution networks may, subject to future technology choice and development, have a very significant part to play in a decarbonised future involving the delivery of other fuels. Simultaneously, the investment climate in the sector is becoming more challenging while the strategic need to ensure ongoing investment has never been more important.

B5.12 It is these factors to which Ofgem should have given considerable weight, having due regard to its principal objective and its financing duty. Its decision not to set a point estimate above the mid-point of the range is an error resulting from its failure to do so.

B5.13 **Finally**, to the extent that Ofgem considers that it has 'arguably' already aimed up in GD2, it is mistaken. This conclusion appears to be based entirely on its use of cross-checks which suffer from various conceptual and estimation errors explained in detail by Oxera[183].

B5.14 The combined effect of these various errors is as further summarised by Oxera –

> 'Aiming up is an intuitive concept meant to balance the risks of underinvestment in energy infrastructure against the cost of higher customer bills. Such underinvestment risks resulting in supply problems (blackouts and gas outages) and significantly higher consumer costs in the future. Regulators have understood and agreed with this concept in this past. Furthermore, the economics literature recognises the long-run investment problems and market failures resulting from aggressive price caps in the short term. As shown in this section, it is a fundamental error to ignore these issues in a regulated energy

[182] Tab A5.9: Ofgem – RIIO-GD2 Final Determinations – Finance Annex (Revised), para 3.183

[183] Tab E1: Oxera – Cost of Equity Report, paras 8.5 – 8.6 and Appendix A1

> context. The point estimate of the cost of equity for RIIO-2 should be above the midpoint of the range of estimates.'[184]

Remedy

B5.15 WWU invites the CMA to conclude that Ofgem's determination of the point estimate for the cost of equity is wrong, and that the point estimate should lie above the midpoint of the range of estimated values.

B6 THE EXPECTED OUTPERFORMANCE ADJUSTMENT

B6.1 Ofgem's theoretical approach to its expected outperformance adjustment (for simplicity, 'the adjustment') is based on its belief that, in light of the incentive aspects of the RIIO-2 package, investors expect licence holders to outperform their cost allowances and output targets. The extent of that expected outperformance it identifies as 0.25%[185].

B6.2 Ofgem considers that this represents the gap between expected and allowed returns, and that it should adjust for this by removing the value of the assumed outperformance ex ante so that the baseline allowed return and the expected return are aligned.

Ofgem's Errors

B6.3 A number of errors undermine the validity of this decision.

B6.4 **First**, there is no reasonable basis on which to anticipate a 25 basis point outperformance by all relevant licensees. Ofgem's calculation of this figure is based on outperformance across a wide range of regulated sectors over multiple price control periods reaching back 30 years in time. But past outperformance is no guide to the future. As Oxera observe –

> '…price controls have progressively improved at estimating cost allowances and targets that align with the commercial reality. For example, early price controls were much smaller in scale and limited to setting a reasonable target, combined with creating strong incentives. In other words, one is likely to observe higher outperformance in earlier price controls (by design) as this was an intended consequence of previous regulation, encouraging firms to aggressively pursue cost efficiencies while meeting operating targets.'[186]

[184] Tab E1: Oxera – Cost of Equity Report, para 8.54

[185] Tab A5.9: Ofgem – RIIO-GD2 Final Determinations – Finance Annex (Revised), para 3.147.

[186] Tab F1: Oxera – Expected Outperformance Adjustment Report, para 3.18

B6.5 Put simply, the outperformance achievable in earlier price controls is no longer systemically achievable now, in particular during the GD2 period given that Ofgem has adopted a number of policy interventions limiting the ability to outperform[187]. In any event, '*the ability of companies to achieve further efficiencies will naturally diminish over time as the network matures*'[188]. It is a basic error to take the past outcomes of economic regulation and extrapolate them forward into the future without recognising that the regulatory framework is now significantly changed and reasonable expectations must change with it.

B6.6 **Second**, even if the expected outperformance was what Ofgem claims it to be, the appropriate policy response would be to identify areas in which this was a result of the price control setting inappropriately low targets which require to be tightened, and use targeted means to address them rather than imposing a blanket reduction to the cost of equity –

> 'Thus, as a matter of principle, it is an error to introduce an adjustment for expected outperformance given that Ofgem already has an array of regulatory tools to set appropriately calibrated cost allowances and associated incentives for the RIIO-2 price control.
>
> If Ofgem does expect companies to outperform on cost and outputs, the correct approach would be to identify and directly reduce the scope for such outperformance via the relevant mechanisms. For instance, if outperformance is expected relative to cost allowances, this could be addressed through a specific higher efficiency challenge rather than a generalised reduction in the allowed equity return.'[189]

B6.7 **Third**, Ofgem's policy explanation for the need to make the adjustment is grounded in large part on what it alleges to be '*the systemic nature of information asymmetry*' between industry and regulator[190]. Since Ofgem in fact has access to substantial quantities of information about all regulated companies – and has the benefit of being able to look across the entire industry, make comparisons between companies, and use these to drive each of them further towards the efficiency frontier[191] – this is far from a self-evident statement. Ofgem's appeal to information asymmetry needs to be, but is not, supported by evidence as to its existence and effect. As a mere unsupported assertion, it does not provide a valid reason for decision-making.

[187] Tab F1: Oxera – Expected Outperformance Adjustment Report, paras 3.11 – 3.16

[188] Tab F1: Oxera – Expected Outperformance Adjustment Report, para 3.18

[189] Tab F1: Oxera – Expected Outperformance Adjustment Report, paras 3.8 – 3.9

[190] Tab A3.4: Ofgem – RIIO-2 Sector Specific Methodology Decision – Finance Annex (Revised), para 3.281

[191] The expected benefits of comparative regulation were noted by Ofgem itself in its 2004 impact assessment prepared in respect of the costs and benefits of the hive-down of WWU and other GDNs – see Tab C4: Ofgem – Impact Assessment Paper

B6.8 **Fourth**, Ofgem appears to treat outperformance as an inherently negative outcome. Or, to put this another way, '*Ofgem considers expected outperformance to be an unnecessary cost to consumers*'.[192] In fact, over time, a measure of outperformance is a desirable and necessary feature of economic regulation.

B6.9 The possibility of outperformance is a key component of the incentive structure that ought to be part of any price control. Outperformance demonstrates the productivity gains that can be achieved and allows consumers to benefit from this in the long run –

> 'Incentive-based regulation encourages companies to achieve cost reductions by incentivising them to outperform and retain a proportion of the cost savings (based on the incentive rates) in a given price control. At the next price control review, consumers benefit as prices are reset to reflect this new information. Often, consumers also benefit earlier by sharing in any cost reductions during the price control.'[193]

B6.10 Price regulation has always, and rightly, proceeded on this basis: '*Incentives are part of normal regulation and operational outperformance is a desirable outcome*'.[194]

B6.11 In consequence, Moody's is correct to consider that this novel policy approach is a departure from regulatory best practice –

> '…the introduction of the correction mechanism…highlights the increased regulatory focus on legitimacy of network company returns and that the regulatory regime is not as stable and predictable as it once was.'[195]

B6.12 It is a fundamental error of principle to approach the setting of a price control on the basis that outperformance is inherently undesirable and must always be avoided, to the extent of taking anticipatory steps to remove the benefit of it before it has even taken place.

B6.13 **Fifth**, which follows from the previous point, Ofgem's adjustment fundamentally undermines the incentives that ought to be intrinsic to the GD2 price control.

B6.14 A relevant and contributing feature of this error is Ofgem's decision to apply an 'ex post top-up' at the end of the GD2 period: '*our decision is to implement, on a licensee basis, an ex-*

[192] Tab F1: Oxera – Expected Outperformance Adjustment Report, Executive Summary, para 1.4

[193] Tab F1: Oxera – Expected Outperformance Adjustment Report, para 4.4.

[194] Tab D34: CMA – Water Redeterminations 2020 – Cost of Debt – Working Papers, para 81.

[195] Tab F4: Moody's Investors Service - Regulated Electric & Gas Networks – Great Britain Regulator's proposals for RIIO-2 will weaken credit quality, p.2.

post adjustment mechanism to protect investors, so that each licensee will, if its outperformance is less than 0.25%, receive a top-up allowance, up to 0.25%'[196].

B6.15 On the one hand, this appears at first glance as an aspect of fairness, and indeed a necessary component of the adjustment policy. Absent the ability to obtain a claw-back of the adjustment in circumstances where outperformance never occurs, the adjustment would simply be an ex ante penalty imposed on licensees who, in practice, do not outperform as Ofgem expects. It would be an entirely indefensible policy.

B6.16 On the other hand, the attempt to address this fundamental deficiency through an ex post top-up simply exposes the extent to which the policy undermines the normal incentive properties of a price control –

> 'In all of the expected performance scenarios, companies have either reduced incentives or no incentives to outperform. In particular, if expected outperformance is between 0 bps and 25bps or below 0bps (i.e. there is expected underperformance), companies do not have the incentive to outperform in RIIO-2 as the top-up mechanism would reimburse the companies (up to 25bps) at the end of the price control if the expected 25bps outperformance is not achieved.
>
> In the event that expected outperformance is above the 25bps threshold, companies would retain efficiencies above the threshold, but the uncertainty of exceeding the 25bps threshold will disincentivise companies from outperforming, unless expected outperformance is significantly greater than 25bps.'[197]

B6.17 In short, the ex post top-up reveals the inherent contradictions in the adjustment policy, and undermines the fundamental, well-established and desirable incentive properties provided by the potential to achieve outperformance benefits. '*Reducing incentives to outperform actively harms consumer welfare in subsequent price controls…*'[198]. Accordingly, Ofgem's adjustment policy is contrary to the long-term consumer interest.

B6.18 The CMA should additionally note that the Oxera Financeability Report[199] assumed a cost of equity of 4.55%. Clearly, should the cost of equity in fact be 4.30%, that could only impair financeability further.

[196] Tab A5.9: Ofgem – RIIO-GD2 Final Determinations – Finance Annex (Revised), para 3.147.

[197] Tab F1: Oxera – Expected Outperformance Adjustment Report, paras 4.11 – 4.12.

[198] Tab F1: Oxera – Expected Outperformance Adjustment Report, para 4.13.

[199] Tab G1: Oxera – RIIO-GD2 Financeability Report

Remedy

B6.19 WWU's case is that the expected outperformance adjustment is fundamentally flawed, and the CMA is invited to conclude that no such adjustment to the cost of equity should be made.

B7 OVERALL REMEDY

B7.1 Taking together all of the matters referred to in this section, WWU invites the CMA to conclude that Ofgem was wrong in its decision on the cost of equity allowance, to quash that decision, and to substitute for it a decision of the CMA which –

(a) determines an allowed cost of equity within the range 5.61% to 6.78%, as identified by Oxera[200], and

(b) chooses a point estimate in respect of the cost of equity from above the midpoint of that range.

[200] Tab E1: Oxera – Cost of Equity Report, Executive Summary, para 1.3

C. REPEX

C1 SUMMARY

C1.1 In broad terms, repex refers to expenditure required to fund work to replace existing iron and steel pipes with new polyethelene (**PE**) pipes. The primary driver for that work is safety. Iron pipes, in particular, are more prone to fracture, and fractures can lead to a greater volume of gas escaping than other types of pipe failure. The consequences of a gas escape can be fatal.

C1.2 Given those safety risks, the vast majority of repex work is underpinned by legal obligations enforced by the Health and Safety Executive (the **HSE**). It is not discretionary work that WWU can choose to undertake or not – WWU must by law replace a certain amount of metallic mains pipes in its network over the course of GD2.

C1.3 Aside from ensuring safety, through minimising gas escapes and making the network ready for hydrogen and hybrid gases, repex work also helps to ensure the reliability and efficiency of the network and brings key environmental and consumer benefits.

C1.4 Against that background, the simple question under this head of appeal is whether Ofgem has provided sufficient allowances for WWU to undertake its repex work.

C1.5 WWU's case is that it has not. WWU has been left with a shortfall of £[✂] per annum in relation to repex – a total shortfall of £[✂] over the GD2 period. That shortfall will leave WWU unable to meet its legal obligations to ensure the safety and reliability of its network.

C1.6 WWU has repeatedly, and in detail, advised Ofgem of the particular challenges that it faces in GD2 – including in relation to where in its network it must undertake its repex work, the techniques it must use to do that work and the types of pipes that it will need to address. All of those factors serve to increase the time taken to do the work.

C1.7 That increased labour time must be considered against the background of increasing labour costs. Labour costs have been increasing in recent years, but WWU has been insulated from the consequences of these increases as its repex work in GD1 was undertaken through a contract under which its suppliers bore the risk of such increases. That contract has insulated WWU and its customers from cost increases that are forecast to total £[✂] by the end of the contract. No supplier is willing to incur such losses in GD2.

C1.8 Taken together, these points mean that WWU's repex work will be more expensive in GD2 than in GD1.

C1.9 That this is so is borne out by the fact that WWU has completed a robust tender process that has resulted in prices significantly higher than in GD1. WWU's tender process and the prices

it produced have been independently validated by Turner & Townsend in a report accompanying this Notice.[201]

C1.10 WWU advised Ofgem of the preliminary results of its tender exercise, and the reasons for the price increases, and asked for a sufficient allowance to fund the costs it had been quoted. In its Final Determination, Ofgem has failed to have proper regard to or give sufficient weight to this market evidence. As a result it has failed to provide an adequate amount for repex.

C1.11 To mitigate the consequences of that inadequate provision, WWU has been forced to take steps to bring its repex work in-house and is currently working hard to do so. However, even though by insourcing it can bring down the cost of its repex work by around £[✂] per metre in comparison to outsourcing, Ofgem's allowances still leave a £[✂] per annum shortfall.

C1.12 This is unsurprising as the factors that have led to the increase in the cost of outsourcing will still apply to WWU's costs when the work is insourced. It is the same pipes in the same parts of WWU's network that need to be replaced, using the same techniques, against the same background of increased wages and labour shortages.

C1.13 The CMA has previously emphasised that regulatory discretion must be underpinned by robust and rigorous evidential analysis. Ofgem's decision on WWU's repex allowances do not meet that threshold.

C1.14 WWU has explained in some detail why its repex work will cost more in GD2 than in GD1. Ofgem has not listened. Its decisions on the allowances granted to WWU for that work do not take account of, or place appropriate weight, on the points that WWU has made. Those decisions are inconsistent and irrational. And they have the potential to compromise the safety and reliability of WWU's network.

C1.15 They are therefore wrong in policy and in law.

C2 OVERVIEW OF THE REPEX PROGRAMME

C2.1 'Mains replacement' refers to the long-term programme of work to replace old, deteriorating, metal mains with new PE pipes, and associated activities. The shorthand 'repex' is often used, although this term includes work on smaller service pipes as well as mains pipes, as explained below.

C2.2 Under section 3(1) of the Health and Safety at Work etc. Act 1974, every company – including each GDN – must conduct its business so as to ensure, so far as reasonably practicable, that

[201] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report.

persons not in its employment are not exposed to risks to their health and safety. More specifically, under regulation 13 of the Pipelines Safety Regulations 1996 (the **1996 Regulations**), each GDN must ensure that the pipes comprising its network are maintained in an efficient state, in efficient working order and in good repair.

C2.3 Regulation 13A of the 1996 Regulations requires that a GDN must have in place a programme of work, approved by the HSE, for the decommissioning of iron pipes used in its network (a **Regulation 13A Programme**). The 1996 Regulations place a legal obligation on a GDN to comply, so far as practicable, with its Regulation 13A Programme.[202]

C2.4 That programme then also forms part of the safety case that each GDN is required to have in place under Regulation 3 of the Gas Safety (Management) Regulations 1996, and with which it must comply under regulation 5.

C2.5 Regulation 13A Programmes are designed in line with the HSE's Iron Mains Risk Reduction Programme (**IMRRP**) which relates to the decommissioning of iron gas mains within 30m of an occupied building (referred to as 'at risk' pipes). Under the IMRRP, 'at risk' pipes are divided into different tiers depending on their diameter and risk profile.

Tier 1

C2.6 Tier 1 encompasses iron pipes of 8 inches diameter and below that run within 30m of a qualifying building. Such pipes are more liable to develop fractures. Fractures are the type of pipe failure which emits the most gas. Therefore, these pipes are judged to present the most significant risk to the public and are required to be decommissioned. Under the IMRRP, all Tier 1 pipes must be decommissioned by the end of 2032.

C2.7 Tier 1 also accounts for the majority of 'at risk' iron pipes, comprising around 80%. The decommissioning of Tier 1 pipes, and associated 'services' (discussed below), accounts for the majority of mains replacement costs.

C2.8 As part of its Regulation 13A Programme, each GDN sets a length of Tier 1 pipe to be decommissioned over a set period (geared to meet the aim of complete decommissioning by 2032). Within that set length, the decommissioning of individual pipes is prioritised on the basis of the risk of an incident presented by those pipes. That risk is assessed by GDNs using a common risk model.

C2.9 The HSE specifies that 20% of the Tier 1 set length of pipes to be decommissioned during each price control period should be drawn from the highest risk pipes identified by the risk

[202] Regulation 13A(5) of the 1996 Regulations.

model. The remaining 80% of the pipes to be decommissioned are then drawn from any part of the remaining Tier 1 population using a cost benefit analysis to select the actual pipes and projects.

Tier 2

C2.10 Tier 2 comprises iron pipes with a diameter of above 8 inches and below 18 inches, which run within 30m of a qualifying building. These account for around 15% of all 'at risk' iron pipes. Each Tier 2 pipe is scored against a 'risk-action threshold' set by each GDN using a methodology approved by the HSE as part of the GDN's Regulation 13A Programme.

C2.11 At present, the HSE specifies that those pipes scoring above the threshold (known as Tier 2A pipes) must be decommissioned.

C2.12 Tier 2 pipes falling below the threshold (known as Tier 2B pipes) are subject to monitoring and management regimes which may include decommissioning where the pipes have deteriorated beyond safe or effective repair. Such pipes may also be subject to decommissioning where this is approved by Ofgem as economically justified.

Tier 3

C2.13 As with Tier 2B pipes, Tier 3 pipes (iron pipes with a diameter of 18 inches and above, which comprise approximately 5% of all 'at risk' iron pipes) are decommissioned where they have become unsafe or where replacement is approved by Ofgem on the basis that it is economically justified.

C2.14 The replacement of Tier 2B and Tier 3 pipes is important due to the high cost of repair in the event of failure and the significant negative impact on environment from methane emissions, as well as the safety risk to the public and WWU operatives from gas escapes.

Iron pipes more than 30m from a qualifying building

C2.15 Iron pipes running more than 30m from a qualifying building do not fall within the HSE's IMRRP. However, they are subject to the absolute duty in regulation 13 of the 1996 Regulations to maintain the network in good repair. They are replaced based on condition assessments and also through a cost benefit analysis which considers safety, reliability and environmental risk and the forecast cost of repairs as against the cost of replacement.

Services

C2.16 Together with the replacement of mains pipes, repex work also includes the replacement or transfer of 'services'. Services are the smaller (mainly metallic) pipes that come off the mains

pipe to deliver gas to a domestic dwelling and non-domestic properties. It is the HSE's expectation that non-PE services will be replaced when the parent mains pipe is decommissioned and replaced with PE.

Steel pipes

C2.17 Steel mains (with a diameter greater than 2 inches) are deemed to present a lower level of safety risk than iron mains. This is because they are more likely to develop pin hole corrosion rather than to fracture, and therefore tend to release lower levels of gas when they fail.

C2.18 Steel pipes do not fall within a GDN's Regulation 13A Programme but are subject to the absolute duty in regulation 13 of the 1996 Regulations to maintain the network in good repair. Such pipes are exhibiting increasing failure rates and are coming under increased scrutiny from the HSE. Their replacement with PE pipes, on the basis of cost benefit analysis, therefore forms an important part of repex work.

C2.19 However, steel mains equal to or less than 2 inches, and steel services, are both treated as services by the HSE which requires them to be replaced when the relevant parent iron main is replaced.

Environmental benefits

C2.20 In Part I of this Notice, we describe GDNs' role in the move to Net Zero. The replacement of both iron and steel pipes with PE pipes is fundamental to that role as it makes the network ready to utilise hydrogen and hybrid gases.

C2.21 In addition, the replacement of older pipes reduces the incidence of leaks which also has environmental benefits. In its Business Plan, WWU highlighted that its planned replacement programme for GD2 would lead to a 10% reduction in methane emissions, the equivalent of permanently taking 46,000 cars off the road.[203] This follows on from a reduction of 360,000 tonnes of carbon dioxide equivalent (CO_2e) saved over the course of GD1.[204]

C3 WWU'S REPEX PERFORMANCE IN GD1

C3.1 WWU expects to deliver its primary risk reduction target for GD1 on time and at a cost of £556m – £214.8m less than its GD1 allowance.[205] As a secondary output, it had a target to

[203] Tab B3.1: WWU – Business Plan Core Document, p. 148.

[204] Tab B3.1: WWU – Business Plan Core Document, p. 153.

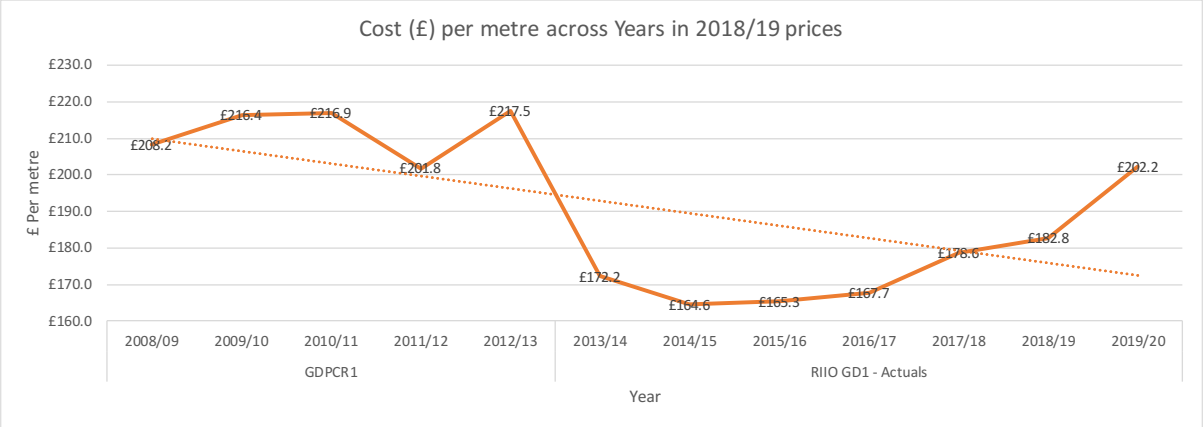
[205] All prices and costs in this section of the Notice are in 2018/19 prices.

complete 3,503km of mains replacement during GD1, delivery of which is likely to be 130km short due to the effects of the Covid-19 pandemic.

C3.2 WWU's outperformance on costs was shared with customers, helping to reduce customers' bills from £154 at the start of GD1 to £125 in 2020/21.

C3.3 As shown in Figure C1 below, WWU's average annual unit cost per metre for mains replacement has reduced since 2008.[206]

Figure C1



C3.4 However, there were particular factors which caused the dip in costs shown during GD1 and which have contributed to a rise in mains replacement costs from 2016/17. This means that, although WWU's unit costs for mains replacement will still see a flattening of the trajectory during GD2, they will still be higher on average than in GD1.

C3.5 In its Business Plan,[207] WWU set out the reasons for its outperformance for repex in GD1 and why the factors that led to this would not be replicated in GD2.[208]

C3.6 As set out in the concluding section to this head of appeal, Ofgem has failed to take account of, or give appropriate weight to, these factors and has instead set allowances for WWU using a mechanism based mainly on –

(a) historical data from GD1, and

[206] A version of this table was provided in the Tab B3.1: WWU – Business Plan Core Document, p. 149, and Tab B3.4: WWU Business Plan – Appendix 16A – GD2 Mains Replacement Programme, p. 3. The version provided in this Notice has been updated to reflect 2019/20 actual costs.

[207] Tab B3.1: WWU – Business Plan Core Document, pp. 158 – 159, and Tab B3.2: WWU Business Plan – Appendix 9D – Mains Replacement Performance RIIO-GD1.

[208] Tab B3.1: WWU – Business Plan Core Document, pp. 160 – 162.

(b) data relating to other networks that will not face the same issues as WWU in GD2.

C3.7 By doing so, Ofgem has erred by not having regard to the specific circumstances of WWU, with the result that WWU has been left underfunded to carry out its mains replacement obligations.

The Alliance Contract

C3.8 The main reason for outperformance in GD1 was that in 2013, WWU entered into a very favourable eight-year Alliance contract (Western Gas Alliance) with two leading service providers to deliver its mains replacement programme during GD1. The contract was originally due to end in March 2021 but has been extended until June 2021 due to impact of Covid-19 on programme delivery.

C3.9 The eight-year Alliance contract was based on a fixed target cost for delivering the programme. The fixed target cost was established by taking the first year of GD1 programmed work, using this to cost future work during the remainder of the price control on a project by project basis and using those project costs to calculate a total programme cost. A rate per metre was then inferred from this total. The Alliance partners then carried out a due diligence exercise on the other mains available to work on before confirming they could deliver the eight years' work at the same cost (less any year-on-year efficiencies). Any overspend ('pain') or underspend ('gain') on the programme is shared between WWU and the delivery partners through a pain/gain sharing mechanism. This sharing mechanism is heavily weighted in favour of WWU, protecting WWU and its customers from large fluctuations in cost over the eight year period.

C3.10 There was a favourable labour market resulting in a reliable and consistent workforce prior to the negotiation of the Alliance contract. This was reflected in the advantageous labour rates in the fixed pricing in the Alliance contract.

C3.11 However, the suppliers' labour costs increased from 2017/18 onwards due to an excess of demand over supply. Increased demand was, and still is, being driven by competition with other GDNs and other capital programmes including in the water, electricity, nuclear, telecoms and transport sectors. The labour landscape has changed significantly in the last few years and the resulting increases to labour costs were borne by the suppliers under the Alliance contract. For example, GD1 saw a large number of skilled engineers moving to other GDNs, attracted by the inflated rates on offer. WWU's supplier was forced into providing teams with payments over and above contracted rates to carry out the work as the period progressed.

C3.12 Taking into account the 2019/20 position, the 'pain' receivable masked the true unit cost of the work by £[✂] per metre of mains and by £[✂] per service pipe replaced. Taken together, this resulted in a £[✂] per metre reduction in cost to WWU overall.

C3.13 In 2019, at the point that costs were escalating, one of those providers left the Western Gas Alliance by mutual consent and exited the market altogether – with the remaining provider and WWU picking up the workload for the rest of GD1.

C3.14 The extended eight year length of the GD1 price control allowed for a relatively long contract under which WWU was able to take advantage of the buffer provided by the pain/gain mechanism to protect it from rising labour costs for a number of years and also contributed to the lower costs secured in the original contract.

C3.15 The effect of the pain/gain mechanism in the Alliance contract from 2017 onwards is highlighted in Figure C2 below.[209] The gap between the two lines on this graph represents the contractual benefit to WWU and the consumer in GD1, with the figures noted on the graph showing unit costs.

Figure C2

[✂]

C3.16 Had that contract not been in place, the Business Plan stated that increased costs faced by the supplier would have resulted in an additional cost to WWU of £[✂] up to that point. The additional cost to WWU would have been £[✂] in 2019/20 and is forecast at £[✂] for 2020/21.

C3.17 The Business Plan explained that upon conclusion of the Alliance contract it would not be possible to negotiate terms which were as favourable to WWU as suppliers would not be willing to continue operating at a loss. For GD2 suppliers would have had to price in increased labour costs, as well as others such as plant provision, compliance with HSE policies, project planning and excavation size. Suppliers would also be unwilling to enter the same kind of pain/gain arrangement as was secured in the Alliance contract.

C3.18 These pricing pressures and supplier market sentiment that point was subsequently borne out by WWU's procurement tender process to outsource mains replacement work in GD2, discussed below.

[209] A version of this table was included in Tab B3.2: WWU Business Plan – Appendix 9D – Mains Replacement Performance RIIO-GD1, p. 8. Whereas the previous version included forecasts for 2018 onwards, these have now been replaced by actuals.

C3.19 *Other factors leading to outperformance in GD1*

C3.20 WWU also set out the other factors leading to outperformance in GD1. These included the following –

(a) **Negotiation with HSE of greater short-term flexibility to design larger replacement schemes** which led to operational efficiencies from using larger teams in smaller geographical areas more easily serviced by support functions.[210] Replacement work in GD2 will involve smaller and more diversified projects leading to less efficiencies and more frequent mobilisation and demobilisation time.

(b) **A high abandon:lay ratio.**[211] The aim of the replacement programme is to decommission or 'abandon' metallic mains. This is usually achieved by laying new mains except where WWU can either reconfigure the network or simply disconnect a main that is no longer required. Costs are reduced where the length of new pipes laid is lower than the length of old pipes abandoned. Some of the outperformance in GD1 was driven by large 'abandon only' schemes where no new pipes were laid. The focus on such schemes was partly driven by the requirement under regulation 14 of the 1996 Regulations to decommission any pipe that is no longer required. Such schemes have now been exhausted and there is limited opportunity to recreate this outperformance factor in GD2. Ofgem has also capped the degree to which a company can outperform through use of a high abandon:lay ratio in GD2.

(c) **The prioritisation of replacement of small diameter pipes in the first part of GD1** due to the comparatively high level of safety risk with smaller diameters.[212] Larger diameter works are more expensive to deliver, because of the greater number of people as well as the plant and equipment required. As shown in Figure C3 below, work in GD2 will see a higher percentage of larger diameter pipes laid with a consequent increase in costs.

[210] Tab B3.2: WWU Business Plan – Appendix 9D – Mains Replacement Performance RIIO-GD1, p. 11.

[211] Tab B3.2: WWU Business Plan – Appendix 9D – Mains Replacement Performance RIIO-GD1, p. 12.

[212] Tab B3.2: WWU Business Plan – Appendix 9D – Mains Replacement Performance RIIO-GD1, p. 14.

Figure C3

(d) **Innovation**, with respect to which the Business Plan stated that any efficiencies from innovations in GD1 had already been embedded in the costs requested for GD2.[213] Such innovations include the development by WWU of a 500m pipe coil trailer which significantly supports insertion and has reduced insertion pits, pipe wastage and the environmental impact of the work.[214] The coil trailer is now also used by other GDNs and will provide an efficiency value of £200k per year in GD2.[215] However, the coil trailer is only useable with pipe diameters up to 90mm and, with the higher proportion of pipes of a greater diameter in GD2 discussed above, the use of the trailer will decrease. WWU also developed a ductile iron cutter to partially mitigate the increased time needed to work with ductile iron as discussed below.[216] The use of these cutters reduces the time taken in relation to every service by 15 minutes. Future innovation by way of a 0.5% per annum ongoing efficiency overlay is accounted for in WWU's forecast figures.

C4 ADDITIONAL FACTORS LEADING TO COST INCREASES IN GD2 AS NOTIFIED TO OFGEM DURING THE PRICE CONTROL PROCESS

C4.1 As at 1 April 2021, WWU's network will be comprised of 75% PE pipes. Its replacement programme for GD2 is intended to keep it on track to deliver a Net Zero-ready network by 2035.

[213] Tab B3.1: WWU – Business Plan Core Document, p. 160.

[214] Tab B3.1: WWU – Business Plan Core Document, p. 159 and Tab B3.2: WWU Business Plan – Appendix 9D – Mains Replacement Performance RIIO-GD1, p. 13.

[215] Tab B3.1: WWU – Business Plan Core Document, p. 150.

[216] Tab B3.1: WWU – Business Plan Core Document, p. 159.

C4.2 From April 2021, WWU will be required to replace an average of 314km Tier 1 pipes each year (in line with its Regulation 13A Programme), alongside another 10km of other iron pipes and 70km of steel pipes.

Factors leading to cost increases in GD2

C4.3 As well as noting the absence of the factors discussed above which led to outperformance in GD1, the Business Plan also outlined other factors which would lead to increased costs in GD2. These included the following[217] –

(a) **Technique**[218]

An increase in the use of the 'open cutting' technique which involves digging and backfilling a trench the full length of the main to be replaced, laying the new main in the trench and transferring all services. This is contrasted with the use of a mains insertion technique which involves digging a pit at each end of the main, inserting the new main inside the old one and digging pits at each service connection to transfer services to the new main. Mains insertion techniques have lower costs due to less excavation, reinstatement and time spent on the operation. However, they can only be used where the replacement pipes are of a suitable diameter to be inserted inside the old mains. Whereas around 90% of pipes could be replaced using mains insertion in GD1, only around 80% of those replaced in GD2 can be replaced using that technique as increasing demand for gas at peak times (within an overall decline in average demand, as outlined in Part I) means that greater diameter pipes will be needed in order to meet licence requirements in relation to continuity of supply during winter.

The location of the pipes that WWU will be replacing in GD2 also has an effect. During GD1 WWU focused its repex activities in large towns and cities given the higher level of risk from an explosion. In GD2, work will move to network extremities and smaller towns. The network configuration in these places is such that there are less feeds into the networks which, for engineering reasons, limits the opportunity for insertion.

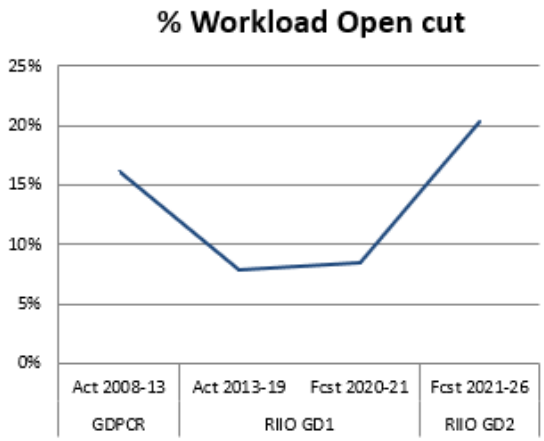
An appendix to the Business Plan included Figure C4 below showing the proportion of work using the open cut technique in GD2 as against GD1.[219]

[217] Tab B3.1: WWU – Business Plan Core Document, pp. 160 – 162 and Tab B3.2: WWU Business Plan – Appendix 9D – Mains Replacement Performance RIIO-GD1.

[218] The detail on this point was provided in Tab B3.5: WWU Business Plan – Appendix 16B – GD2 Mains Insertion Rate Forecast, pp. 4 – 6.

[219] Tab B3.2: WWU Business Plan – Appendix 9D – Mains Replacement Performance RIIO-GD1, p. 14.

Figure C4



WWU estimated that the greater use of the open cut technique in GD2 would add £4.4m in mains replacement costs compared to GD1.[220] The increase in costs from the use of open cut is caused by the greater time involved to carefully excavate the trench to avoid damaging other utility apparatus, excavate and backfill a greater volume of material, maintain access to driveways and businesses, and maintain traffic flow and control. In addition to the decrease in productivity, there is an increase in costs due to additional travel time to quarry, reinstatement of surfaces and street furniture, logistical support, and additional machinery and plant usage, movement and size.

In its Business Plan, WWU gave a breakdown of the additional costs in an example project where the cost using the insertion technique was £[✂] per metre whereas the use of open cut would cost £[✂] per metre.[221] The percentage of open cut work as part of overall mains replacement in GD1 was around 8%. That will rise to around 20% in GD2. Assuming a target of 417km per annum, this would lead to an increase in costs of £[✂].[222]

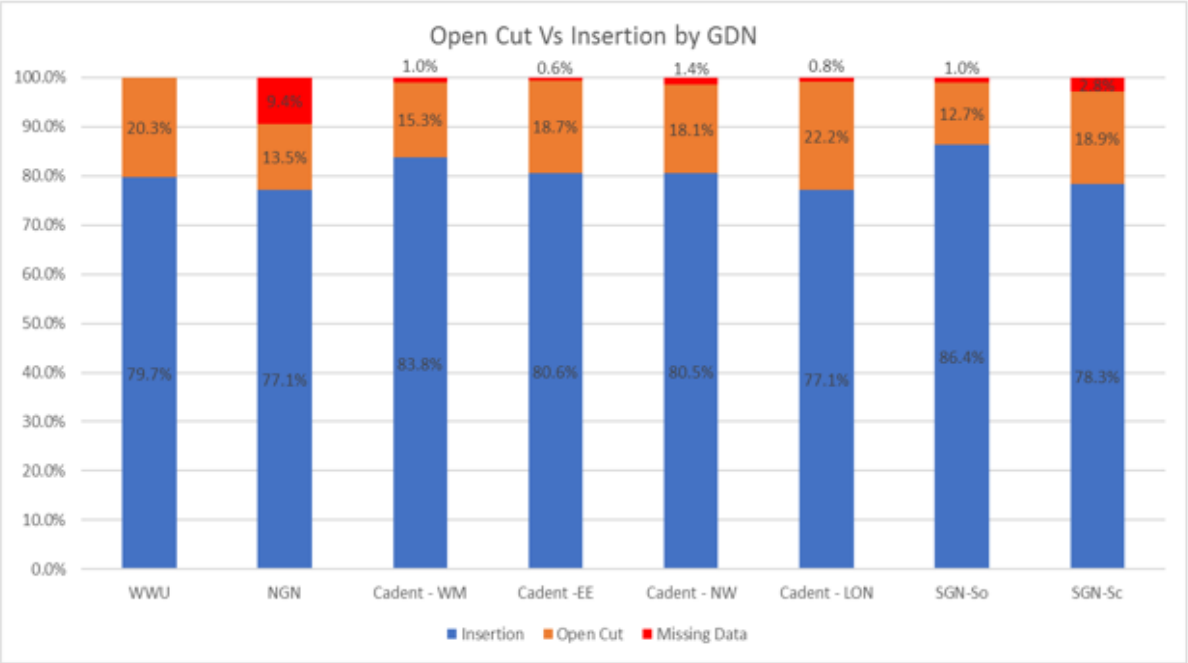
As shown in Figure C5, compared to the other GDNs, WWU will undertake the highest level of open cut work outside London during GD2.

[220] Tab B3.5: WWU Business Plan – Appendix 16B – GD2 Mains Insertion Rate Forecast, p. 6.

[221] Tab B3.2: WWU Business Plan – Appendix 9D – Mains Replacement Performance RIIO-GD1, p. 6.

[222] 20% x 417km per annum = [✂].

Figure C5



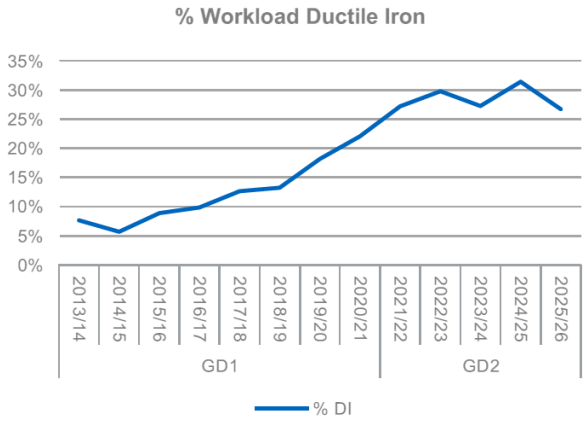
(b) **Material**[223]

The cost differences in the replacement technique used are mirrored by cost differences in the material to be replaced. During the first few years of GD1, WWU focussed less on replacing mains made of ductile iron, as pipes made from that material are less likely to fracture and therefore have a lower risk score meaning that it was a lower priority. As at the end of 2019, less than 10% of the mains replacement work undertaken in GD1 had related to ductile iron mains.

As it has completed higher priority work, a greater proportion of the replacement work undertaken in GD2 will comprise ductile iron, as shown in Figure C6 below.

[223] Tab B3.2: WWU Business Plan – Appendix 9D – Mains Replacement Performance RIIO-GD1, p. 14.

Figure C6



Ductile iron is more difficult to cut than cast or spun iron meaning that it takes increased time to deal with and therefore leads to higher labour costs. As described above, WWU has developed a more cost effective ductile iron cutter and has been increasing the amount of replacement work done on ductile iron mains. However, even with the improved cutting tool, there will be an increased cost for labour delivery given that the material remains more complex to work with, as well as higher material costs.

(c) **Work location**[224]

GD2 will see work moving from the centre of WWU's network to the extremities as the higher risk pipes in the major towns and cities have been replaced during previous price controls. This will result in cost increases due to increased travel time and the impact of higher quarry fees, which are much higher in Devon and Cornwall, for example, than in South Wales.[225]

(d) **Labour shortages**[226]

Labour shortages will affect WWU's own workforce as well as its contractors. Labour cost makes up approximately 37% of WWU's annual mains replacement programme costs and the current excess of demand over supply is increasing salary demands. The growth of other projects,[227] including some within or close to the WWU network, makes WWU susceptible to subcontractors and staff leaving to work for other

[224] Tab B3.1: WWU – Business Plan Core Document, p. 162.

[225] Tab B3.1: WWU – Business Plan Core Document, p. 83.

[226] Tab B3.2: WWU Business Plan – Appendix 9D – Mains Replacement Performance RIIO-GD1, p. 15.

[227] These include Hinkley Point C, High Speed 2, Thames Tideway, the expansion of Heathrow airport, various projects being run by Network Rail and Highways England, and projects as part of city regeneration programmes.

companies. This is an important factor as WWU has sought to build its own workforce to mitigate the risks caused by its inability to subcontract on favourable terms. In addition, WWU has sought to mitigate increasing labour costs through implementation of an additional Resource Strategy introduced during 2018/19 to recruit graduates and apprentices, and by more general upskilling of the current workforce for supervisor and technician roles. WWU has always had an apprentice and upskilling programme to address normal succession planning and churn which has been funded by Ofgem on a business as usual basis outside of any major labour issue.

In its report on regional factors included within WWU's business plan (the **Regional Factors Report**), Oxera noted that WWU's areas of Wales and the South West had the highest proportion of over 60 year-olds in Great Britain, and that the difficulties it had in attracting skilled labour were borne out by the biennial Employment Skills Surveys which showed that the skills shortage is becoming more acute in Wales over the years, particularly in the utilities sector.[228] A study by Energy & Utility Skills in 2019 also highlighted that a feasible recruitment strategy to resolve the shortfall generated by the skills shortage would amount to around £2.3m per annum in GD2 for WWU.[229]

The analysis of the effect of labour shortages on WWU's repex costs in the Regional Factors Report has been updated and is provided in a new report by Oxera provided with this Notice (the **2021 Oxera Report**).[230]

WWU highlighted that the shortfall in skilled labour is driving up labour salary demands as shown in Figure C7 below.

[228] Tab B3.3: WWU Business Plan – Appendix 9M – Regional Factors in the Cost Assessment for GD2 Oxera Report Prepared for WWU, p. 11.

[229] Tab B3.3: WWU Business Plan – Appendix 9M – Regional Factors in the Cost Assessment for GD2 Oxera Report Prepared for WWU, p. 11.

[230] Tab J1: Oxera – The impacts of labour market pressures and sparsity on Repex in the Wales & West Region.

Figure C7

[✂]

Sparsity

C4.4 As noted in the discussion above, at several points during its Business Plan, WWU drew attention to the fact that during GD2 a greater amount of repex work would be conducted at the extremities of its network. It noted how the location of that work would serve to increase its costs significantly.

C4.5 WWU pointed out that regional factors lead to cost differentials across the eight gas networks and stated that, where Ofgem's cost models did not capture these and adjust accordingly, WWU required a regional cost adjustment as part of the Ofgem cost assessment toolkit.[231] It supplemented that point with analysis set out in Oxera's Regional Factors Report. The Regional Factors Report noted that there was a need to account for sparsity and topography in benchmarking and that sparsity was *'likely to affect more activities than just emergency and repairs as was assumed in GD1'*, such as repex.[232]

C4.6 In March 2020, in a response to a question from Ofgem, WWU produced a paper quantifying the impact of sparsity factors on its costs (the **Sparsity Paper**).[233]

C4.7 The Sparsity Paper described WWU's network as being different from all other networks in that it is long, irregularly shaped and divided into three distinct geographic areas by the Severn Estuary and the Brecon Beacons. It also explained that WWU's customer base is widely dispersed with average customer density being significantly below the UK average, and

[231] Tab B3.1: WWU – Business Plan Core Document, p. 85.

[232] Tab B3.3: WWU Business Plan – Appendix 9M – Regional Factors in the Cost Assessment for GD2 Oxera Report Prepared for WWU, p. 25.

[233] Tab H4: SQCA10 WWU Sparsity Estimation. Also submitted as part of WWU's response to the Draft Determination.

customers being clustered with large empty patches around them and long driving distances in between on road networks less well developed than other parts of the UK.[234]

C4.8 The Sparsity Paper went on to explain that both densely and sparsely populated regions have relatively high costs with regions in between having lower costs, meaning that sparsity and density give rise to a U-shaped impact on GDN costs.

C4.9 Against this background, and with a greater proportion of mains replacement work being needed in the extremities of its network in GD2, the Regional Factors Report set out the impacts of sparsity on WWU's repex costs, including[235] –

(a) increased travel times due to types of road leading to increased travel costs, and, as a consequence, a reduced productive day duration, particularly where teams are increasingly not local to where the work is located,

(b) the need for additional depots each staffed and stocked with specialist equipment (with an illustration provided drawing a contrast with Cadent's network in the West Midlands),

(c) additional costs of transporting materials to depots,

(d) higher fuel costs,

(e) the need for additional vans,

(f) difficult topography (such as valleys) and local ground conditions, and

(g) larger distances and longer travel times to quarries and mines (with maps illustrating the low numbers of quarries in Wales and the South West relative to other areas in Great Britain, and Oxera suggesting that the issue was even more pronounced with respect to tips[236]).

C4.10 The Business Plan also pointed to higher aggregate and tipping costs in Devon and Cornwall of £[✂] per annum than the rest of WWU's region.[237]

[234] This information was also contained in Tab B3.3: WWU Business Plan – Appendix 9M – Regional Factors in the Cost Assessment for GD2 Oxera Report Prepared for WWU, pp. 16 – 17.

[235] Tab B3.3: WWU Business Plan – Appendix 9M – Regional Factors in the Cost Assessment for GD2 Oxera Report Prepared for WWU, Table 3.3, p. 19.

[236] Tab B3.3: WWU Business Plan – Appendix 9M – Regional Factors in the Cost Assessment for GD2 Oxera Report Prepared for WWU, p. 28.

[237] Tab B3.1: WWU – Business Plan Core Document, p. 83.

C4.11 WWU concluded that its sparsity costs in relation to repex (as understood at that point) amounted to £[✂] per annum and explained that it had embedded these in its Business Plan cost base.

C4.12 The additional costs of sparsity were borne out by the results from WWU's tender process to outsource its mains replacement work in GD2. The 2021 Oxera Report shows how bidders' prices were higher in regions of greater sparsity.[238]

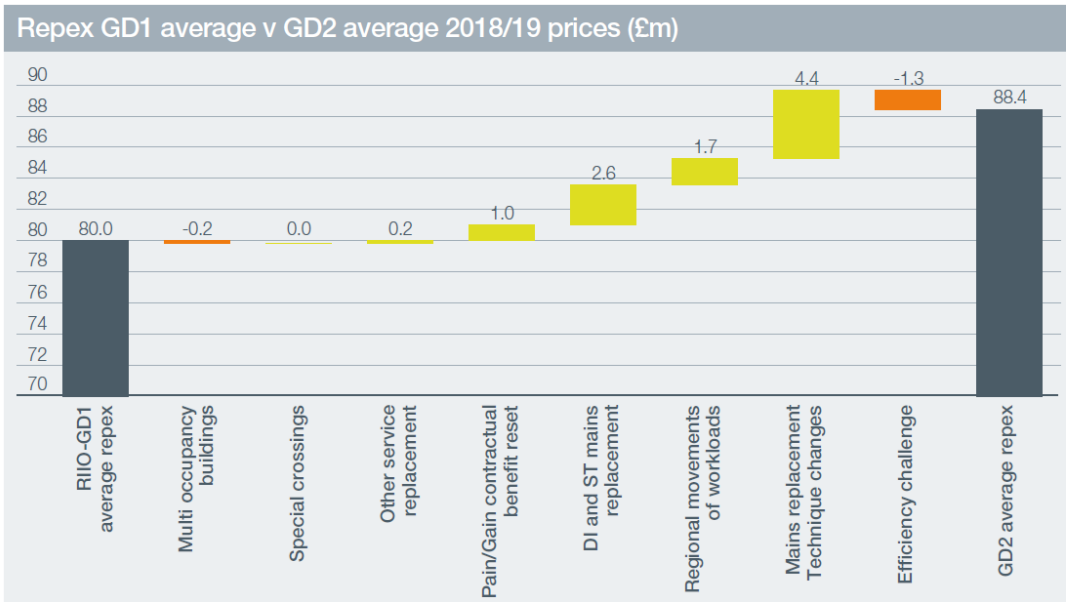
WWU's request in the Business Plan

C4.13 WWU explained that its financial outperformance in GD1, which it had shared with customers, has been enabled by its tightly negotiated and favourable Alliance contract which encompassed eight-year fixed cost targets, as well as pipe selection flexibility and innovation.

C4.14 It explained that the unit costs achieved in GD1 could not be carried into GD2 for the reasons set out above, although it was able to include an efficiency challenge of 0.5% per annum compounding to its controllable costs.

C4.15 The cumulative effect of these factors on total repex as shown in the Business Plan is set out in Figure C8 below.

Figure C8



[238] Tab J1: Oxera – The impacts of labour market pressures and sparsity on Repex in the Wales & West Region, paras 3.34 – 3.37.

C4.16 On this basis, in its Business Plan WWU requested a unit cost for Tier 1 mains replacement, mains and services work of £170.9 per metre and for Tier 2B and Tier 3 mains and services of £342.4 per metre, with an average unit cost of £183.7 per metre across all Tiers and diameters.

C5 The Draft Determination

C5.1 Cost allowances for repex form part of the overall allowances for totex. The Draft Determination proposed the use of a single totex model with one cost driver (a composite scale variable cost driver, or CSV) consisting of a number of different variables to reflect costs of different activities, including repex.[239] Each component was weighted to reflect the proportion of industry costs attributed to that activity, with the CSV cost driver being the product of the individual components raised to the power of their respective weights.

C5.2 The repex component was weighted at 39% of overall totex allowances.

C5.3 In order to set the repex allowances, Ofgem took the forecasts submitted by the GDNs as well as totex data from GD1, adjusted them to account for specified regional factors in order to facilitate comparison (labour costs, urbanity and sparsity), and removed costs that it considered to be unjustified.

C5.4 The labour cost adjustment took the form of an uplift for wage differentials in London and the South East.[240] The adjustment for sparsity was applied only in relation to emergency and repair activities in order to compensate for reduced labour productivity due to additional travel time.[241] No sparsity adjustment was made in respect of repex. Ofgem agreed with WWU that there may be additional sparsity impacts, but stated that WWU had not shown that such impacts were not already captured by existing cost drivers such as MEAV and customer numbers.[242]

C5.5 Ofgem then conducted a regression analysis on the adjusted figures, in order to understand the connection between GDNs' costs and a set of specified variables that could drive cost variation. Regional factors were then added back in and the results of that analysis were subjected to a benchmark efficiency adjustment based on the GDNs' relative performance,

[239] Tab A4.2: Ofgem – RIIO-2 Draft Determinations – Gas Distribution Annex, paras 3.59 and 3.79.

[240] Tab A4.8: Ofgem – RIIO-GD2 Draft Determinations – Step by Step Guide to Cost Assessment, paras 1.86 and 1.87.

[241] Tab A4.2: Ofgem – RIIO-2 Draft Determinations – Gas Distribution Annex, para 3.41.

[242] Tab A4.9: Ofgem – RIIO-GD2 Draft Determinations – Regional and Company Specific Factors Annex, para 1.32.

with the benchmark set at the 85th percentile. An ongoing efficiency target of 1.25% in relation to repex was also proposed.[243]

C5.6 For the repex component, a synthetic cost driver was used, comprising the sum of the products of the synthetic unit cost and volume for the following repex activities[244] –

(a) Tier 1 iron mains,

(b) Tier 2A iron mains,

(c) Tier 2B iron mains,

(d) Tier 3 iron mains,

(e) steel mains of 2 inches or less (also referred to as 'consequential steel'),

(f) steel mains of more than 2 inches,

(g) iron mains more than 30m from a building,

(h) other policy and condition mains,

(i) services associated with all of the aforementioned mains replacement activities, and

(j) services not associated with mains replacement.

C5.7 This was described as a workload driver, with variances in GDNs' workloads for different activities driving different costs for each. Ofgem determined the workloads to be inputted to the synthetic costs driver following consideration of the proposals put forward by the GDNs in their Business Plans.

C5.8 Ofgem's modelling of synthetic unit costs was based, in part, on work completed by CEPA. In its report, CEPA made the following points –

(a) The data provided by the GDNs in relation to replacement technique varied in terms of granularity and that it was therefore not possible to include technique within the

[243] Tab A4.2: Ofgem – RIIO-2 Draft Determinations – Gas Distribution Annex, Figure 5, paras 3.21 – 3.37.

[244] Tab A4.2: Ofgem – RIIO-2 Draft Determinations – Gas Distribution Annex, para 3.83.

synthetic unit cost methodology.[245] However, it was noted that open cut replacement was more costly than the mains insertion technique.[246]

(b) Although separate unit costs should be included for ductile and cast iron, the difference between the two was not as significant as the GDNs suggested.[247]

C5.9 CEPA also noted that the use of pain/gain mechanisms within the contracts agreed with repex contractors could mean that historical reported costs are not a true reflection of the costs incurred to undertake the repex work.[248]

Tier 1 mains and services

C5.10 In its Draft Determination, Ofgem proposed putting in place two Price Control Deliverables (**PCDs**) to allow for costs incurred in relation to the delivery of mandatory Tier 1 mains and services.[249]

C5.11 Ofgem will use PCDs in GD2 to capture those outputs that are directly funded through the price control and where the funding provided is not transferrable to a different output or project.

C5.12 The PCDs for Tier 1 mains and services included fixed ex ante unit costs for each of 12 specified workload activities made up of three types of mains decommissioning activities[250] in relation to four diameter bands.[251]

C5.13 The Draft Determination proposed baseline target workloads for WWU of 1,568km mains replaced during GD2[252], and 118,603 service interventions[253] with a unit cost for Tier 1 repex mains and services of £155.8 per metre. The baseline target workloads indicate the workload volume that GDNs are expected to deliver and on which the baseline cost allowance is set.

C5.14 As outlined above, the Draft Determination explained that unit costs for each GDN were set by calculating the industry average unit costs for each workload activity, and adjusting for

[245] Tab A4.10: Ofgem – RIIO-GD2 Draft Determinations – Synthetic Unit Costs Update Annex (CEPA), p. 13.

[246] Tab A4.10: Ofgem – RIIO-GD2 Draft Determinations – Synthetic Unit Costs Update Annex (CEPA), p. 10.

[247] Tab A4.10: Ofgem – RIIO-GD2 Draft Determinations – Synthetic Unit Costs Update Annex (CEPA), p. 23.

[248] Tab A4.10: Ofgem – RIIO-GD2 Draft Determinations – Synthetic Unit Costs Update Annex (CEPA), p. 8.

[249] Tab A4.2: Ofgem – RIIO-2 Draft Determinations – Gas Distribution Annex, para 2.166.

[250] The three types of decommissioning activity were (i) decommissioned and not replaced, (ii) cast/spun iron: Low and medium pressure, decommissioned and replaced with PE, and (iii) ductile iron: low pressure, decommissioned and replaced with PE.

[251] The four diameter band sizes were (a) less than or equal to 3 inches, (ii) 4 to 5 inches, (iii) 6 to 7 inches, and (iv) 8 inches.

[252] Tab A4.6: Ofgem – RIIO-2 Draft Determinations – Wales & West Utilities Annex, Table 13, p. 14.

[253] Tab A4.6: Ofgem – RIIO-2 Draft Determinations – Wales & West Utilities Annex, Table 15, p. 15.

certain regional factors, to derive distribution network-specific unit costs. These unit costs would then be used to adjust the baseline cost allowance at the end of RIIO-GD2. The Draft Determination stated Ofgem's view that using industry average unit costs (plus regional factors) was appropriate as Tier 1 mains replacement is a high volume, repeatable activity that is common across all GDNs.[254]

C5.15 The same methodology was used to calculate unit costs for Tier 1 services.

C5.16 In line with the other GDN's, WWU's proposed workloads for Tier 1 repex work associated with dynamic growth were disallowed. Ofgem decided that uncertainty with forecasting workloads and the declining size of the Tier 1 population meant it was not necessary to provide ex ante funding. WWU's remaining proposed Tier 1 workloads were allowed in full.[255]

Tier 2A mains and services

C5.17 The Draft Determination proposed that Tier 2A mains and services (those that fall above the risk-action threshold and are required to be replaced under WWU's Regulation 13A Programme) would be funded through a volume driver to allow costs for actual volumes of work done, again using fixed up-front unit costs.[256]

C5.18 Again, the unit cost was set using an average industry unit cost for each diameter band (including services costs) which was then adjusted to take into account regional factors to create a specific unit cost for each GDN.[257]

C5.19 WWU's proposed workloads for Tier 2A were accepted in full.

Other repex

C5.20 The Draft Determination proposed to fund other mains replacement including –

(a) the mandatory replacement of steel mains of equal to or less than 2 inches in diameter and associated services,

(b) steel mains of more than 2 inches in diameter and associated services, and

(c) iron mains more than 30m from a building and associated services,

[254] Tab A4.6: Ofgem – RIIO-2 Draft Determinations – Wales & West Utilities Annex, para 2.178.

[255] Tab A4.6: Ofgem – RIIO-2 Draft Determinations – Wales & West Utilities Annex, Table 24 (p. 24) and para 3.92.

[256] Tab A4.2: Ofgem – RIIO-2 Draft Determinations – Gas Distribution Annex, para 4.21.

[257] Tab A4.2: Ofgem – RIIO-2 Draft Determinations – Gas Distribution Annex, paras 4.24 – 4.25.

using the Network Asset Risk Metric (**NARM**).[258] Through this, baseline totex allowances would be adjusted to fund specified outputs, with a penalty applied to penalise under-delivery.

C5.21 The Draft Determination stated that, although its proposed workloads for other repex work would be allowed, WWU's proposed workloads for Tier 2B and iron mains more than 30m from a building, and associated services, would be disallowed in full. This was because Ofgem considered that WWU had not provided adequate justification for that work.[259]

C6 WWU's response to the Draft Determination

C6.1 In its response to the Draft determination, WWU made a number of submissions on the unit costs for Tier 1 mains and services work and the disallowance of work in relation to Tier 2B and iron mains more than 30m from a building. As the latter had been disallowed, no unit cost had been published for it and so WWU did not have the opportunity to comment on those unit costs following the Draft Determination.

C6.2 Following its submissions, Ofgem allowed the previously disallowed workloads, with the exception of a small length of dynamic growth (pipes found to be missing from our records each year), so its submissions on that point are not discussed further here. This section therefore focuses on WWU's submissions on Tier 1 unit costs.

C6.3 WWU agreed that the repex synthetic cost approach was fair in principle but highlighted three points on which it needed to be adjusted in its application –

(a) to better account for sparsity,

(b) to take a more granular approach by setting separate unit costs in relation to different techniques and materials, and

(c) to take account of the fact that WWU's costs in GD2 would increase due to the end of the Alliance contract, and the pain sharing mechanism it contains, in June 2021.

C6.4 Therefore, WWU did not object to the use of a top-down model by Ofgem, but made clear that the model used did not adequately capture some circumstances which were specific to WWU in GD2.

[258] Tab A4.2: Ofgem – RIIO-2 Draft Determinations – Gas Distribution Annex, para 2.213 – 2.215, and Tab A4.5: Ofgem – RIIO-2 Draft Determinations – NARM Annex.

[259] Tab A4.6: Ofgem – RIIO-2 Draft Determinations – Wales & West Utilities Annex, Tables 29, 31 and 32 and paras 3.21 and 3.23.

Sparsity

C6.5 As set out above, the Draft Determination set out Ofgem's position that sparsity would be taken into account for setting costs in relation to emergency and repair work, but not for repex.

C6.6 As part of its response to the Draft Determination, WWU provided a report by Oxera on Ofgem's approach to cost assessment (the **Oxera DD Report**).[260] The Oxera DD Report reiterated many of the points on the effect of sparsity made in the Sparsity Paper and the report from Oxera submitted with the business plan.

C6.7 The Oxera DD Report drew attention to the analysis previously provided to Ofgem on differences in reinstatement rates between sparser and less sparse areas. The report noted that reinstatement costs in London were allowed by Ofgem as a regional factor on the basis of density and, given Ofgem's acceptance of the impact of reinstatement costs in London, argued that allowance should also be made for sparsity (and its impact on reinstatement costs and other areas). In addition, it pointed out that evidence had been provided by WWU of the increased cost due to the location of quarry and tipping sites in sparse areas, showing that the impact of sparsity could not simply be taken into account through allowances in respect of labour costs.[261]

C6.8 Oxera also drew a link between the sub-contractors' costs submitted as part of WWU's tender for repex work and concluded that Ofgem should include a sparsity adjustment for repex consistent with the urbanity productivity adjustment it made to reflect the increased costs in densely populated areas (such as Bristol in WWU's area).[262]

C6.9 The Oxera DD Report analysed Ofgem's point that sparsity impacts were already captured by existing cost drivers such as MEAV and customer numbers.[263] It found that sparsity impacts were not captured by these other cost drivers. This is unsurprising as MEAV is a count and value of asset replacement. There is no difference in the cost of an asset depending on region or extremity, so sparsity is not reflected in the asset count. Likewise, as WWU must lay mains to the extremities of its network regardless of the number of customers, a cost driver in relation customer numbers does not account for sparsity impacts.

[260] Tab B4.2: WWU – Appendix GDQ26A – A Review of Ofgem's Cost Assessment Approach in the RIIO-GD2 Draft Determinations (Oxera Report).

[261] Tab B4.2: WWU – Appendix GDQ26A – A Review of Ofgem's Cost Assessment Approach in the RIIO-GD2 Draft Determinations (Oxera Report), para 4.7.

[262] Tab B4.2: WWU – Appendix GDQ26A – A Review of Ofgem's Cost Assessment Approach in the RIIO-GD2 Draft Determinations (Oxera Report), para 4.13.

[263] Tab B4.2: WWU – Appendix GDQ26A – A Review of Ofgem's Cost Assessment Approach in the RIIO-GD2 Draft Determinations (Oxera Report), para 4.1 – 4.5.

C6.10 In addition, Ofgem's argument in this respect is inconsistent as it does take account of sparsity factors in relation to emergency and repair work. If MEAV and customer numbers accounted for sparsity impacts in respect of mains replacement, they would also account for the same impacts for emergency and repair.

A more granular approach

C6.11 WWU highlighted that the repex allowances outlined in the Draft Determination were inadequate to deliver its mains replacement programmes.

C6.12 This point was expanded in a Repex Cost Justification Paper (the **Repex Paper**) provided by WWU as part of its response to the Draft Determination.[264] In particular, the Repex Paper made clear that the unit cost proposed by Ofgem would not enable WWU to carry out the repex work which it was legally obliged to do for Tier 1 mains.

C6.13 The Repex Paper stated that it was apparent that Ofgem had not considered many of the factors specific to WWU that it had set out in its Business Plan to explain why its unit costs would increase in GD2. The Repex Paper summarised many of those points again. It also stated that the same points had been made to Ofgem at various meetings throughout the GD2 Business Planning process as described in the witness statement of Robert Long.[265]

C6.14 WWU argued that Ofgem should set separate costs in relation to mains replacement technique and type of iron, as well as by pipe material (iron or steel) and diameter.

C6.15 WWU reiterated that the volume of open cut was increasing from 8% in GD1 to 20% in GD2, resulting in a 30% increase in costs. It noted that the analysis carried out for Ofgem by CEPA drew attention to the significant cost differentials between open cut as opposed to insertion but that despite this, Ofgem still did not account for that difference in setting unit costs.[266]

C6.16 The points in relation to technique were supported by the Oxera DD Report which stated that the lack of a distinction in the repex synthetic cost calculation between open cut and insertion unit costs was a problem because[267] –

(a) unit costs for open cut replacements are significantly higher than for insertions,

[264] Tab B4.3: WWU – GDQ33A – Repex Cost Justification Paper.

[265] Tab H1: First Witness Statement of Robert Long, section 7.

[266] Tab B4.1: WWU – Letter of Response to Ofgem's RIIO-2 Draft Determinations, pp. 105 – 106, response to GDQ33.

[267] Tab B4.2: WWU – Appendix GDQ26A – A Review of Ofgem's Cost Assessment Approach in the RIIO-GD2 Draft Determinations (Oxera Report), para 5.18.

(b) the workload mix is changing for GD2 compared with GD1, with more open cut activities, and

(c) Ofgem was using historical unit costs in its synthetic cost calculation which masked the impact of the different work mix to be undertaken in GD2.

C6.17 The Oxera DD Report also noted that Ofgem had itself highlighted that *'unit costs for open cut replacements are consistently significantly higher than insertion'* in the slide presentation used at its RIIO-GD2 Working Group in July 2020.[268]

The end of the Alliance contract and WWU's procurement process

C6.18 The Repex Paper also reiterated the effect that the end of the Alliance contract under which WWU's repex work in GD1 had been undertaken would have on repex costs in GD2. It explained that, faced with the end of its current contract in June 2021, WWU had recently completed a significant external market procurement exercise consisting of two rounds of pre-market engagement and a tender event in relation to its GD2 repex work.

C6.19 In its expert report (the **T&T Report**), Turner & Townsend undertakes an independent analysis of WWU's tender process and finds it to be robust.[269]

C6.20 The Repex Paper described how one of the main findings of WWU's initial market engagement had been that the larger potential contracting partners were very cautious of the gas market with two ([✂] and [✂]) stating that they were withdrawing from the gas distribution market and two others ([✂] and [✂]) withdrawing part way through the process.[270] This was because they considered the balance of risk to be prohibitive and the profit margins unacceptable.

C6.21 WWU then opened the process to smaller organisations and divided the work into geographical lots allowing interested parties to tailor their bids to their own geographic and commercial strengths in order to try to make the risk profile more acceptable and enable a larger pool of eligible contractors to participate.

[268] Tab B4.2: WWU – Appendix GDQ26A – A Review of Ofgem's Cost Assessment Approach in the RIIO-GD2 Draft Determinations (Oxera Report), fn. 47 to para 5.18(a), referring to Tab H5: Ofgem – Slide Presentation to RIIO-GD2 Repex Working Group, p. 13.

[269] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report.

[270] Tab B4.3: WWU – GDQ33A – Repex Cost Justification Paper, p. 11.

C6.22 Initial bid responses were received in August 2020 and the birds for Tier 1 work are set out in Table C1 below.[271] Bidder A failed to provide any bids and no bids were received for work at the extremity of WWU's network in Plymouth and Cornwall.

Table C1

[✂]

C6.23 Setting aside Plymouth and Cornwall, the most competitive bid from each geographical lot resulted in average unit costs set out in Table C2 below.[272]

Table C2

[✂]

C6.24 This included average unit cost of £[✂] per metre for the Tier 1 mains and services work, higher than the £[✂] per metre requested in the original Business Plan and much higher than the proposed unit cost outlined in the Draft Determination. Although the bidders gave different unit costs, some below £[✂] per metre, all were in excess of the £[✂] per metre originally requested by WWU in the Business Plan.

C6.25 The most competitive rate for each lot produces an average unit cost of £[✂] per metre across all Tiers and diameter bands.

[271] Tab B4.3: WWU – GDQ33A – Repex Cost Justification Paper, p. 13.

[272] This table was contained in the slide deck shown to Ofgem on 25 September 2020 and later sent to Ofgem by email from Carly Evans to Ofgem on 4 October 2020 – Tab H3: WWU – Repex Bilateral Slide Pack.

C6.26 The number of responses for each area showed the effects of sparsity on bidders' appetite to take on work at the extremities of WWU's network. The Oxera DD Report noted that the bids received showed a negative relationship between average price and density measured in customers per km.[273] It also noted that the failure to secure bids for work in the Plymouth and Cornwall regions (which are both relatively sparsely populated and difficult to get to) tended to support that point.[274]

C6.27 In its response to the Draft Determination,[275] WWU stated that it had drafted a paper demonstrating the robust nature of its tender process and that it was happy to share this with Ofgem.

C6.28 That document was sent to Ofgem by email on 4 October 2020,[276] together with slides used in a meeting with Ofgem the previous week.

C6.29 The document attached to the email described the initial tender results as showing –

(a) a shrinking supplier market,

(b) incomplete bidder coverage in some geographies,

(c) a supplier market that is risk averse and selective in opportunities, and

(d) increasing costs due to a number of external factors, most notably the labour market issues described above.

C6.30 The slides included versions of the tables set out above in relation to the prices bid into the tender process. They also included the graph originally contained in the Business Plan showing how, in overall terms, WWU's unit cost per meter of replacement was increasing from 2018. The slides ended by asking whether Ofgem required any further evidence and how it would take the information presented into account in adjusting the allowances.[277]

[273] Tab B4.2: WWU – Appendix GDQ26A – A Review of Ofgem's Cost Assessment Approach in the RIIO-GD2 Draft Determinations (Oxera Report), paras 4.10 – 4.11.

[274] Tab B4.2: WWU – Appendix GDQ26A – A Review of Ofgem's Cost Assessment Approach in the RIIO-GD2 Draft Determinations (Oxera Report), para 4.9.

[275] Tab B4.1: WWU – Letter of Response to Ofgem's RIIO-2 Draft Determinations, pp. 105 – 106, response to GDQ33.

[276] Email from Carly Evans to Ofgem, 4 October 2020, with attachment Tab H2: WWU – GD2 Outsourcing Tender Report.

[277] Tab H3: WWU – Repex Bilateral Slide Pack.

C7 The Final Determination

C7.1 The foregoing sections illustrate that over the course of several submissions to Ofgem in advance of the Final Determination, WWU had clearly set out the various reasons why it was inappropriate to set its repex allowances for GD2 with reference to its GD1 performance, and other networks, without making adjustments to allow for the increased costs it would face in GD2.

C7.2 Despite WWU's evidence in its response to the Draft Determination that the market rate was £[✂] per metre, Ofgem has set a blended unit cost for repex work of £[✂] per metre.

C7.3 In its Final Determination, Ofgem set out its decision to adopt the top-down benchmarking approach for assessment of repex cost categories and to implement the synthetic cost driver for repex proposed in the Draft Determination.[278] However, in doing so, it decided to reduce the number of synthetic cost categories proposed in the Draft Determination by aggregating material and workloads categories.[279]

C7.4 In its Final Determination Ofgem provided baseline allowances for Tier 1 mains replacement for the five years of £201.9 and for Tier 1 services of £50.2 per service, equating to £160 per metre.[280]

C7.5 For mains replacement, this was based on the following synthetic unit costs broken down by pipe diameter[281] –

(a) 3 inches and less – £87,051 per km.

(b) 4 – 5 inches – £93,363 per km.

(c) 6 – 7 inches – £140,322 per km.

(d) 8 inches – £210,131 per km.

C7.6 The Final Determination noted that both WWU and SGN had submitted information from their tendering processes and suggested that this should take precedence over the submissions in

[278] Tab A5.1: Ofgem – RIIO-2 Final Determinations – Core Document (REVISED), paras 3.133 and 3.135, and Tab A5.7: Ofgem – RIIO-GD2 Final Determinations – Step-by-Step Guide to Cost Assessment.

[279] Tab A5.7: Ofgem – RIIO-GD2 Final Determinations – Step-by-Step Guide to Cost Assessment, paras 1.50 – 1.51.

[280] Tab A5.4: Ofgem – RIIO-2 Final Determinations – WWU Annex (REVISED), pp. 12 – 13, Tables 10 and 13.

[281] Tab A5.4: Ofgem – RIIO-2 Final Determinations – WWU Annex (REVISED), p. 12, Table 11. The approach to setting unit costs is outlined in Tab A5.7: Ofgem – RIIO-GD2 Final Determinations – Step-by-Step Guide to Cost Assessment, paras 1.79 – 1.87.

their Business Plans. Ofgem stated that, although it had considered this information as a relevant factor when determining whether its final cost allowances were appropriate in the round, it did not agree that the tender information should take precedence over the information in its detailed cost assessment process and had not therefore used it to set unit costs. It stated that to do so would have been inconsistent with its overall totex approach to modelling efficient costs, and that it did not have confidence that the information was comparable to that in the Business Plans as it had not gone through a formal assurance process.[282]

C7.7 The same rationale as for Tier 1 mains was adopted in relation to synthetic unit costs for Tier 1 services[283] with unit costs set as follows –

(a) Relay – £519 per service (where the service is replaced with a new PE pipe).

(b) Test and transfer – £327 per service (where the service is already a PE pipe and is transferred to the replacement main following testing).

C7.8 In relation to sparsity, the Final Determination adopted the position in the Draft Determination applying a pre-modelling sparsity adjustment to emergency and repair costs only.[284] It referenced WWU's comments that sparsity also leads to higher costs in other areas, including repex, and its points in relation to the shape of its network and access to quarries and mines. However, it went on to state that it considered acceptance of that point would be inappropriate given that other GDNs operate in sparse regions and may experience similar issues. It also stated that the analysis presented by WWU referred almost exclusively to its own operating environment without comparing unit costs with other GDNs, making it difficult to understand how the cost impact had been estimated.[285]

C7.9 The Final Determination went on to state that Ofgem would implement the approach outlined in the Draft Determination of applying a 13% adjustment to WWU's costs and scaling the sparsity indices of the other GDNs accordingly.[286]

C7.10 The other factors set out by WWU over the course of its previous submissions were not mentioned leading to a conclusion that they were not taken into account.

[282] Tab A5.1: Ofgem – RIIO-2 Final Determinations – Core Document (REVISED), para 2.128.

[283] Tab A5.1: Ofgem – RIIO-2 Final Determinations – Core Document (REVISED), para 2.138.

[284] Tab A5.1: Ofgem – RIIO-2 Final Determinations – Core Document (REVISED), para 3.71.

[285] Tab A5.1: Ofgem – RIIO-2 Final Determinations – Core Document (REVISED), para 3.76.

[286] Tab A5.1: Ofgem – RIIO-2 Final Determinations – Core Document (REVISED), para 3.77.

Tier 2A mains and services

C7.11 In its Final Determination Ofgem made no change to the volume driver that it has proposed in the Draft Determination in respect of Tier 2A mains and services.[287] It did, however, make some adjustments to its methodology for calculating ex ante unit costs.

Other repex

C7.12 Again, the Final Determination adopted the general approach proposed in the Draft Determination, albeit with less disaggregation in terms of cost categories. As noted above, WWU's proposed workloads for Tier 2B and Tier 3, which had been disallowed in the Draft Determination, were allowed in full.

C7.13 However, no separate unit costs were set out in relation to Tier 2B and Tier 3 repex work as they were for Tier 1 mains and services work.

C8 THE RESULT OF WWU'S TENDERING PROCESS AND THE DECISION TO INSOURCE

C8.1 WWU received the Best and Final Offers from its tendering process in December 2020, following publication of the Final Determination. Those results are set out in the T&T Report, which notes that the differences between those final bids and those received in August 2020 was marginal,[288] with the most competitive rate for each lot giving an average unit cost of £[✂] across all Tiers and diameters.[289]

C8.2 There was thus a [✂]% shortfall between the unit cost that the market was prepared to offer and the unit cost of £[✂] per metre allowed by Ofgem. As its allowances were insufficient to fund outsourcing of its repex work, WWU decided to try to work within the allowances provided by Ofgem by taking its repex work in-house.

C8.3 In his witness statement, WWU's Chief Operating Officer, Robert Long, describes the steps that WWU has taken in this regard.[290]

C8.4 The T&T Report sets out the methodology that WWU used to develop its internal cost model.[291]

[287] Tab A5.1: Ofgem – RIIO-2 Final Determinations – Core Document (REVISED), para 4.13.

[288] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report, Figure 4 and para 59.

[289] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report para 182.

[290] Tab H1: First Witness Statement of Robert Long, section 8.

[291] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report, sections 7 and 8, and Appendix 2.

C8.5 At a high level, this was made up of the following three elements[292] –

(a) The cost components identified in the Business Plan, comprising 43% of the total internal costs.[293]

(b) An internal resource model, comprising 39% of the total internal costs, which includes a Performance Management Framework (**PMF**).[294] The PMF is a relative measure of workforce productivity against set target times for completing certain tasks. It is through this mechanism that WWU's internal cost model takes account of the factors outlined in sections C3 and C4 which increase costs by increasing the time taken for a particular job, such as the use of open cut or working with ductile iron.

(c) Current and historic costs,[295] comprising 18% of the total internal costs, in relation to obligations under the New Roads and Street Works Act, logistics (general costs relating to the movement of labour and materials) and certain other heads of expenditure.

C8.6 Within its internal cost model, WWU has also sought to take account of the additional risk that it will be taking on through in-sourcing its repex work.

C8.7 The T&T Report sets out the summary of risk ownership under the Alliance contract, a standard outsourced model and an insourced model shown in Table C3 below.[296]

[292] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report, para 82.

[293] As originally set out in Tab A4.4: WWU – GDQ33C – RIIO-GD2 Mains Replacement Cost Model Overview, and discussed in Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report, paras 84 – 94.

[294] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report, paras 95 – 105.

[295] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report, paras 106 – 107.

[296] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report, Table 9, p. 30.

Table C3

	GD1	GD2		
	WWU/Contractor (Shared Alliance risk)	Outsourced delivery	Insourced Delivery	Where is this risk reflected in the internal costed model?
Ground risk	Alliance	Contractor	WWU*	Historic delivery at 73% PMF. Risk therefore included is based on previously experienced risk levels.
Weather risk	Alliance	Contractor	WWU*	
Design risk/benefits	Alliance	WWU	WWU*	
Accuracy of maps	Alliance	WWU	WWU*	
Unforeseen site issues	Alliance	WWU	WWU*	
Project planning	Alliance	Contractor	WWU	WWU back office management teams (asset management, design, planning) costed using current management structures.
Non-desirable projects	WWU	WWU	WWU	Business Plan workload is the basis for the Internal Bid workload and drives the majority of cost components. The characteristics of non-desirable projects (i.e. open cut, ductile Iron, large number of mains connections) has therefore been factored into the volume drivers.
Labour price increase/decrease	Alliance	Contractor	WWU	c.80% Direct Labour workforce, costed bottom up using the current cost of WWU Labour. Risk fluctuations mitigated as based on WWU pay structures multipled by number of heads required to deliver the work.
Labour availability	Alliance	Contractor	WWU	Newly recruited labour inefficiency built into the historic delivery within PMF. Wider WWU budget already agreed outside of Repex for apprentices.
Plant provision/damage/theft	Alliance	Contractor	WWU*	Historic cost of plant used, as per Business Plan cost components.
HSE, Policy Compliance	Alliance	Contractor	WWU	Internal delivery based on full compliance, as per historic delivery.
CDM	Alliance	Contractor	WWU	WWU experienced in being Principal under CDM. Included in underlying historic assumptions.
Excavation size	Alliance	Contractor	WWU*	Cost component methodology, as submitted in the Business Plan, used for backfill & spoil and reinstatement.
Logistics delivery	Alliance	WWU	WWU	Risks built into "bottom up" view of logistics fleet requirement which increases WWU's logistics fleet size to accommodate Mains Replacement into the existing WWU fleet size. Review undertaken by the WWU Logistics lead.
Pipe and Fittings delivery	WWU	WWU	WWU	WWU have always procured and provided the pipe and fittings service.

* Whilst we will have an internal delivery model with a larger internal delivery team, we will still be reliant on contractor organisations contracting directly to WWU in GD2 rather than through the Alliance as per GD1. Where WWU continue to use Contractors, some risk/reward will be backed off to them accordingly.

C8.8 Whereas risks were shared under the Alliance contract through the pain/gain mechanism, and some can be passed to the contractor in a fully outsourced model, all of the risk will lie with WWU when it brings the work in-house.

C8.9 The T&T Report finds that the internal build-up of WWU's internal cost model is robust, and the risks that it has sought to account for reasonable.[297]

C8.10 As a result of its internal cost modelling, WWU has calculated that it requires a blended rate of £[✂] per metre to undertake its mains replacement work in GD2 – £[✂][298] per metre less than the unit cost resulting from its tender exercise, but still [✂]% above the £[✂] per metre allowance granted by Ofgem in the Final Determination.

C8.11 The £[✂] figure is made up of a £[✂] per metre underlying cost of mains replacement to which is added an additional amount to take account of special crossings[299] and a number of cash spend items.[300]

[297] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report, paras 110, 126 – 128 and 143.

[298] The £[✂] per metre difference is based on an average year at £[✂] per metre per the internal delivery model which excludes the £[✂] transition cost in the first year.

[299] Special crossings are pipes which cross an obstacle below, above ground or within a structure, such as a river or a railway. These pipes may be constructed of iron, steel or polyethylene and pipes may have specific requirements above a normal pipe.

[300] Cash spend relates to short length diversions and finance leases.

C8.12 Table C4 sets out the resulting comparisons between costs requested and granted by Ofgem, and WWU's request from the CMA.

Table C4

[✂]

C9 THE ERRORS IN THE FINAL DETERMINATION WITH RESPECT TO REPEX

C9.1 The simple question that must be asked under this head of appeal is whether Ofgem has provided WWU with sufficient remuneration over the course of GD2 to undertake Tier 1 mains replacement work (which it is legally required to do in line with its Regulation 13A Programme) and Tier 2B and Tier 3 work which, by allowing the proposed workloads, Ofgem has recognised should be completed.

C9.2 It is clear that Ofgem has not done so. Its decision is therefore wrong.

C9.3 It is important to bear in mind that the context for repex work is safety – of WWU customers, WWU staff and the wider public, all of whom are at risk from failures in old metallic and badly maintained pipes. The consequences of such failures can be, and have been, fatal.

C9.4 It is no part of WWU's case to allege that Ofgem was wrong to use a top-down approach to costs modelling. Rather, in common with the points made earlier in this Notice of Appeal in relation to cost of debt, this head of appeal is concerned with errors which fall outside the scope of Ofgem's field of regulatory judgement.

C9.5 The consequence of these errors is that Ofgem's decision on mains replacement unit costs for Tier 1, Tier 2B and Tier 3 mains and services was fundamentally 'wrong', in both legal and policy terms, as the allowances provided do not allow WWU to undertake its mains replacement work.

C9.6 Although Ofgem is entitled to adopt a top-down approach to setting repex costs, such a model cannot be applied without checking that it would allow a GDN to be able to perform its activities. The model must be capable of taking into account factors that will serve to increase the repex costs of a particular company where there are good reasons to do so.

C9.7 Ofgem has set WWU's unit costs using data derived from WWU's own performance in GD1 and that of other companies. However, it failed to use the additional data which WWU has provided to perform a cross-check on the resulting allowances in order to ensure that they are actually sufficient for WWU.

C9.8 Such a cross-check is required as that additional data provides very clear evidence of the particular circumstances faced by WWU in GD1 and GD2 which mean that the cost of its repex work will be higher in the latter than the former. Those circumstances are set out in sections C3, C4 and C6 above.

C9.9 WWU undertook a robust tendering exercise with a view to continuing to outsource its mains replacement work in GD2. It provided the details of the resulting bids to Ofgem and asked for sufficient allowances to cover those external costs. However, notwithstanding this very clear market evidence, Ofgem failed to provide sufficient allowances to fund continued outsourcing.

C9.10 Therefore, following the Final Determination, WWU has attempted to work, as best it can, within the allowances provided by insourcing its repex work. However, although it has been able to bring its repex unit costs down by £[✂] per metre in comparison to outsourcing, Ofgem's allowances remain insufficient even where the work is insourced.

C9.11 This is unsurprising as –

(a) the factors that led to the increased cost of outsourcing repex work in GD2 apply also where the work is insourced, and

(b) by taking repex work in-house, WWU will be required to take on additional risk which has previously been borne by its suppliers.

C9.12 Ofgem's allowances were insufficient when the intention was to outsource repex work and they remain insufficient where the work is insourced. The results of both its tendering exercise and the build-up of its internal cost model have been shown to be robust.[301] Ofgem's decision on repex unit costs was wrong on the basis on which it was originally made and remains wrong even where WWU has attempted to work within it.

[301] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report, paras 69, 110, 126 – 128 and 143.

The factors leading to increased costs in GD2

C9.13 As outlined above, WWU made several submissions over the course of the price control in which it outlined the reasons why its repex costs will increase in GD2. Those factors included –

(a) increasing labour costs, from which WWU has been shielded during GD1 through the pain/gain mechanism in the Alliance contract now due to end in June 2021,

(b) the increasing use of the open cut technique during GD2,

(c) the increasing proportion of ductile iron pipes to be decommissioned during GD2, as well as the increased proportion of larger diameter pipes,

(d) the nature of the replacement schemes in GD2 (smaller and more diversified meaning they are less efficient), and

(e) the location of the repex work in GD2 at the extremities of the network, bringing in issues related to sparsity such as labour shortages, increased travel times, and increased quarry and tipping costs.

C9.14 The relevance and materiality of these factors is attested by both the external bids that were received in response to WWU's tendering exercise and the expert evidence that accompanies this Notice.

C9.15 The 2021 Oxera Report focuses on two specific factors, (i) upwards pressure in the labour market, and (ii) the effect of sparsity on repex costs.

C9.16 The report shows that wages in the energy sector have grown in 2020, despite being depressed in other sectors, and that energy wages in Wales and the South West have experienced higher growth than those in the UK energy sector as a whole.[302] As such, Ofgem's use of occupational data across all sectors, and across the UK as a whole, understates actual wage pressures in the gas sector in WWU's network area. The 2021 Oxera Report highlights that those pressures are not picked up through Ofgem's RPE indexation mechanism because Ofgem uses labour indices that do not reflect the developments in the

[302] Tab J1: Oxera – The impacts of labour market pressures and sparsity on Repex in the Wales & West Region, paras 3.10 – 3.12 and 3.23.

energy sector.[303] This means that *'Ofgem's approach erroneously uses the construction and private sector wage indices that do not capture actual labour cost input pressures'*.[304]

C9.17 Oxera draws attention to recruitment problems faced by WWU which also serve to increase wages in its region, including[305] –

(a) an older population than other areas making it more difficult to recruit workers,

(b) a skills shortage as compared to other regions, particularly in the utilities sector, and

(c) increased competition from other infrastructure projects and utilities that are paying above-market rates.

C9.18 In addition, Oxera illustrates that, outside the more densely populated Bristol region, the prices of bidders in WWU's tender process were higher in regions of greater sparsity.[306] Its analysis demonstrates that sparsity increases, it statistically significantly increases repex costs.

C9.19 As discussed above, Ofgem accepts that sparsity has real cost effects. It is right to do so given the clear evidence of such effects presented in the 2021 Oxera Report.[307] There are no reasonable grounds, either in law or in policy terms, for not taking account of the use of open cut, or the effects of sparsity beyond emergency and repair work.

C9.20 Oxera states that[308] –

> 'sparsity affects REPEX in much the same way as repair costs. For example, working in a sparse region would increase the number of depots required, each needing to be staffed and stocked with specialist equipment, and would also increase the cost of transporting materials. Indeed, the evidence confirms that sparsity does increase replacement costs (see section 3). Therefore, the lack of a sparsity adjustment in Ofgem's modelling is a clear omission and error that means that the true cost of replacement is not taken into account.'

[303] Tab J1: Oxera – The impacts of labour market pressures and sparsity on Repex in the Wales & West Region, paras 3.19 – 3.22.

[304] Tab J1: Oxera – The impacts of labour market pressures and sparsity on Repex in the Wales & West Region, p. 1.

[305] Tab J1: Oxera – The impacts of labour market pressures and sparsity on Repex in the Wales & West Region, para 3.17.

[306] Tab J1: Oxera – The impacts of labour market pressures and sparsity on Repex in the Wales & West Region, paras 3.34 – 3.37.

[307] Tab J1: Oxera – The impacts of labour market pressures and sparsity on Repex in the Wales & West Region, para 3.24 – 3.39.

[308] Tab J1: Oxera – The impacts of labour market pressures and sparsity on Repex in the Wales & West Region, para 2.14.

C9.21 Indeed, it is irrational to make an allowance for sparsity in relation to costs provided for emergencies and repairs but not repex costs. In circumstances where Ofgem has recognised the particular circumstances of WWU in relation to sparsity, the suggestion by Ofgem that it would be inappropriate to take those circumstances into account for repex costs because other operators may face similar issues does not stand up to scrutiny. If other networks face similar issues then the proper approach must be to investigate this and take account of it in settling their costs rather than simply disallowing any uplift to WWU.

C9.22 The 2021 Oxera Report states that Ofgem could have used its regional factors adjustment and the indices chosen to account for RPEs to take these factors into account.[309] It did not, and the effect of failing to take account of increasing labour pressures and sparsity leads to a £23m shortfall in the allowances provided by Ofgem for WWU's repex work.[310]

C9.23 The increasing labour market pressure, sparsity and the other factors identified to Ofgem led to the higher bids received by WWU in its tender exercise.

C9.24 The T&T Report finds that the tendering exercise was robust and produced reasonable prices.[311] It also finds that those prices reflect the external factors that WWU had identified to Ofgem above, as well as a shrinking supplier market which is more risk averse and selective in opportunities. The T&T Report is clear in its conclusion that Ofgem was therefore wrong to ignore that more up to date evidence in its Final Determination in preference for that submitted with the Business Plan.[312]

C9.25 By ignoring those specific cost pressures on WWU in GD2, Ofgem failed to take account of relevant information even where, in the cases of sparsity and the open cut technique, it accepted that those factors serve to increase costs. As outlined above, Ofgem's arguments as to why it should not take account of sparsity in relation to mains replacement where it does so in relation to emergency and repair work clearly do not stand up. The suggestion that sparsity impacts for repex are covered by other cost drivers, whereas separate provision is needed for the same impacts for emergency and repair, is factually incorrect, inconsistent and irrational. It is wrong both as a matter of policy and in public law.

C9.26 More broadly, sparsity and the other factors outlined by WWU are clearly relevant considerations in terms of setting allowances for repex work, and Ofgem's failure to take them

[309] Tab J1: Oxera – The impacts of labour market pressures and sparsity on Repex in the Wales & West Region, paras 2.9 – 2.11.

[310] Tab J1: Oxera – The impacts of labour market pressures and sparsity on Repex in the Wales & West Region, para 4.6.

[311] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report, para 69.

[312] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report, paras 76 – 77.

into account was both an error in public law and meant that its decision was wrong in policy terms.

C9.27 Those errors do not disappear because WWU will now insource its repex work as the factors that led to increased external prices will also increase costs internally. The same amount of open cut and ductile iron work will still need to be done during GD2, in the same parts of WWU's network, against a background of increased wages and labour shortages, no matter who employs the staff actually undertaking that work.

C9.28 Although WWU is able to reduce its costs to some extent by bringing the work in-house, these factors mean that it can only reduce them so far.

C9.29 Indeed, it will now be WWU rather than an external Prime Contractor, will take on the risks arising from those factors.

Increased risk from insourcing

C9.30 Aside from the actual costs of doing the work in light of the factors outlined above, WWU's allowances must also reflect the fact that by bringing the work in-house it will be taking on an increased level of risk. The risks that it will be taking on are set out in detail in section C8 above and the potential impact of doing so is thrown into sharp relief by the cost increases that its previous supplier was forced to bear under the Alliance contract as outlined in section C3 above.

C9.31 WWU will still contract out around 30% of its repex work to the smaller companies that acted as subcontractors of the main supplier under the Alliance contract.[313] However, it cannot pass the full weight of the relevant risks along to those smaller suppliers as they will be in no position to bear it.

C9.32 It would be wholly inappropriate for the allowance for WWU's repex work to simply take account of its base costs, therefore. It must include some provision to remunerate WWU for the increased risks that it will be subject to.

Conclusion

C9.33 Ofgem has not provided an allowance that would have allowed WWU to continue outsourcing its repex work and the basis on which that decision was made was wrong for the reasons set out above. For the same reasons, the allowance provided by Ofgem is insufficient to allow WWU to complete its repex work in-house. This is so even though WWU's internal delivery

[313] Tab I1: Turner & Townsend – WWU Mains Replacement Appeal – Expert Report, para 139.

model can deliver that work at £[✂] per metre less than the average cost of outsourcing, taking account of the increased risks it is taking on and the upfront cost of insourcing.

C9.34 Taking all of the above points together, the T&T Report analyses the building blocks through which WWU has built up the costs of its internal delivery model. It finds those internal costs to be robust.

C9.35 WWU acknowledges that other GDNs have insourced their repex work and may be able to undertake that work within the allowances that they have been allowed by Ofgem. However, no direct comparison can be drawn from such instances for two reasons. Firstly, other networks insourced their repex work during GD1 at a time when schemes could be tailored to reduce costs and the labour market was not constricted. Secondly, such a view would fail to take account of the company-specific factors faced by WWU which do not affect other GDNs, or which affect them differently, such as the nature of its network, labour issues, transport links and other sparsity issues.

C9.36 Having previously outsourced its repex work, and saved consumers a substantial amount of money through the Alliance contract, WWU cannot now be penalised for the fact that it struck a good deal in 2013 or because it is now forced by Ofgem to take the work in-house.

C9.37 It is clear that WWU has taken reasonable and proportionate decisions on matters within its own control, in order to ensure that its repex work is undertaken as efficiently as possible. However, the allowances provided by Ofgem are inadequate whether the work is outsourced or insourced.

C9.38 Ofgem's decision –

(a) is wrong in law, and

(b) fails to properly have regard, or give weight, to its principal objective and general duties.

C9.39 Ofgem's decision is wrong in law because Ofgem has not acted in accordance with the principles of public law by –

(a) acting inconsistently and irrationally in its treatment of sparsity, and

(b) failing to have regard, or give appropriate weight, to the range of relevant considerations outlined by WWU explaining why –

(i) its situation differs from that faced by other networks, and

(ii) its outperformance in GD1 cannot be replicated in GD2.

C9.40 The CMA has previously emphasised that regulatory discretion must be underpinned by robust and rigorous evidential analysis.[314] Ofgem's decision on WWU's repex allowances do not meet that threshold.

C9.41 In addition, Ofgem has failed to have regard, or give appropriate weight, to its principal objective and general duties. Ofgem's principal objective as set out in section 4AA(1) of the Gas Act is to protect the interests of existing and future consumers in relation to gas conveyed through pipes. Fundamentally, those interests must include the safety of consumers and the efficiency of the gas network, both of which are negatively impacted where WWU is rendered unable to undertake its mains replacement decommissioning programme and, in particular, its Tier 1 work.

C9.42 To the extent that Ofgem's PCD imposes an obligation on WWU to undertake a certain amount of Tier 1 mains replacement during GD2, Ofgem must have regard to the need to ensure that WWU can finance those activities, under section 4AA(2)(b). It is clear that, under the unit costs set, it cannot.

C9.43 More broadly, the importance of safety is made explicit in section 4AA(5), under which Ofgem is required to carry out its functions in the manner which it considers best calculated to protect customers from dangers arising from the supply or use of gas conveyed through pipes.

C9.44 Section 4AA(1A)(a) also makes clear that the environmental benefits of repex work form part of the interests of consumers. As set out above the replacement of metal pipes with PE serves to both ready the network for the possible future use of alternative fuels and also has the immediate benefit of reducing methane emissions by ensuring fewer leaks.

C9.45 Taken together, those duties highlight the particular importance of adequately remunerating mains replacement work which, for the reasons set out above, Ofgem has failed to do.

C9.46 It is clear that Ofgem's decision on repex cost allowances is wrong. That decision cannot be remedied through the simple addition of an uncertainty mechanism for repex alongside the allowances in the Final Determination as this would rob WWU of the benefit of outperforming its allowance that the other GDNs will have and would not encourage WWU to be efficient throughout the price control.

C9.47 Rather, the allowance itself must be increased.

[314] Tab M32: CMA - Northern Powergrid v the Gas and Electricity Markets Authority- Final Determination, paras 4.59 and 4.140.

C10 SUMMARY OF RELIEF SOUGHT

C10.1 The relief sought by WWU in respect of this head of appeal is set out below.

C10.2 WWU requests that the CMA grants the following relief to correct Ofgem's errors in respect of this head of appeal –

(a) quash Ofgem's decision to make licence modifications which set the unit costs for WWU's repex work at the levels reflected in the Final Determination; and

(b) substitute the CMA's decision for that of Ofgem with the effect of granting a blended unit rate for WWU's repex work of £[✂] per metre.

D. LICENCE CONDITIONS AND REVENUE UNCERTAINTY

D1 EXECUTIVE SUMMARY

D1.1 Ofgem has a statutory duty, as set out in section 4AA(2)(b) of the Gas Act, to have regard to the need to secure that WWU (as a licence holder) is able to finance the activities which are the subject of obligations imposed on it.

D1.2 Ofgem also has a duty, pursuant to section 4AA(5A) of the Gas Act, in carrying out its regulatory functions to have regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed.

D1.3 WWU submits that Ofgem has failed to have regard to these statutory duties with regard to the licence conditions which provide for –

(a) obligations (relating to price control matters) to be imposed on WWU under a wide range of different subsidiary documents; and

(b) for those subsidiary documents to be modified by Ofgem by direction at any time during the RIIO-GD2 period.

D1.4 As at the date of this Notice of Appeal, WWU does not know the full extent of the obligations it will be under and the legal requirements with which it must comply during the period of the RIIO-GD2 price control. This is by virtue of the fact that not only is WWU's regulated business to be subject to subsidiary documents which have not yet been fully disclosed to the licensees but also subject to such documents being changed at any time by Ofgem by direction.

D1.5 Accordingly, Ofgem has failed to discharge its financing duty and its duty in respect of better regulation, in particular to be transparent, accountable, proportionate, consistent and targeted.

D1.6 Ofgem is essentially proposing that WWU accepts a price control package in respect of which it has no clarity or certainty as to the requirements to which it is or might be subject or to the regulated revenue that it would be entitled to recover in consequence of costs incurred in complying with the said requirements.

D1.7 The lack of transparency and clarity is not proportionate, nor is it consistent with the rating agencies methodologies for awarding the regulatory regime in the UK the highest rating for stability and certainty.

D1.8 This level of uncertainty and the manner in which the subsidiary documents can be changed during the licence control period has a significant impact on WWU and could result in WWU incurring costs for which it is not remunerated under the allowed revenue. The effect of this is that there is revenue uncertainty.

D2 OVERVIEW

D2.1 This head of appeal concerns the policy decision taken (with minimal consultation and explanation) by Ofgem, and implemented through the modifications to the price control licence conditions, to adopt an approach under which significant and key aspects of the RIIO-GD2 price control are to be set out in a large number of subsidiary documents, the significant majority of which are, irrespective of the nature or scope of the amendment, subject to unilateral amendment by Ofgem by the giving of a direction.

D2.2 The level and extent to which Ofgem has reserved to itself a unilateral right to change WWU's overall price control package for RIIO-GD2 through amendments to provisions set out in subsidiary documents is unprecedented.

D2.3 It also goes way beyond any acceptable level of 'within period' amendment that could otherwise be considered appropriate for the purposes of building in some flexibility for managing uncertainty and/or responding to changed circumstances and has the potential to have a material impact on WWU's ability to finance its activities.

D2.4 To date, the price control regulatory framework has, rightly, been designed to provide a level of transparency, clarity, stability, and certainty for WWU as to its permitted revenues for the applicable price control period.

D2.5 In respect of the RIIO-GD2 price control framework, Ofgem has departed from this well established and best regulatory practice through the extensive use of subsidiary documents which can be unilaterally amended by Ofgem at any time.

D2.6 In adopting its policy position in relation to subsidiary documents, Ofgem has failed to have proper regard or give sufficient weight to the fact that such an approach serves only to create considerable levels of uncertainty and regulatory risk for licensees, including WWU.

D2.7 In turn this means that Ofgem has also failed to have proper regard or give appropriate weight to the material impact its approach can have on investor confidence, licensees' credit ratings and consequently on WWU's financeability.

D2.8 Ofgem's approach leaves wide open the very real possibility that gas network licensees, including WWU, could be required to incur additional costs during the period of the price control by virtue of new or amended obligations imposed under, and through changes made to, the subsidiary documents. Ofgem has not offset this risk by allowing for corresponding changes to be made to the licensee's allowed regulated revenue.

D2.9 It is WWU's position that, in adopting this approach, Ofgem has failed to have proper regard to –

(a) the performance of its statutory duty, as set out in section 4AA(2)(b) of the Gas Act, as to the need to secure that WWU (as a licence holder) is able to finance the activities which are the subject of obligations imposed on it;

(b) the 'better regulation' principles set out in section 4AA(5A)(a) of the Gas Act, namely that regulatory activities should be transparent, accountable, proportionate, consistent and targeted; and

(c) other regulatory best practice in accordance with section 4AA(5A)(b) of the Gas Act.

D2.10 In addition, given that important and substantial components of the RIIO-GD2 price control are to be set out in such subsidiary documents, it is WWU's position that the RIIO-GD2 licence modifications fail to achieve, in whole or in part, the effect that is stated by Ofgem in the notice published under section 23(7)(b) of the Gas Act.

D2.11 WWU relies for these purposes on the analysis carried out by KPMG and set out in their expert report 'Analysis of use of subsidiary documents in RIIO-2: A report for Wales and West Utilities' (the **KPMG Report**).[315]

D2.12 The purpose of the statement of facts and grounds below is to explain to the CMA how and why Ofgem is wrong to adopt the approach it has in respect of the licence modifications relating to subsidiary documents and to highlight the remedial actions that WWU invites the CMA to take.

D2.13 The CMA is invited to read this statement of grounds and facts alongside the KPMG Report, which sets out some key findings on the importance of regulatory transparency and stability.

[315] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU).

D3 THE SUBSIDIARY DOCUMENTS

D3.1 Within the suite of the price control licence modifications, Ofgem has in essence created two categories of subsidiary documents that are to constitute an integral part of the RIIO-GD2 price control framework.

Associated Documents

D3.2 The first category is those documents which are generically referred to by Ofgem as 'Associated Documents'.

D3.3 Ofgem describes Associated Documents as –

> '…documents created under the licence conditions that supplement those conditions and are subordinate to them. They are important for licensees…as they provide information, requirements and guidance…' [316]

D3.4 The reference to the documents being 'subordinate' to licence conditions is explained as meaning that they do not have the same status as licence conditions. However, the only difference in status between a licence condition and an Associated Document is in respect of the way in which they can be modified.

D3.5 Ofgem's legal definition of Associated Document is –

> 'a document issued and amended by the Authority by direction in accordance with the special conditions of this licence and any reference to an Associated Document is to that document as amended from time to time unless otherwise specified'[317].

D3.6 Each of the following special conditions of the licence enable Ofgem to issue and amend a document by direction –

(a) Standard Special Condition A40 (Regulatory Instructions and Guidance) – under which Ofgem will issue and amend **RIGs**.[318]

(b) Standard Special Condition A55 (Data Assurance Requirements) – under which Ofgem will issue and amend **Data Assurance Guidance**.[319]

[316] Tab A6.1: Ofgem - RIIO-2 Informal Licence Drafting Consultation, para 3.1.

[317] Tab A9.3: Ofgem – RIIO-2 Licence Conditions – WWU Special Conditions, Special Condition 1.1 Interpretation and definitions

[318] Not published in any form by Ofgem as at the date of this Notice of Appeal.

[319] Not published in any form by Ofgem as at the date of this Notice of Appeal.

(c) Standard Special Condition A57 (Exit Capacity Planning) – under which Ofgem will issue and amend **ECP Guidance**.[320]

(d) Standard Special Condition D21 (Treating Domestic Customers Fairly) – under which Ofgem will issue and amend **Fair Treatment Guidance**.[321]

(e) Special Condition 3.1 (Baseline Network Risk Outputs ($NARM_t$)) – under which Ofgem will issue and amend –

(i) the **Network Asset Risk Workbook**; [322]

(ii) the **NARM Handbook**.[323]

(f) Special Condition 3.5 (Net Zero and Re-opener Development Fund use it or lose it allowance) – under which Ofgem will issue and amend the **Net Zero And Re-opener Development Fund Governance Document**.[324]

(g) Special Condition 3.9 (Net Zero Pre-Construction Work and Small Net Zero Projects Re-opener (NZP_t)) – under which Ofgem will issue and amend the **Net Zero Pre-Construction Work and Small Net Zero Projects Re-opener Governance Document**.[325]

(h) Special Condition 3.14 (Fuel Poor Network Extension Scheme volume driver) - under which Ofgem will issue and amend the **FPNES Governance Document**.[326]

(i) Special Condition 5.2 (RIIO-2 network innovation allowance) - under which Ofgem will issue and amend the **RIIO-2 NIA Governance Document**.[327]

[320] Tab A8.1: Ofgem – Draft RIIO-2 ECP Guidance (Draft).

[321] Not published in any form by Ofgem as at the date of this Notice of Appeal.

[322] Tab A8.2: Ofgem – Letter re Consultation on issuing the Network Asset Risk Workbooks and Network Asset Risk Metric Handbook (Draft).

[323] Tab A8.3: Ofgem – NARM Handbook (Draft).

[324] Tab A8.4: Ofgem – Net Zero and Re-opener Development UIOLI Allowance Governance Document (Draft).

[325] Tab A8.5: Ofgem – Net Zero Pre-construction Work and Small Net Zero Projects Re-opener Governance Document (Draft)

[326] Tab A8.6: Ofgem – The Fuel Poor Network Extension Scheme (FPNES) Governance Document (Final).

[327] Tab A8.7: Ofgem – RIIO-2 NIA Governance Document (Final).

(j) Special Condition 5.4 (Vulnerability and carbon monoxide allowance) – under which Ofgem will issue and amend the **VCMA Governance Document**.[328]

(k) Special Condition 8.2 (Annual Iteration Process for the GD2 Price Control Financial Model) – under which Ofgem will issue and amend **PCFM Guidance**.[329]

(l) Special Condition 9.1 (Annual Environment Report) – under which Ofgem will issue and amend **Environmental Reporting Guidance**.[330]

(m) Special Condition 9.3 (Price Control Deliverable Reporting Requirements and Methodology Document) – under which Ofgem will issue and amend the **PCD Reporting Requirements and Methodology Document**. [331]

(n) Special Condition 9.4 (Re-opener Guidance and Application Requirements Document) – under which Ofgem will issue and amend the **Re-opener Guidance and Application Requirements Document**.[332]

(o) Special Condition 9.5 (Digitalisation) – under which Ofgem will issue and amend –

(i) the **DSAP Guidance**;[333]

(ii) the **Data Best Practice Guidance**.[334]

D3.7 It is clearly evident from the list set out above that Ofgem has created a substantial number of Associated Documents and that these documents relate to important constituent elements of the RIIO-GD2 price control package and/or place particular obligations on WWU in respect of the RIIO-GD2 price control. Moreover, all but three of the above documents are new documents forming part of the price control framework.

D3.8 It is also relevant to highlight that although Ofgem has labelled some of the documents as 'guidance' documents, this is a complete misnomer. It is not Ofgem's intention that such documents constitute guidance – which by its very nature is not legally binding.

[328] Tab A8.8: Ofgem - Gas Network Vulnerability and Carbon Monoxide Allowance (VCMA) Governance Document (Final).

[329] Not published in any form by Ofgem as at the date of this Notice of Appeal.

[330] Tab A8.9: - Ofgem - Environmental Reporting Guidance (Final).

[331] Tab A8.10: Ofgem - Price Control Deliverable Reporting Requirements and Methodology Document (Version 1) (Final).

[332] Tab A8.11: Ofgem - RIIO-2 Re-opener Guidance and Application Requirements Document (Version 1) (Final).

[333] Not published in any form by Ofgem as at the date of this Notice of Appeal.

[334] Not published in any form by Ofgem as at the date of this Notice of Appeal.

D3.9 Rather, Ofgem's intention is that the subsidiary documents have a legally binding effect - as all licensees, including WWU, are required to comply with the relevant document by virtue of the relevant Special Condition (of the licence) under which it is issued.

D3.10 By way of example, see paragraph 8.2.18 of Special Condition 8.2 (Annual Iteration Process for the GD2 Price Control Financial Model) which reads –

> '8.2.18 The Licensee must comply with the PCFM Guidance when completing the Annual Iteration Process.'

D3.11 In this context, all of the Associated Documents have the same status as licence conditions because WWU has an obligation to comply with them and non-compliance can be subject to enforcement by Ofgem.

D3.12 Unlike licence conditions however, the documents can be amended by Ofgem on a unilateral basis at any time – and therefore without any of the safeguards that are available for licensees in respect of licence modifications, including for example an appeal to the CMA.

D3.13 In adopting this policy approach, i.e. to place key elements of the price control framework in subsidiary documents, Ofgem has effectively given itself absolute discretion to change the framework and WWU's rights and obligations in relation to changes to the framework.

D3.14 To help illustrate the impact of Ofgem's policy approach, the KPMG Report provides an outline of Ofgem's proposals and the potential impacts on WWU's business and on financial performance, in respect of three particular areas (used as examples only) of the price control and the relevant subsidiary document.[335]

Price Control Financial Instruments

D3.15 The second category of subsidiary documents are the documents which are collectively referred to as the GD2 Price Control Financial Instruments.

D3.16 The GD2 Price Control Financial Instruments are comprised of –

(a) the **GD2 Price Control Financial Handbook**;[336] and

(b) the **GD2 Price Control Financial Model**,[337]

[335] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU), pp. 6 to 8.

[336] Tab A8.12: Ofgem – GD2 Price Control Financial Model (Final).

[337] Tab A8.13: Ofgem – GD2 Price Control Financial Handbook (Final).

which are 'established' under special condition 8.1 (Governance of the GD2 Price Control Financial Instruments) of the licence.

D3.17 Taken together these two subsidiary documents constitute a central and fundamental part of the RIIO-GD2 price control framework. They contain the rules and processes and the methodology (the model) that will be used to determine the value of Allowed Revenue - the amount that WWU is effectively entitled to recover through its network charges and therefore the constituent and fundamental element of the price control.

D3.18 It is evident that Ofgem accepts that these documents form an intrinsic part of the RIIO-GD2 price control framework given that they form part of special condition 8.1 and are subject to a different change procedure than Associated Documents – see paragraphs D4.11 to D4.15 below.

D3.19 It is WWU's case that there is no rationale for the Associated Documents to be treated differently from the Price Control Financial Instruments, nor has Ofgem proposed any such rationale for different treatment. Both sets of documents are intended to give rise to legal compliance and failure to comply could give rise to enforcement action by Ofgem. It is WWU's case that they should be treated in the same way with respect to certainty and modifications.

D4 OFGEM'S APPROACH – LACK OF CLARITY AND UNCERTAINTY

D4.1 WWU accepts that Ofgem can, by virtue of section 7B(7) of the Gas Act, include licence conditions which contain provision for those conditions to –

(a) have effect or cease to have effect at such times and in such circumstances as may be determined by or under the conditions; or

(b) be modified in such manner as may be specified in the conditions at such times and in such circumstances as may be so determined.

D4.2 Accordingly, WWU acknowledges that it may be appropriate for certain obligations and/or provisions to be set out in subsidiary documents.

D4.3 Such an approach might be suitable where, for example, it is necessary and/or helpful for all market participants to follow certain processes and procedures on an industry wide basis or where flexibility may be needed in order to respond to wider government policy or initiatives

D4.4 However, in the context of implementing a periodic regulatory price control, where it is important to provide regulatory certainty and stability, the use of subsidiary documents should be proportionate and targeted.

D4.5 WWU draws the CMA's attention to the KPMG Report which verifies that –

> 'The research presented in this report demonstrates that many of the principles of regulation in the UK and investor expectations of the regulated sector is based on transparency and an element of stability/predictability which allows the management of risk that can arise from an unspecified regulatory obligation.'[338]

Associated Documents

D4.6 As noted earlier almost all of the Associated Documents listed at paragraph D3.6 are new documents which are being introduced to form part of the price control framework for the first time.

D4.7 The only exceptions are –

(a) Regulatory Instructions and Guidance (RIGs);

(b) Data Assurance Guidance; and

(c) NIA Governance Document,

where corresponding documents, issued by Ofgem, form part of the current (GD1) price control framework.

D4.8 It can be observed from the above that Ofgem is proposing a significant increase in the number of subsidiary documents which will form part of the RIIO-GD2 price control framework which is neither proportionate nor can it be considered to be targeted.

D4.9 WWU's concern is that this level of increase is clear evidence of Ofgem aiming to afford itself complete unreasonable and disproportionate discretion to first establish, and thereafter change, certain parameters affecting the scope, extent and nature of the price control set out in the price control conditions.

D4.10 WWU is particularly concerned that Ofgem's approach fails to have proper regard in affording itself these powers to the impact it could have on investor confidence, credit rating direction, and financeability.

[338] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU), p.4.

Price Control Financial Instruments

D4.11 While the Price Control Financial Instruments are not new documents in that they also exist within the GD1 price control framework, the scope and remit of the two documents in terms of how they could be amended in GD1 and how Ofgem is proposing they can be amended in RIIO-GD2 is not equivalent or similar in all respects. This is clearly demonstrated in the licence condition modifications which have been proposed as part of the implementation of RIIO-GD2.

D4.12 Whereas Ofgem can make any type of amendment to an Associated Document simply by giving a direction, in relation to the Price Control Financial Instruments only those changes which Ofgem considers would not be likely to have a significant impact on WWU, other energy licence holders or energy consumers, can be made by direction.

D4.13 Otherwise, the change can only be made in accordance with the statutory licence modification procedure set out in section 23 of the Gas Act. There is also a presumption that a change which serves to correct a manifest error will not have a significant impact.

D4.14 However, there is a subtle yet fundamental difference between the RIIO-GD1 licence condition[339] and the RIIO-GD2 licence condition[340] which not only leads to an erosion of licensees' current rights but also adds to and compounds the uncertainty and regulatory risk arising from the approach Ofgem is adopting with regard to subsidiary documents.

D4.15 The RIIO-GD1 licence condition enables WWU to demonstrate (in representations made to Ofgem) that it reasonably considers that a proposed change would be likely to have a significant impact and where it does so, the change cannot then be made by direction but can only be made under the statutory licence modification procedure in compliance with the statutory provisions. This is not replicated in the equivalent RIIO-GD2 licence condition. Similarly, the presumption that a change to correct a manifest error will not have a significant impact can be rebutted in the same way under the GD1 provisions but not under the RIIO-GD2 provisions.

D4.16 Ofgem has not given any clear explanation for its change of approach in relation to the modification process for the Price Control Financial Instruments.

[339] Tab M25: Ofgem - Special Condition 2A of the WWU licence (in effect prior to 1 April 2021).

[340] Tab A9.3: RIIO-2 Licence Conditions: WWU Special Conditions, Special Condition 8.2.

D4.17 WWU notes that in giving the reasons and effect of its proposed changes to the Price Control Financial Instruments, Ofgem merely states –

> 'The second reason for the changes is to amend the self-modification process…to reflect that as an independent regulator we should be determining whether to use the self-modification process after considering all relevant evidence.' [341]

D4.18 This statement provides no clear or rationale justification for the changed approach and does not evidence that Ofgem has had proper regard to all the material facts or given due weight to the impacts that this would have on investor sentiment.

D4.19 Moreover, Ofgem has failed to have proper regard to the level of additional uncertainty it has created within the price control framework by introducing a third subsidiary document (within the category of Associated Document) into the mix, namely the PCFM Guidance[342].

D4.20 Ofgem has not yet published a draft form of the PCFM Guidance and has therefore failed to have regard to the need to be transparent about its use and purpose. WWU does not presently therefore have any information as to the likely content of this new subsidiary document.

D4.21 Moreover, Ofgem has not given any reason for the need to introduce such a third subsidiary document – and particularly one which is not subject to the same modification process as the Price Control Financial Instruments – into the mix.

D4.22 Ofgem states that one of the reasons for modifications in special condition 8.1 is –

> 'to introduce the PCFM Guidance as a new Associated Document, for the reasons discussed in the previous condition.' [343]

D4.23 But no reasons are given for the introduction of the PCFM in the 'previous condition'. The only reference to the PCFM Guidance in the 'previous condition' is to say that some of the Variable Value Methodologies from the PCFM Handbook are to be included in the PCFM Guidance. There is no explanation as to why such a change is required.

D4.24 In essence, as provided for in paragraphs 8.2.4 and 8.2.8 of Special Condition 8.2 (Annual Iteration Process for the GD2 Price Control Financial Model), Ofgem has erroneously given

[341] Tab A6.1: Ofgem – RIIO-2 Informal Licence Drafting Consultation, paragraph 4.37 and Tab A9.2: Ofgem – RIIO-2 Statutory Licence Modification Reason and Effects.

[342] Tab A9.3: RIIO-2 Licence Conditions: WWU Special Conditions, Special Condition 8.2.

[343] Tab A9.2: Ofgem – RIIO-2 Statutory Licence Modification Reason and Effects, para 2.10.

itself the latitude for both the PCFM Guidance and the PCFM Handbook to include certain requirements as to the calculation of one or more PCFM Variable Values[344].

D4.25 That this is intentional is confirmed by Ofgem –

> 'The purpose of [special condition 8.1] is to establish the change control framework for the…Price Control Financial Instruments.
>
> The first reason for the changes is to remove some of the Variable Value Methodologies from the handbook and include them elsewhere, either within the licence or within the PCFM Guidance (see next condition discussed).'[345]

D4.26 That there is the potential for overlap and/or duplication between the Price Control Financial Model and the PCFM Guidance creates even greater uncertainty as to the likely scope and content of the PCFM Guidance and the potential for conflicting provisions.

D4.27 WWU also has an additional concern, given the difference in the 'status' of these documents in terms of the proposed constraints (albeit, as highlighted above, diluted constraints in comparison with the current position) on Ofgem in respect of the amendments that can be made by direction to the Price Control Financial Handbook.

D4.28 By introducing a further subsidiary document into the mix of 'price control financial documents' Ofgem has essentially created an avenue through which it can avoid and by pass these constraints.

D4.29 Thus in circumstances where Ofgem would otherwise be looking to make a significant change to the Price Control Financial Handbook and thereby be required to use the statutory modification process under section 23 of the Gas Act, there is the possibility that Ofgem could seek to circumvent the statutory modification process and instead introduce the change through a unilateral amendment to the PCFM Guidance.

Material effect of Ofgem's Approach

D4.30 The overall and cumulative effect of Ofgem's approach to place key aspects of the price control package in an increasing number of subsidiary documents is that the price control licence modifications fail to –

[344] These are the values in the table of that name in the GD2 Price Control Financial Model.

[345] Tab A9.2: Ofgem – RIIO-2 Statutory Licence Modification Reason and Effects, paras 2.5 and 2.6.

(a) provide clarity and certainty for the regulated company as to the recoverability of efficiently incurred costs;

(b) have regard to the need to secure that the regulated company is in a position to finance the activities which it is obliged to undertake.

D4.31 The lack of clarity and certainty consequential from Ofgem's approach in relation to subsidiary documents is not only and solely a concern in terms of the forward looking position, i.e. because Ofgem would have a very wide discretion to modify unilaterally the subsidiary documents at any point during the price control period direct, it applies also from the outset of the application of the RIIO-GD2 price control.

D4.32 In this regard, only a handful of the Associated Documents are, as at the date of this Notice of Appeal, in their final form. Others have been published by Ofgem in their draft form - but in some cases after rather than alongside or prior to the statutory consultation on the licence modifications. Some others, including for example the PCFM Guidance and the Fair Treatment Guidance, are not going to be issued until after the licence modifications are scheduled to take effect.

D4.33 Additionally, while in some cases the licence condition under which Ofgem proposes to issue and amend the subsidiary document provides certain information as to the likely scope of the document, this is not the case for all of the subsidiary documents.

D4.34 To illustrate this point, special condition 3.1 provides for Ofgem to issue, and subsequently amend by direction, the Network Asset Risk Workbook and the NARM Handbook. However, it does not provide any further information as to the scope, content or purpose of either of these Associated Documents.

D4.35 Even in those cases where the licence condition does outline the likely scope of the subsidiary document, the drafting confirms and clarifies that the outlined scope is not exhaustive. The relevant document could therefore include, either at the outset or subsequently through Ofgem's amendments, provisions relating to matters which are not referred to in the licence condition and which have not been priced or allowed for in the RIIO-GD2 price control.

D4.36 There are different levels of uncertainty inherent in Ofgem's approach in relation to some of the subsidiary documents.

D4.37 So, for example, if we consider the Re-opener Guidance and Applications Requirements Document (special condition 9.4) which is fundamental for any re-opener applications that WWU may make under the licence, there is –

(a) uncertainty about whether more detailed specific requirements will be published for different re-openers at some point. In this respect, paragraph 4.8 of the final form of that document states that '*specific requirements with regard to the structure of specific re-opener applications may be provided in individual appendices for specific Re-openers*'; and

(b) uncertainty in respect of the process that Ofgem will use in assessing re-openers (WWU notes that an earlier draft included a non-binding annex which described the process but this has been deleted from the final version of the document published on 26 February 2021).

D4.38 This in turn means that the requirements for specific re-opener applications and the process by which they will be assessed is currently unclear and will remain uncertain as Ofgem can amend Re-opener Guidance and Applications Requirements Document by direction.

D4.39 As at the date of this Notice of Appeal, WWU therefore does not know the full extent of the obligations it will be under and the legal requirements with which it must comply during the next price control.

D4.40 Ofgem is therefore essentially proposing that WWU accepts a price control package in respect of which it has no clarity or certainty as to the requirements to which it is or might be subject or to the regulated revenue that it would be entitled to recover in consequence of costs incurred in complying with the said requirements.

D4.41 Given the number of subsidiary documents and the breadth of the areas which they cover, it is difficult to quantify the costs that WWU may be required to incur in order to comply with any changes that are made by Ofgem to the subsidiary documents during the period of the RIIO-GD2 price control.

D4.42 That this is the case is itself evident of the regulatory risk and uncertainty that is inherent in Ofgem's adopted position.

D4.43 Nevertheless, in light of the number and breadth of the subsidiary documents, it is possible that, in aggregate, the costs that may need to be incurred by WWU could run into many millions of pounds in each regulatory year.

D4.44 This is supported by the analysis in Section 2 of the KPMG Report – whereby WWU and KPMG have, in relation to three example areas, considered the potential range of different outcomes based on different levels of additional requirements.

D4.45 The analysis is based on quantification of costs based on a low cost, medium cost, and high cost scenarios. Taking only these three example areas, in the low cost scenario the ongoing

costs needing to be incurred by WWU could be as much as £510,000 per regulatory year plus one-off costs of £800,000, in the medium cost scenario they could be as much as £2.2 million per regulatory year with one-off costs of £400,000 and in the high cost scenario they could be as much as £4.2 million per regulatory year with one-off costs of £2.4 million.[346]

D4.46 Over the full RIIO-GD2 period the additional costs of compliance in respect of the three example areas alone could potentially be as much as £23.4 million. Across all of the areas falling within the remit of the subsidiary documents, the additional costs of compliance could therefore be much higher.

D4.47 In its final determination on the regulatory appeal by SONI Limited - the last regulatory appeal relating to energy network price control determined by the CMA – the CMA, consistent with other CMA and CC decisions, confirmed that –

> '…an error will not be a material error where it only has an insignificant or negligible impact in relative terms on the overall price control that has been set by the regulator.'[347]

D4.48 It is undeniable that Ofgem's error is not one which could only have an insignificant or negligible impact on the overall level of WWU's price control for RIIO-GD2. Accordingly, it is a material error.

D5 OFGEM'S APPROACH – SUBSTANTIALLY INCREASED REGULATORY RISK

D5.1 Ofgem has failed to have proper regard to or give sufficient weight to the impact that this lack of clarity and certainty inherent in Ofgem's approach has on regulatory risk for WWU, its investors and the credit rating agencies. This includes both currently and over the RIIO-GD2 price control period.

D5.2 The current risk arises from each of the following points –

(a) Not all of the subsidiary documents are yet published in even their draft form. Therefore, WWU has limited knowledge of the type of obligations and requirements with which it would need to comply even assuming no changes were to be made throughout the price control period.

[346] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU), p. 8.

[347] Tab M17: CMA - SONI Limited v Northern Ireland Authority for Utility Regulation – Final determination, para 3.39

(b) Most of the other subsidiary documents that have been published continue to be in their draft form and may therefore change before being formally issued by Ofgem under the relevant licence condition.

(c) All subsidiary documents are subject to unilateral change by Ofgem by direction and therefore likely to be changed after the date the price control licence modifications are scheduled to take effect.

(d) WWU cannot therefore assess whether appropriate funding is or will be allowed in order it to comply with these unknown obligations.

(e) Where consultations are being undertaken by Ofgem on the subsidiary documents, they are taking place on a piecemeal basis.

(f) None of the reporting specifications have yet been made available which means that WWU is needing to make preparations to enable compliance on the basis of informal discussions only which could end up needing to be aborted causing WWU to incur wasted or inefficient costs.

D5.3 The ongoing risk arises from the fact that Ofgem has systematically and intentionally afforded itself the power to unilaterally change any of the subsidiary documents at any time by direction, following what is essentially limited consultation with relevant licence holders.

D5.4 Given the number of subsidiary documents that are to form part of the price control framework, WWU considers there is a real likelihood that going forward Ofgem will –

(a) amend the scope or nature of some of the requirements and obligations set out in the subsidiary document as it was initially issued by Ofgem;

(b) introduce new and additional requirements and obligations;

(c) amend certain aspects of the model and methodologies that are used for calculating regulated revenue (and the associated values);

(d) introduce and amend certain criteria for funding of certain projects and/or amend the category of projects for which funding is applicable.

D5.5 To give some practical examples of the potential impact of Ofgem's approach to adopt a price control which is governed by subsidiary documents that can be changed at will by Ofgem, WWU could be put in a position whereby it needed to –

(a) design and implement new processes to capture data to meet revised reporting requirements;

(b) introduce new assurance, governance and independent verification process for the purposes of meeting reporting requirements;

(c) make changes to the way in which it procures services through the supply chain in order to meet Ofgem's requirements;

(d) deliver different objectives than those originally specified and to a different timescale than initially required; and/or

(e) honour contracts entered into with third parties on the basis of requirements and obligations which are no longer applicable.

D5.6 The regulatory risk arising from Ofgem's ability to make unilateral changes to the price control framework can also have a dampening effect on incentive frameworks and regimes.

D5.7 A real world example of how a unilateral change by Ofgem can ultimately play out and have a detrimental effect on a licensee's revenues relates to the Non Gas Fuel Poor Network Extensions Scheme (the **Scheme**) applicable in GD1 to WWU (and other gas distribution licensees).

D5.8 The purpose of the Scheme is to incentivise the licensee to extend its distribution network to premises not previously connected to that network that are occupied by individuals eligible to receive a fuel poor voucher ('qualifying premises'). Gas distribution licensee were therefore set connection targets for such premises. The operation of the Scheme was subject to review by Ofgem and following such a review Ofgem had the power (given to itself under the relevant licence condition[348]) to decide whether it should continue with modifications, continue without modifications, or cease.

D5.9 In its original and initial form, the Scheme criteria provided that a premises was a qualifying premises if it was in one of the 25% most deprived areas, as measured by the government's Index of Multiple Deprivation. The effect of this was that all premises in a particular road/street met the criteria for being a qualifying premises. However, following its review Ofgem removed this aspect of the Scheme criteria which meant that each premises had to be assessed individually for the purposes of whether it was a qualifying premises. Ofgem did not however change the licensee's connection targets to reflect the change in criteria.

[348] Special condition 3F of the WWU licence prior to 1 April 2021.

D5.10 The unilateral 'within period' change made by Ofgem to the Scheme has had an adverse impact on WWU and serves as an example of how process changes can have an effect on costs and/or allowances.

D5.11 Another example relates to Ofgem's approach to tax clawback - as more fully explained in Section F below.

D5.12 In this case, Ofgem is giving, in WWU's view, an erroneous interpretation to a definition in the GD1 Price Control Financial Model - which feeds through into the application of the GD2 Price Control Financial Model and will, if Ofgem persists with its erroneous interpretation, have a significant financial impact on WWU in the GD2 price control period.

D5.13 This case provides a clear illustration of how the level of revenue that can be recovered by WWU can ride on definitions (or other provisions) included in subsidiary documents and the importance for there to be absolute clarity on the scope and interpretation and on the rights and obligations of licensees with regard to such documents.

D5.14 Regulatory risk arising from the regulatory governance of the price control framework can be managed by licensees where the number of subsidiary documents is limited and/or where the scope of such subsidiary documents or the scope of the change is limited essentially to process and procedural matters which do not incur significant costs and/or provide certainty as to revenue recovery.

D5.15 But it becomes very difficult and almost impossible to manage where a significantly greater part of the price control framework is to be governed by and/or set out in subsidiary documents which are subject to change at any time and in any respect with limited ability to contest the change or to be awarded additional costs for accommodating the amendments.

D5.16 It is widely acknowledged and accepted that regulatory measures should provide a sufficient degree of certainty and avoid creating additional regulatory burdens without recompense that recognise the additional costs of compliance.

Previous CMA Decisions

D5.17 The CMA has previously determined that it is wrong in principle for a price control framework to result in lack of clarity and uncertainty for the licensee.

D5.18 The undesirability of uncertainty and risk resulting from the possibility of changes being made (to the applicable price control) within-period was very recently discussed by the CMA in its final report on the NATS reference[349].

D5.19 In this respect, the CMA noted the following –

> '...the scope of ex-post RAB disallowances inevitably creates a degree of uncertainty that can have adverse effects on investment incentives. This implies that particular care is typically merited when [such] arrangements are being developed or modified.'[350]

> 'In line with our provisional findings, we consider that the CAA RP3 Decision implied that the basis upon which the CAA would consider RAB disallowances following ex-post efficiency reviews had changed materially, but that the CAA had not codified the basis upon which it may apply a RAB disallowance to a sufficient degree, or in a sufficiently constrained manner.'[351]

> 'While we recognise that some scope for adjustments to be made within the price control period may be desirable, we would expect such adjustments to be limited to minor refinements… unless they formed part of a more fundamental review (such as occurs when price control arrangements are re-opened).'[352]

D5.20 Similarly, in its final determination on the appeal by SONI Limited, the CMA considered the uncertainty and regulatory risk arising from certain aspects of the price control framework being adopted by the Utility Regulator.

D5.21 On price control frameworks in general the CMA said –

> 'At the heart of SONI's concern is its view that the framework for recovering its spend on PCNPs is unclear and inadequately codified. We note that for any regulated business, a clear path for recovering its efficiently incurred costs is a central aspect of the regulatory settlement.'[353]

D5.22 On matters relating to regulatory uncertainty arising from lack of clarity, the CMA opined –

> 'In our view, there is a significant lack of clarity around the functioning of the two-stage process. Although in response to the appeal the UR has stated that the Dt mechanism is intended to 'de-risk' SONI's expenditure, our view is that there is considerable uncertainty

[349] Tab M18: CMA – NATS (En Route) Plc /CAA Regulatory Appeal – Final report.

[350] Tab M18: CMA – NATS (En Route) Plc /CAA Regulatory Appeal – Final report, para 41.

[351] Tab M18: CMA – NATS (En Route) Plc /CAA Regulatory Appeal – Final report, para 9.63.

[352] Tab M18: CMA – NATS (En Route) Plc /CAA Regulatory Appeal – Final report, para 9.111.

[353] Tab M17: CMA - SONI Limited v Northern Ireland Authority for Utility Regulation – Final determination, para 6.45

around how the Dt mechanism set out in the Final Determination will function in practice. This gives rise to regulatory uncertainty around whether SONI will be able to recover its efficiently incurred costs…'*354*

'We consider that the Dt mechanism as presently specified results in significant uncertainty for SONI and is sufficiently unworkable that it is not consistent with the UR's duty to secure SONI's financeability. For these reasons, we are satisfied that this decision was wrong, as the UR failed properly to have regard to the Financeability Duty.'[355]

D5.23 Finally, on regulatory risk, the CMA concluded –

'In our view, it is important that the mechanisms through which SONI is expected to recover its efficiently incurred costs are set out clearly, in a manner that allows SONI's investors to assess the risks of investing in the company. Failing to do so is likely to introduce regulatory risk, and is likely to affect SONI's ability to finance its activities…'*356*

'In view of the foregoing, we are satisfied that this decision was wrong, as the UR failed to codify and specify clearly the mechanisms through which SONI is to recover its efficiently incurred PNCP costs, including under the TIA, notwithstanding this may adversely affect SONI's ability to finance its statutory activities. We are satisfied that the UR has therefore failed to properly to have regard to the Financeability Duty, and that the modifications fail to achieve, in whole or in part, the effect stated by the UR.'[357]

D5.24 In a similar vein, the Competition Commission in making a determination on the regulatory reference relating to Phoenix Natural Gas Limited[358] considered, among other things, the factors contributing to regulatory uncertainty and the possible implications for investment.

D5.25 In this regard, the final determination expressed the following views of the Competition Commission –

'The evidence we have received…suggested that the stability, predictability and transparency of the regulatory regime was important to investors'.[359]

[354] Tab M17: CMA - SONI Limited v Northern Ireland Authority for Utility Regulation – Final determination, para 6.238

[355] Tab M17: CMA - SONI Limited v Northern Ireland Authority for Utility Regulation – Final determination, paras 6.241 and 6.242

[356] Tab M17: CMA - SONI Limited v Northern Ireland Authority for Utility Regulation – Final determination, para 6.70

[357] Tab M17: CMA - SONI Limited v Northern Ireland Authority for Utility Regulation – Final determination, para 6.75

[358] Tab M19: CMA - Phoenix Natural Gas Limited price determination.

[359] Tab M19: CMA - Phoenix Natural Gas Limited price determination, para 8.85.

> '…it is our view that unpredictability increases risk for equity investors.'[360]

> '…the effect of increased regulatory uncertainty may not be felt immediately…but may have longer-term effects.' [361]

Credit Rating Agencies Perspective

D5.26 Ofgem's policy approach in respect of placing key aspects of the RIIO-GD2 price control framework approach in subsidiary documents also has the potential to jeopardise the highest rating which credit rating agencies' currently ascribe to the stability of the regulatory regime for the UK energy sector.

D5.27 By way of example, as currently rated in its rating analysis, Moody's awarded the highest score of Aaa to the stability of the regulatory regime in the UK energy sector.[362]

D5.28 It is relevant to note here that in describing the features of a regulatory regime which is afforded an Aaa rating Moody's notes the following –

> 'Utility regulation occurs under a fully developed framework that is national in scope based on legislation that provides that utility…an unquestioned assurance that rates will be set in a manner that will permit the utility to make and recover all necessary investments, an **extremely high degree of clarity as to the manner in which utilities will be regulated and prescriptive methods and procedures for setting rates**. Existing utility law is comprehensive and supportive such that **changes in legislation are not expected to be necessary;** or any changes that have occurred have been **strongly supportive** of utilities credit quality in general and **sufficiently forward-looking so as to address problems before they occurred**.'[363]

D5.29 We would also draw to the CMA's attention that the next rating down at Aa only requires –

> '…a strong assurance, subject to limited review, that rates will be set in a manner that will permit the utility to make and recover all necessary investments, a **very high degree of clarity** as to the manner in which utilities will be regulated and reasonably prescriptive methods and procedures for setting rates. If there have been changes in utility legislation they have been **timely** and **clearly** credit supportive of the issuer in a manner that shows the utility has had **a strong voice in the process**.*'* [364]

[360] Tab M19: CMA - Phoenix Natural Gas Limited price determination, para 8.90.

[361] Tab M19: CMA - Phoenix Natural Gas Limited price determination, para 8.91.

[362] Tab M20: Moody's Investors Service: Rating Methodology: Regulated Electric and Gas Utilities.

[363] Tab M20: Moody's Investors Service: Rating Methodology: Regulated Electric and Gas Utilities, p. 9 (our emphasis in bold).

[364] Tab M20: Moody's Investors Service: Rating Methodology: Regulated Electric and Gas Utilities, p. 9 (our emphasis in bold).

D5.30 For an A rating regulated utilities must have –

> '…an assurance, subject to reasonable prudency requirements, that rates will be set in a manner which will permit the utility to make and recover all necessary of investments, **a high degree of clarity** as to the manner in which utilities will be regulated, and **overall guidance for methods and procedures for setting rates**. If there have been changes in utility legislation, they have been mostly timely and on the whole credit supportive for the issuer, and the utility has had **a clear voice in the legislative process**.'[365]

D5.31 As the CMA will see the differences between the relative ratings in the Moody's methodology are clear.

D5.32 To obtain the highest grading - which the gas distribution sector currently enjoys - Ofgem needs to ensure that there is an –

> '…extremely high degree of clarity as to the manner in which utilities will be regulated and prescriptive methods and procedures for setting rates'. [366]

D5.33 The introduction of Ofgem's new approach of implementing regulatory policy through an increasing number of subsidiary documents and decision making by direction without the forward looking clarity that there won't be changes, has the potential to jeopardise the highest credit rating score which can currently be awarded under Moody's methodology.

D5.34 In its September 2017 Ratings Direct report, S&P Global assessed the gas sector in England & Wales as benefiting from a regulatory framework that was based on, among other things, *'providing transparent guidelines'* and '*assumptions that are clearly laid out'* but highlighted one of the key risks being '*proposed changes in the framework methodology from 2020'*. [367]

D5.35 The reports also noted that one of the four pillars for assessing a utility's regulatory regime is '*regulatory stability'*[368] and went on to confirm that when assessing regulatory stability S&P Global assesses –

> 'the transparency of the key components of rate-setting, the **predictability** of the framework, and the **consistency** of the framework over time.'

[365]Tab M20: Moody's Investors Service: Rating Methodology: Regulated Electric and Gas Utilities, p. 9 (our emphasis in bold).

[366]Tab M20: Moody's Investors Service: Rating Methodology: Regulated Electric and Gas Utilities, p. 9 (our emphasis in bold).

[367]Tab G13: S&P Global - Why we see the Regulatory Frameworks for U.K. Utilities as supportive, p. 2.

[368] Tab G13: S&P Global - Why we see the Regulatory Frameworks for U.K. Utilities as supportive, p. 3.

D5.36 Similarly, in its EMEA Regulated Networks: Ratings Navigator Companion report, Fitch Ratings also affirms that '*transparency and predictability'* are the most beneficial pillars of the regulatory framework and regulatory risk increasing as the framework becomes less transparent and predictable.[369]

D5.37 This report also notes that it is this type of regulatory environment which supports an 'a' rating.[370]

D5.38 Some examples of where agencies have cited the importance of a transparent, stable and predictable regulatory framework for companies' credit ratings are also provided in the KPMG Report.[371]

D5.39 Moving towards subsidiary documents, as Ofgem currently proposes without giving the licensees a '*strong voice*' in amendments has the potential to move the rating down to an A from Aaa for the whole gas distribution industry, a matter which will have a direct and material impact on financeability in this subcategory, which for a company such as WWU who is on negative watch for a downgrade into sub-investment territory, could have significant consequences.

D5.40 WWU considers that in proposing licence modifications providing for significant aspects of the price control to be set out in subsidiary documents, Ofgem has failed to have proper regard to the wider implications on financeability for the wider sector.

D5.41 Adopting a policy approach under which key aspects of the price control framework are set out in subsidiary documents that can (and are likely to) be changed 'within-period' with minimal consultation does not assist to provide the regulatory stability considered to be one of the key influencing factors from a credit rating agency's perspective.

D6 OFGEM'S APPROACH – UNPRECEDENTED AND CONTRARY TO BEST REGULATORY PRACTICE

D6.1 As highlighted above, Ofgem has proposed an exponential increase in subsidiary documents. Such an extensive use of subsidiary documents, which can be changed at will by Ofgem, to implement and govern key aspects of a price control is unprecedented and unwarranted.

[369] Tab G14: FitchRatings - EMEA Regulated Networks: Ratings Navigator Companion report, p. 3.

[370] Tab G14: FitchRatings - EMEA Regulated Networks: Ratings Navigator Companion report, p. 3.

[371] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU), p. 30.

D6.2 Furthermore, adopting such a systematic and intentional approach to placing key aspects of the price control framework into subsidiary documents which Ofgem can change by direction is also contrary to the 'better regulation' principles and to general regulatory best practice.

Better Regulation Principles

D6.3 Section 4AA(5A)(a) of the Gas Act requires Ofgem to have regard to the principles that regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases at which action is required.

D6.4 As discussed in the KPMG Report, the 2005 report of the Better Regulation Taskforce[372] - which was designed as a toolkit to measure/improve the quality of regulation – concludes that –

> 'Regulation should be predictable in order to give stability and certainty to those being regulated.'[373]

D6.5 Ofgem's approach of placing a substantial component of the RIIO-GD2 price control framework into subsidiary documents fails to have regard to the better regulation principles, and particularly so with regard to principles of transparency, proportionality, and consistency.

D6.6 In terms of transparency, as discussed above WWU is effectively being asked to accept licence modifications in respect of which there is considerable lack of clarity and certainty as to the requirements with which WWU would be obliged to comply. The lack of transparency is twofold.

D6.7 Firstly, many of the subsidiary documents are not yet published even in draft form and some will not be issued prior to the licence modifications taking effect. This essentially means that WWU has little transparency on the requirements which it is effectively being asked to sign up to from the outset.

D6.8 Secondly, all of the Associated Documents can be amended by Ofgem at any time and in any respect and while this is not the absolute position for the Price Control Financial Instruments, it is Ofgem that would decide whether any change has a significant impact such that it can only be made under the statutory modification provisions of section 23 of the Gas Act.

[372] Tab K15: UK Better Regulation Task Force – Principles of Good Regulation.

[373] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU), p. 4.

D6.9 There is therefore little transparency on the requirements and obligations to which WWU may be subject throughout the RIIO-GD2 price control period at the subsidiary documents can be changed by Ofgem.

D6.10 The KPMG Report identifies, by reference to the 2014 guide published by the UK Regulators Network, transparency is considered to be one of the most important principles for investors.[374]

D6.11 In terms of proportionality, it is neither proportionate nor reasonable for Ofgem to substantially increase the number of subsidiary documents without providing an appropriate rationale for needing to do so.

D6.12 As noted earlier, Ofgem has not provided any reasoned explanation for its intentional and systematic approach with regard to subsidiary documents and the unparalleled level of discretion that Ofgem would have in respect of making 'within-period' changes to the rights and obligations being placed on licensees.

D6.13 This is so notwithstanding the fact that WWU has alerted Ofgem of its concerns about the range, nature and status of subsidiary documents on a number of occasions.

D6.14 More specifically the concerns were outlined by WWU in responding to –

(a) Ofgem's informal consultation on the licence modifications[375];

(b) Ofgem's statutory consultation (under section 23 of the Gas Act) on its proposed changes to the licence[376];

(c) Ofgem's request for views on its 'principles of use of RIIO-2 associated documents', whereby WWU's (and other licensees') responses are summarised in Ofgem's response to the views it received[377]; and

(d) other communications with Ofgem following its decision to proceed with the making of the licence modifications[378].

[374] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU), p. 12.

[375] Tab A6.1: Ofgem - RIIO-2 Informal Licence Drafting Consultation.

[376] Tab A7.1: Ofgem – Notice of Statutory Consultation on the RIIO-2 Gas Transporter Licence Drafting.

[377] Tab A10.2: Ofgem - Associated Documents Principles Log.

[378] Tab M22: Email exchange of 16 and 17 February 2021 between Kiran Turner (Ofgem) and Sarah Williams (WWU)

D6.15 In its response to the informal consultation, WWU made, among others, the following particular submissions –

> '…the powers available to Ofgem to provide for a condition to be modified in accordance with a process set out in the condition itself are powers which are intended to, and should, be used sparingly.'[379]

> 'Our other significant concern…is the move in RIIO-GD2 to…effectively amend obligations during the price control by the use of Associated Documents…'[380]

> 'Ofgem has introduced a large number of Associated Documents…with which WWU is required to comply….That these can be modified at will by Ofgem issuing a direction is an inequitable position and a real cause of concern for WWU.'[381]

> '…Associated Documents should be subject to the same process as…the Price Control Financial Instruments….This includes incorporating the changes we have proposed….to restore them to the level…in the current licence' [382]

D6.16 WWU's concerns were not addressed (or acknowledged) within Ofgem's statutory consultation.

D6.17 In its response to the statutory consultation, WWU reiterated that it had –

> 'significant concerns around the content and governance of Associated Documents'[383]

D6.18 The 'executive summary' of response summarised that the concerns related to the 'scope and nature' of the documents – whereby key aspects of the price control were to be included in these documents, and to the 'status' of the documents – whereby they are subject to 'within-period' unilateral amendment by Ofgem by direction.[384]

[379] Tab B5.1: WWU – Letter of Response to Ofgem's Informal Licence Drafting Consultation, p. 1 of executive summary.

[380] Tab B5.1: WWU – Letter of Response to Ofgem's Informal Licence Drafting Consultation, p. 2 of executive summary.

[381] Tab B5.1: WWU – Letter of Response to Ofgem's Informal Licence Drafting Consultation, p. 7 of executive summary.

[382] Tab B5.1: WWU – Letter of Response to Ofgem's Informal Licence Drafting Consultation, p. 7 of executive summary.

[383] Tab B6.1: WWU - Letter of Response to Ofgem's Statutory Licence Drafting Consultation, p. 1 of executive summary.

[384] Tab B6.1: WWU - Letter of Response to Ofgem's Statutory Licence Drafting Consultation, p. 1 of executive summary.

D6.19 WWU also stressed that –

> 'Ofgem's policy approach in relation to Associated Documents leads to increased regulatory risk….the level of regulatory risk could potentially have an adverse impact on investor confidence and/or on a company's financeability.'[385]

D6.20 More specifically WWU's response highlighted the avoidable regulatory risk arising from Ofgem's proposed approach by reference to four example areas[386] - as also now highlighted in the KPMG Report[387].

D6.21 WWU submits that in following through with its policy approach on the governance and status of subsidiary documents and doing so without providing any clear explanation or reasons as to why it considers it to be sufficiently important to justify limiting the rights afforded to licensees under section 23 of the Gas Act, Ofgem has demonstrated that it has not taken a proportionate decision with regard to the rights and obligations of licensees.

D6.22 In terms of consistency, this new approach of placing much of the price control framework into subsidiary documents is very much at odds and therefore wholly inconsistent with not only the GD1 price control framework but also previous energy price control frameworks (and indeed price control frameworks in other sectors).

D6.23 In undertaking its analysis, KPMG reviewed the reporting requirements and provisions within the GDCPR1 and RIIO-GD1 price controls for comparison purposes. The KPMG Report states that –

> '[KPMG] could not find an example of where Ofgem required additional flexibility around reporting processes outside the gas transporter licence. All of the uncertainties around reporting requirements were resolved through the licence modification process.'[388]

D6.24 The KPMG Report also finds that while Ofgem recognises the benefits of a stable and predictable, e.g. consistent, regulatory regime and makes virtue of the regime to date –

> 'Ofgem's approach in some areas of RIIO-GD2 is not consistent with principles of predictable regulatory regime…'[389]

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[385] Tab B6.1: WWU - Letter of Response to Ofgem's Statutory Licence Drafting Consultation, p. 1 of executive summary.

[386] Tab B6.1: WWU - Letter of Response to Ofgem's Statutory Licence Drafting Consultation, Annex 1, pp. 6 and 7

[387] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU), pp. 6 and 7.

[388] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU), p. 9.

[389] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU), p. 14.

General Regulatory Best Practice

D6.25 Section 4AA(5A)(b) of the Gas Act requires Ofgem to have regard to other principles appearing to it to represent best regulatory practice.

D6.26 In this regard, it is widely accepted and understood that regulatory certainty is a desirable aim of regulatory best practice.

D6.27 As the KPMG Report notes –

> 'Reducing uncertainty and providing transparency are elements of best practice. Mechanisms that create uncertainty around network returns or that can be triggered outside the existing licence modification process, would appear to contravene best practice.'[390]

D6.28 What constitutes regulatory best practice has also been opined on by the CMA (and before it the CC) in its determinations of regulatory appeals and references.

D6.29 In the PNGL Report, the CC considered that –

> 'In line with normal regulatory practice, our view is that any revision of…regulatory determinations should be: well reasoned, properly signalled, subject to fair and effective consultation, clear and understood and, normally, forward-looking.' [391]

D6.30 In its determination on the regulatory price control appeal made by Firmus Energy, the CMA endorsed this criteria as 'good regulatory practice'[392].

D6.31 Ofgem's approach, which provides for it to make changes to the RIIO-GD2 determination through changes to subsidiary documents which can be made on a unilateral basis, with little (if any) signalling and with minimum consultation, is not consistent with general regulatory best practice.

D6.32 Additionally, it is possible that changes made by Ofgem to subsidiary documents could have the flavour of retrospectivity. So, for example, a change in reporting requirements, while purportedly forward looking, could require WWU to reconfigure its systems such that historical information is captured correctly for the purposes of being able to meet the new reporting requirements. This too does not represent good regulatory practice.

[390] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU), p. 15.

[391] Tab M19: CMA - Phoenix Natural Gas Limited price determination, para 32.

[392] Tab M23: CMA – Firmus Energy (Distribution) Limited v Northern Ireland Authority for Utility Regulation – Final Determination, para 6.99.

Investor Confidence

D6.33 It is a cornerstone of good regulatory practice that wherever possible regulation should aim to be stable and predictable in the context of ensuring long term and stable investment.

D6.34 In this context, the KPMG Report also notes that –

> 'The literature stresses how regulatory uncertainty can depress investment (and as a result economic growth and welfare).'[393]

D6.35 The KPMG Report highlights four academic papers which have considered and/or analysed the impact of regulatory uncertainty on investment decisions.[394]

D6.36 WWU submits that adopting an approach whereby substantive aspects and elements of the price control framework can be changed on a unilateral basis by Ofgem conflicts with good regulatory practice which promotes consistency, predictability and transparency in regulatory decision-making.

D6.37 WWU also submits that such an approach is contrary to the interests of consumers because it increases investors' perceptions of regulatory risk leading to an adverse impact of investor confidence and regulatory stability and has wide reaching implications for the rating of debt within the industry. By extension, this could impact required returns by equity investors.

D7 SUMMARY OF RELIEF SOUGHT

D7.1 The relief sought by WWU in respect of this head of appeal is set out below.

D7.2 WWU requests that the CMA grants the following relief to correct Ofgem's errors in respect of this head of appeal –

(a) quash Ofgem's decision to make licence modifications under which significant and key aspects of the RIIO-GD2 price control are to be set out in a large number of subsidiary documents; and

(b) corrects Ofgem's errors by substituting its decision for that of Ofgem such that each condition which provides for a subsidiary document (whether an Associated Document or a GD2 Price Control Financial Instrument) to be issued by Ofgem (a 'relevant condition') is modified to the effect described below.

[393] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU), p. 11.

[394] Tab K1: KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU), p. 11.

D7.3 The substituted decision shall make modifications to each relevant condition such that it –

(a) provides for the relevant subsidiary document which is issued under it to form part of, and therefore in all respects has the same status as, the relevant licence condition, e.g. in the same manner as the GD1 Price Control Financial Instruments have such status; and

(b) provides that –

(i) any change to the relevant subsidiary document which Ofgem wishes to make that has or is likely to have a 'significant impact' on WWU and/or any other affected party (including consumers) shall and can only be made pursuant to the provisions of section 23 of the Gas Act;

(ii) in making an assessment on whether a change has or is likely to have a significant impact on any such persons, Ofgem shall have particular regard to any impact which an intended modification would be likely to have on any component of WWU's allowed revenues or on any value, rate, time period, or calculation used in the determination of those allowed revenues;

(iii) a change which serves to correct a manifest error shall be presumed not to have or likely to have a significant impact, but that presumption can be rebutted by representations made by WWU which demonstrate that WWU reasonably considers the proposed change has or would be likely to have a significant impact; and

(iv) where the licensee reasonably demonstrates in its representations to Ofgem that a change proposed by Ofgem has or is likely to have a 'significant impact' on WWU or on any component of WWU's allowed revenues or on any value, rate, time period, or calculation used in the determination of those allowed revenues, the change shall and can only be made pursuant to the provisions of section 23 of the Gas Act.

D7.4 In the alternative, WWU requests that the CMA substitutes its decision for that of Ofgem's such that additional modifications are made to the conditions of the WWU licence which have the effect that where Ofgem amends any of the requirements set out in a subsidiary document issued by it under a relevant condition it shall also make modifications to the price control licence conditions so as to provide for WWU to recover, by way of pass-through, the costs incurred by it in consequence of the amended requirements and/or Ofgem's subsequent interpretation of the requirements.

D7.5 In this case, WWU would request the CMA to make the requisite additional modifications to Special Condition 6.1 of the WWU licence.

E. ONGOING EFFICIENCY

E1 SUMMARY

E1.1 Ongoing efficiency relates to the principle that all companies should be able to find greater efficiencies over time.

E1.2 For the GD2 period, Ofgem has set an ongoing efficiency challenge for GDNs of 1.15% p.a. for capex and repex, and 1.25% p.a. for opex.

E1.3 The methodology which underpins the level at which that challenge is set is wrong in both policy and law. This is because it contains a set of errors which –

(a) take into account irrelevant considerations – such as adopting wholly dissimilar industries as comparators – and ignore relevant considerations – such as the way in which companies have built innovation into their business plans,

(b) build in inconsistencies,

(c) run contrary to relevant empirical evidence, and

(d) undermine the purpose of the totex approach.

E1.4 The approach which should be taken is set out in a report by Oxera which accompanies this head of appeal.

E1.5 WWU respectfully asks the CMA to substitute the efficiency challenge set by Ofgem with one of 0.5% p.a. as requested in its Business Plan.

E2 OVERVIEW

E2.1 Ofgem's ongoing efficiency challenge must be distinguished from its 'catch-up' efficiency challenge. The latter is designed to incentivise less efficient companies to improve in order to 'catch-up' with more efficient companies. By contrast, the ongoing efficiency challenge is premised on the idea that all companies, even the most efficient ones, should be capable of becoming more efficient over time as a matter of normal business, without earning special rewards for doing so.[395]

[395] Tab A5.1: Ofgem – RIIO-2 Final Determinations - Core Document (REVISED), para 5.15.

E2.2 WWU does not dispute the principle behind ongoing efficiency. Rather, WWU's case is that the quantum of the ongoing efficiency challenge set by Ofgem is wrong. It is fundamentally flawed because it is based on a methodology and data that are unsound in a number of respects.

E2.3 The CMA has previously emphasised that regulatory discretion must be underpinned by robust and rigorous evidential analysis.[396] As with its decision on repex, Ofgem's decision on setting the level of the ongoing efficiency challenge does not meet that threshold.

E2.4 As outlined below, Ofgem's approach is grounded in a series of fundamental errors which have resulted in the challenge being set at a level which is both unreasonable and unsupported by any valid analytical basis. It is wrong in both policy and law.

E2.5 WWU's case in this regard is supported by the analysis carried out by Oxera and set out in the expert report which accompanies this head of appeal. In that report Oxera concludes that '*Ofgem's analysis is incorrect in both principle and application*'.[397] This conclusion follows a detailed assessment of the methodology applied by Ofgem to set the ongoing efficiency challenge for GDNs in RIIO-2 and the recommendations made by Ofgem's consultants, CEPA, to the extent that those recommendations have been adopted by Ofgem.

E2.6 In its report, Oxera identifies a series of errors in the calculation of Ofgem's ongoing efficiency challenge. It also draws attention to a number of points at which Ofgem departs from CEPA's advice, without any adequate justification.

E2.7 It is notable that each error in Ofgem's methodology leads to an upwards bias to the overall challenge. No error contributes to a downwards bias. The collective impact of these errors therefore results in an ongoing efficiency target that is significantly higher than that which would have been identified if a correct approach had been applied and a more balanced analysis undertaken.

E2.8 This head of appeal will summarise the errors identified by Oxera, and highlight the remedial actions that WWU respectfully requests the CMA to take in order to correct those errors.

E2.9 The CMA is invited to read this head of appeal alongside Oxera's detailed supporting analysis, which sets out additional explanation, reasons and evidence to further substantiate the key observations highlighted in this section of the Notice.

[396] Tab M32: CMA – *Northern Powergrid v the Gas and Electricity Markets Authority* – Final Determination, para 4.59.

[397] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations.

E2.10 In the Final Determination, Ofgem sets an ongoing efficiency challenge of 1.15% p.a. for capex and repex, and 1.25% p.a. for opex.[398] Oxera's 'best estimate' after applying an analysis that rectifies Ofgem's errors is an efficiency benchmark of 0.4% p.a.[399] The gap between Ofgem's and Oxera's figures underscores the significant impact of Ofgem's errors.

E2.11 However, the ongoing efficiency challenge sought by WWU remains that which was outlined within its Business Plan in 2019 – 0.5% p.a. – slightly below that suggested by Oxera.[400] WWU believes this target to be sufficiently ambitious, without being unrealistic, and provides the best value for money for its customers.

E3 OFGEM'S ONGOING EFFICIENCY METHODOLOGY

E3.1 To set its ongoing efficiency challenge, Ofgem uses the growth accounting method. This is a financial tool which is used to measure productivity growth in an economy. Specifically, it measures the influence of capital, labour and technology changes upon real GDP. The method calculates productivity growth by dividing growth rates of output (GDP) with the growth rate of the input factors. Productivity growth is thus the part of output growth that is not accounted for by increased production factor input.

E3.2 Application of the growth accounting method requires a number of choices to be made in relation to the parameters and inputs to be used in the analysis i.e. the time period, output measure, measure of productivity, and comparator set and weighting approach.[401]

E3.3 Ofgem's underlying analysis largely accords with that of CEPA, and that CEPA's methodology is intended to inform the ongoing efficiency challenge is confirmed in the Final Determination.[402] Despite this, the ultimate estimate provided by Ofgem exceeds that which was deemed appropriate by CEPA. Specifically, CEPA provides a 'lower bound' estimate of 0.5% p.a., and attempts – though insufficiently explains – to justify a more 'stretching' challenge of up to 0.95% on capex and repex, and 1.05% on opex.[403]

[398] Tab A5.1: Ofgem – RIIO-2 Final Determinations - Core Document (REVISED), para 5.20.

[399] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 6.6.

[400] Tab B3.1: WWU – Business Plan Core Document Plan, p. 10.

[401] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paras 2.3 – 2.4.

[402] Tab A5.1: Ofgem – RIIO-2 Final Determinations - Core Document (REVISED), para 5.22.

[403] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 2.5; see also Tab L4: CEPA – RIIO-GD2 and T2 Cost Assessment – Advice on Frontier Shift policy for Final Determinations, Tables 1, para 2.1.

E3.4 WWU does not dispute the legitimacy of the growth accounting framework as a means to set the ongoing efficiency challenge. Indeed, the framework adopted by Oxera is largely similar to that applied by CEPA.[404] However, it is WWU's case that Oxera's analysis shows that Ofgem has erred in the decisions it has made in its application of the growth accounting framework to gas distribution networks.

E4 ERROR 1 – TIME PERIOD

E4.1 The application of the growth accounting framework requires the identification of a time period to act as the basis for identifying an estimated productivity range. The choice of an appropriate time period is of obvious importance as different periods will see different levels of productivity.

E4.2 During periods of economic growth, productivity is higher, whereas during periods of recession productivity is lower. This is because there is a greater demand for labour during periods of economic growth, leading to increased workloads and recruitment. Conversely, during periods of recession, the size of the workforce outweighs the workload that needs to be undertaken, lowering productivity.[405]

E4.3 The time period adopted for use in the growth accounting framework should therefore not focus on a period of higher or lower productivity than normal as this would unduly skew the range. It is therefore clear that the estimated productivity benchmark must reflect the average of a 'full business cycle'. In other words, the time period used must be balanced so as to encompass periods of both higher and lower productivity.[406] To the extent that the chosen time period does not reflect this balance, it will lead to a productivity benchmark that is biased either upwards or downwards.

E4.4 The time period used in Ofgem's analysis contains just such an error and results in an upwards bias to the efficiency challenge.

E4.5 The time period adopted by CEPA and Ofgem is 1997-2016, and it is CEPA's contention that this period is representative of two complete business cycles: 1997-2005 and 2006-2016.[407]

[404] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 6.1.

[405] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.6.

[406] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paras 3.9 – 3.11.

[407] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.10; see also Tab A5.1: Ofgem – RIIO-2 Final Determinations - Core Document (REVISED), February 2021, para 5.23.

E4.6 However, CEPA's contention that 1997-2005 represents a full business cycle is unsubstantiated, and is not supported by CEPA's own dataset. Closer analysis reveals that for the majority of years (1997-2002 and 2003-2005) the output gap is positive, i.e. the economy grew faster than usual, while for only two years (2002-2003) the output gap is negative, i.e. the economy grew slower than usual.[408]

E4.7 CEPA's proposed time period is further undermined when applying the preferred 'EU KLEMS dataset', an industry-level analysis tool for assessing productivity trends. Whereas CEPA opts to use that dataset for estimating productivity, it does not use it for identifying the business cycle.[409] The EU KLEMS dataset reveals that, instead of two full business cycles between 1997 and 2016, there is only one (2007-2016), and this single business cycle follows a ten year period of sustained economic growth (1997-2007).[410]

E4.8 As such, CEPA's observations conflict with the data. Its choice of a time period with an unusually high degree of economic growth not counterbalanced by a period of low productivity results in an upwards bias to the forecast efficiency estimate. That error by CEPA is then adopted by Ofgem.

E4.9 In order to correct that error, WWU invites the CMA to substitute the 1997-2016 time period adopted by Ofgem with the 2007-2016 time period which constitutes a single balanced business cycle that will produce an appropriate productivity benchmark.

E5 ERROR 2 – OUTPUT MEASURE

E5.1 Productivity growth can be measured based on 'gross output' (**GO**) or 'value added' (**VA**). GO total factor productivity (**TFP**) is a measure of the total production of goods and services over a given time period within a given industry. By contrast, VA TFP measures changes in productivity based on the difference between gross outputs and intermediate inputs in order to represent what an industry adds to its products and services during the production process.[411] As it excludes intermediary goods and services from its measurement, a VA-based target is only relevant for a part of the total cost base. Indeed, Ofgem has previously stated that –

[408] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.15.

[409] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.13.

[410] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paras 3.16 – 3.17.

[411] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.22.

> '…the VA measure of productivity only allows us to evaluate the impact of the use of labour and capital on outputs, thus limiting the costs that this can be applied to…'[412]

E5.2 Yet, Ofgem relies almost entirely upon a VA TFP measure in setting the ongoing efficiency challenge in RIIO-GD2. It places no – or very minimal – weight on GO TFP.[413]

E5.3 That decision may have been influenced by CEPA's suggestion that there is no consistent expert view on whether VA or GO are better productivity measures.[414] This is not the case. The OECD states that a VA-based measure is *'not a good measure of technology shifts at industry or firm level'*.[415] In fact CEPA itself has previously expressed a preference for the GO-based measure in the context of setting cost allowances.[416]

E5.4 There is a clear conceptual difference between GO-based and VA-based measures, and it is therefore important to ensure that the measure chosen aligns with the relevant context. Here, Ofgem is applying the ongoing efficiency challenge to totex. Given that totex includes intermediary goods and services, and VA-based measures exclude intermediary goods and services, a VA-based measure fails to appropriately align with the context.[417]

E5.5 Ofgem claims that there are *'practical difficulties in estimating GO that in effect limits [sic] the weight that can be reasonably placed on GO compared to VA measure'*.[418] However, it fails to identify or explain what those practical difficulties are. Instead, it references CEPA's report, which actually contains an estimate of GO TFP with no mention of difficulty.[419]

E5.6 Ofgem is wrong to use a VA-based measure in the way that it does. It is an inappropriate approach which fails to align with the context in which Ofgem seeks to apply it and Ofgem has given no reasons why it cannot use the GO-based approach where CEPA has previously supported that approach and deploys it in its own analysis. Even if any practical difficulties with the GO-based approach could be identified, Ofgem should have considered applying adjustments to the VA-based benchmark to offset its limitations – such as narrowing the

[412] Tab L2: Ofgem - RIIO-T1/GD1: Initial Proposals − Real price effects and ongoing efficiency appendix.

[413] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.29.

[414] Tab L4: CEPA - RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, p. 24.

[415] Tab L13: OECD - Measuring Productivity OECD Manual Measurement of Aggregate and Industry-level Productivity Growth, p. 16.

Tab L12: CEPA - Ongoing efficiency in new method decisions for Dutch electricity and gas network operators, p. 44.

[417] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.26.

[418] Tab A5.1: Ofgem – RIIO-2 Final Determinations - Core Document (REVISED), p. 48.

[419] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paras 3.30 – 3.31.

defined cost base to exclude intermediaries altogether. But it does not appear that Ofgem has considered doing so.[420]

E5.7 Taking the appropriate context into consideration, in respect of Ofgem's decision to apply the ongoing efficiency target to totex, GO TFP is the preferred option using the EU KLEMS dataset.[421] In the alternative, where a VA TFP analysis is used it requires appropriate adjustments to counteract its conceptual limitations.

E6 ERROR 3 – MIXING PRODUCTIVITY MEASURES

E6.1 In its determination of the ongoing efficiency target, Ofgem further errs in opting to use different productivity measures for different categories of expenditure. Specifically, on CEPA's recommendation, Ofgem applies labour productivity (LP) measures for opex, while applying TFP measures for capex and repex.

E6.2 TFP measures relate the change of all relevant production inputs to the change in output. By contrast, partial productivity measures, such as LP, relate only a particular factor.[422]

E6.3 Ofgem's approach of using different productivity measures for different categories of expenditure is wrong, for the following three reasons.

E6.4 Firstly, the use of LP assuming constant capital is inconsistent with, and not found in, existing economic literature. Generally, TFP corresponds to the average of consistently and correctly applied partial productivity measures, yet CEPA's proposed LP measure does not produce an outcome equal to the average of partial productivity measures or, therefore, TFP growth.

E6.5 **Secondly,** the application of different measures to different expenditure categories naturally results in error. Where measures are applied inconsistently across components – characterised by a mixture of partial and TFP – the average will not then also correspond to TFP (and, thus, the benchmark TFP performance of targeted sectors), regardless of the partial productivity definition being applied.

E6.6 **Thirdly,** it is conceptually wrong to use LPs measures for opex, given that opex also includes non-labour costs. In addition, applying different incentives for certain types of expenditures undermines the basic intention of the totex framework, which is to support the removal of incentives which favour one type of expenditure.[423]

[420] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.27.

[421] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.32.

[422] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.34.

[423] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.35.

E6.7 Given that the ongoing efficiency challenge applied to GDNs exceeds the TFP benchmarks estimated by Ofgem, it is evident that the mixing of productivity measures has resulted in an upwards bias to the total ongoing efficiency target.[424]

E6.8 The correct approach would be one that, at the very least, is consistent across all cost components. This presents two potential remedial options –

(a) apply the correctly specified partial productivity estimates for all cost components (for example, LP would be applied for labour inputs, and capital productivity for capital inputs), or

(b) apply TFP uniformly to all cost components.[425]

E6.9 However, in order to avoid contradiction with the underlying intention of totex, and to address the fact that opex contains capital and intermediate inputs rendering it difficult to identify the correct cost component, it is WWU's submission that the right approach is to apply the TFP productivity measure to all cost components.[426]

E7 ERROR 4 – FOCUS ON AN ECONOMY-WIDE BENCHMARK

E7.1 The fourth error relates to Ofgem's decision to use an economy-wide comparator set to inform its ongoing efficiency challenge.[427] At its most basic level, this error relates to the need for the ongoing efficiency estimate to be a true, accurate and fair reflection of the sector to which it is applied.

E7.2 As with any assessment which involves the use of a comparator group to determine a particular outcome for another group, it is essential that the two groups are sufficiently alike. In the absence of sufficient likeness, any outcome decided in reliance upon the comparator group will be unrepresentative.

E7.3 Different industries are exposed to different rates of productivity growth. If any other industries are used to determine the ongoing efficiency target in the gas industry, the activities of the comparator industries must be sufficiently 'like' that of gas so as to avoid distorting the ongoing efficiency outcome.

E7.4 CEPA identified two possible comparator sets as appropriate for the purposes of identifying an ongoing efficiency target in the gas sector –

[424] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, p. 2.

[425] L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.35.

[426] L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.38.

[427] L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.57.

(a) A weighted 'economy-wide' set, including all industries within the EU KLEMS dataset (excluding real estate, public admin, education, health and social services); and

(b) A 'targeted' comparator set (including construction, wholesale and retail; repair of motor vehicles and motorcycles; transportation and storage; and financial and insurance activities).[428]

E7.5 CEPA proposes that the 'economy-wide' set – which Ofgem appears to have adopted in its entirety – is 'important' on the ground that energy networks will be able to learn from productivity improvements in other sectors, and *'implement them in their own activities'.*[429] However, comparing GDNs with such dissimilar industries is like comparing apples with pears. Goods, technologies and methods of productivity differ between sectors. For example, it would be unsustainable to hold GDNs to the standard of productivity that could be expected in the digital sector where advances in technology serve to drive productivity in a way that cannot be replicated in a 'pipes in the ground' industry. Yet, this is, in effect, what CEPA is proposing and what Ofgem has adopted.[430]

E7.6 To protect the like-for-like analysis, an appropriately weighted 'targeted' comparator set should be applied.

E7.7 CEPA's choice and weighting of a comparator set, as it currently stands, would be an insufficient alternative to the economy-wide approach. CEPA's comparator set fails to incorporate industries sharing the same characteristics as gas distribution networks – that is, natural monopoly regulated industries, such as water. This is because CEPA's comparator set criteria places weight on competition which means that the industries in the set are not comparable with network industries. Due to the sunk investment of these natural monopoly industries, it is the lack of actual or potential competition which justifies their economic regulation.[431] In addition, CEPA does not take into account the impact of specific industry activities when assessing the weighting of productivity growth.[432] This further undermines the accuracy of the comparability analysis and the representative strength of the resulting estimate.

E7.8 Ofgem is wrong to focus solely on an economy-wide benchmark which has the effect of subjecting WWU to the same ongoing efficiency challenge as could be expected in an industry

[428] Tab L4: CEPA - RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, p. 26.

[429] Tab L4: CEPA - RIIO-GD2 and T2: Cost Assessment – Advice on Frontier Shift policy for Final Determinations, p. 27.

[430] L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.42.

[431] L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 3.45.

[432] L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paras 3.49 – 3.53.

with completely different efficiency and productivity drivers. That error produces an upwards bias to the resulting estimate, as economy-wide productivity has historically been higher than comparator sectors.[433] To correct this, an adapted targeted approach must be implemented which appropriately weights comparable sectors.

E8 ERROR 5 – INNOVATION OVERLAY

E8.1 Ofgem has decided to add a 0.2% p.a. uplift for innovation funding in its ongoing efficiency target, based on an estimation provided by CEPA.[434]

E8.2 Innovation is already accounted for in the EU KLEMS dataset, which CEPA uses to estimate productivity. It is also included within both the past cost base and forecast costs of GDNs. This amounts to a double count.[435]

E8.3 Ofgem states that it 'believes' that the energy sector has enjoyed additional innovation funding and that such innovation funding is 'totally unique' to energy networks.[436] It provides no evidence in support of its belief, and its view is undermined by the similarities that can be drawn between innovation funding and research and development (R&D) expenditure in other sectors.[437]

E8.4 Ofgem has also failed to account for the fact that WWU's Business Plan already includes potential cost savings due to past and ongoing innovation (before applying a further 0.5% p.a. ongoing efficiency challenge).[438]

E8.5 This is in direct conflict with CEPA's recommendations in its report for the Draft Determinations. Specifically, CEPA indicated that, in considering how much of the 0.2% estimate to incorporate into the ongoing efficiency challenge, Ofgem would need to take a view on –

> 'the extent to which any additional [ongoing efficiency] driven by innovation funding in RIIO-1 is already embedded in the baseline spending plans submitted by the companies.'[439]

[433] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, p. 2.

[434] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 4.1.

[435] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, pp. 2 – 3 and para 4.17.

[436] Tab A5.1: Ofgem – RIIO-2 Final Determinations - Core Document (REVISED, para 5.26.

[437] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 4.7.

[438] Tab B3.1: WWU – Business Plan Core Document Plan, pp. 77, 79.

[439] Tab L4: CEPA – RIIO-GD2 and T2 Cost Assessment – Advice on Frontier Shift policy for Final Determinations, p. 32.

E8.6 Even if an uplift for innovation funding could be theoretically justified (i.e. the productivity gain had not been accounted for), the basis for CEPA's 0.2% analysis estimate is insufficient for the context in which it is being applied.

E8.7 Specifically, CEPA fails to distinguish between process innovations (e.g. cost reductions) and product innovations (e.g. quality improvements). CEPA assumes that innovation funding has resulted in process innovation only, resulting in an over-estimation of cost reduction impact. Although WWU advocates that no uplift should be applied, as the productivity gain has already been accounted for, it is erroneous in any event to base an analysis solely on process innovation where, in the gas distribution context, the innovation funding is –

(a) to be applied to a mixture of both process and product innovation, and

(b) expected in GD2 to be primarily applied to product innovation given the shift in focus to projects contributing to the Net Zero transition.[440] The innovation stimulus offered in the Final Determination will not achieve a 0.2% p.a. benefit in GD2 if only a small proportion is invested in process innovation.[441]

E8.8 Oxera also highlights that CEPA has not substantiated its choice of a 20-year duration, which is too short given that the lifetime of GDN assets is around 45 years.[442]

E8.9 Therefore, the error in Ofgem's decision to apply any uplift at all is inflated by the use of an estimate which in its formulation has failed to appropriately take account of the purpose of the funding itself.

E8.10 The fundamental problem with the additional innovation uplift applied by Ofgem is underlined by the fact that CEPA recommended not using the full 0.2% estimate.[443]

E8.11 WWU acknowledges the importance of considering innovation funding as a contributing factor to the ongoing efficiency setting assessment. However, WWU had already incorporated the impact of such funding within its business plan (prior to its own 0.5% p.a. ongoing efficiency challenge). Had Ofgem’s assessment been conducted correctly, it would have been evident that such innovation funding had already been considered and accounted for by WWU, and already included in the TFP benchmarks.

[440] Tab L1: Oxera – Review of Ofgem’s ongoing efficiency decision in the RIIO-2 Final Determinations, paras 4.13 – 4.15.

[441] Tab A5.1: Ofgem – RIIO-2 Final Determinations - Core Document (REVISED), p. 99.

[442] Tab L1: Oxera – Review of Ofgem’s ongoing efficiency decision in the RIIO-2 Final Determinations, para 4.16.

[443] Tab L3: CEPA RIIO-GD2 and T2: Cost Assessment – Frontier shift methodology paper, p. 22.

E9 ERROR 6 – AIMING UP

E9.1 Ofgem has decided to set an ongoing efficiency challenge that 'aims up' within the range identified by CEPA.[444] It proposes a number of reasons for doing so, each of which is incorrect and insufficiently supported. The overall result is an estimate which is significantly higher than a 'correct' analysis would otherwise have provided.

E9.2 **Firstly**, Ofgem asserts that regulated sectors such as gas and electricity are less exposed to 'negative shocks' – that is, a decrease in demand – than their comparator industries.[445] This assertion is inaccurate.[446] The invalidity of this assertion is exacerbated by Ofgem's errors in its time period and comparator choice as discussed above.

E9.3 **Secondly**, Ofgem argues that the *'lack of competitive pressure means network companies should be able to place greater management focus on driving high efficiency gains'* as compared to the competitive markets.[447] Ofgem incorrectly applies the concept of 'x-inefficiency' – that is, the concept that natural monopolies are intrinsically inefficient relative to competitive sectors. Furthermore, where Ofwat proposed similar arguments to the CMA to justify a stringent benchmark, the CMA provisionally rejected them on the ground that there is no way of quantifying the theoretical effect of the regulatory regime on x-inefficiency.[448]

E9.4 **Thirdly**, Ofgem relies on the unsubstantiated hypothesis that productivity gain from embodied technical change is not already included within the EU KLEMS dataset.[449] In any event, recent evidence illustrates that the impact of embodied technical change is negative and insignificant,[450] and its relevance to energy networks is questionable.[451] In turn, any decision to aim up on this basis and in this context must also be called into question.

E9.5 **Fourthly**, Ofgem has failed to account for the link between labour productivity and real wage growth. It updated the price control financial model for the most recent real price effects (**RPEs**) at February 2021, but failed to then update ongoing efficiency to account for the most recent market information. This gives rise to an inherent inconsistency as the efficiency

[444] Tab A5.1: Ofgem – RIIO-2 Final Determinations - Core Document (REVISED), para 5.21.

[445] Tab A5.1: Ofgem – RIIO-2 Final Determinations - Core Document (REVISED), para 5.21.

[446] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 5.5, Figure 5.1.

[447] Tab A5.1: Ofgem – RIIO-2 Final Determinations - Core Document (REVISED), para 5.21.

[448] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paras 5.6 – 5.7; Tab D33: Competition and Markets Authority – Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations – Provisional findings, para 4.295.

[449] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paras 5.8.

[450] Tab L16: Economic Insights - Frontier Shift for Dutch Gas and Electricity, p. 77.

[451] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 5.12.

challenge is set ex ante and is fixed thereafter, while RPEs are subject to annual indexation refreshes during a price control period. Unless addressed, this inconsistency will continue throughout GD2.[452]

E9.6 **Fifthly**, to justify aiming up, Ofgem relies on a 'high-level assessment' indicating that the frontier GDN for RIIO-GD1 was able to realise ongoing efficiencies of >1.2% p.a., and that other GDNs indicate that 'they believe they have got closer' to that company over RIIO-GD1.[453] However, there are no details of the 'high-level' assessment mentioned, which undermines any opportunity to identify and critique the modelling assumptions it is based on. In addition reliance on statements made by individual companies to inform an approach for all companies fails to address the importance of context to company assumptions and the way in which different companies may have accounted for innovation 'efficiency' differently.[454]

E9.7 **Sixthly**, and critically, Ofgem has failed to consider issues that might suggest the need to 'aim down'. Ofgem attempts to justify aiming up by drawing on what it believes 'could' increase productivity, but refrains from considering events that 'could' *reduce* productivity. Consistency is required to rectify this imbalance. Either all arguments must be addressed ex ante, or none.[455]

E9.8 Ultimately, Ofgem has provided a number of selective qualitative assertions on the impact of productivity growth, in an attempt to justify its decision to 'aim up'. However, it has failed to provide empirical evidence to support these assertions, undermining the credibility of the 'aimed up' estimate.

E9.9 It is WWU's case that the EU KLEMS analysis remains the main source of evidence for the ongoing efficiency challenge, and that no aiming up is required.[456]

E10 A CORRECTIVE ASSESSMENT

E10.1 The collective effect of the errors outlined above has led Ofgem to set its ongoing efficiency challenge at 1.15% p.a. for capex and repex, and 1.25% p.a. for opex.

[452] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paras 5.13 – 5.14.

[453] Tab A5.1: Ofgem – RIIO-2 Final Determinations - Core Document (REVISED), para 5.27.

[454] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paras 5.15 – 5.19.

[455] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paras 5.21 – 5.22

[456] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 5.23.

E10.2 This challenge is significantly too high, representing a regulatory judgement which cannot be supported when considered in light of the appropriate context and empirical evidence.

E10.3 WWU respectfully invites the CMA to correct Ofgem's errors and to realign the ongoing efficiency challenge with the purpose and context for which it is being applied. Only by exercising this power of substitution can both WWU and the CMA be confident that the errors will be rightly rectified.

E10.4 To aid the exercise of recalculation, WWU draws the CMA's attention to Oxera's estimation methodology, which is notably similar to CEPA's approach.[457] Although addressed above, and while more detail can be found within the report itself, the key assumptions adopted by Oxera are summarised briefly below.

E10.5 Unlike Ofgem's approach, Oxera applies –

(a) the 2007-2016 time period,

(b) GO-based productivity benchmarks,

(c) estimated TFP growth for identifying benchmarks for each cost category, and

(d) an adapted 'targeted' comparator set.

E10.6 Contrary to Ofgem's approach, Oxera does not apply –

(a) any uplift for innovation funding, or

(b) any uplift for aiming up.[458]

E10.7 In addition to the above, Oxera conducts a sensitivity analysis which reveals the robustness of their results to the weighting scheme, the exclusion of industries and an adjusted VA estimation.[459]

E10.8 Taking the above into consideration, and applying it accordingly, Oxera arrives at a primary estimate of 0.4% p.a. – significantly lower than that provided by Ofgem, and marginally lower than the 0.4% p.a. estimate provided by WWU in its Business Plan.[460]

[457] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 6.2.

[458] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 6.2.

[459] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, paras 6.7 - 6.11.

[460] Tab L1: Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations, para 6.15.

E11 SUMMARY OF RELIEF SOUGHT

E11.1 The relief sought by WWU in respect of this head of appeal is set out below.

E11.2 WWU requests that the CMA grants the following relief to correct Ofgem's errors in respect of this head of appeal –

(a) quash Ofgem's decision to set the ongoing efficiency challenge at 1.15% p.a. for capex and repex, and 1.25% p.a. for opex, and

(b) substitute an efficiency benchmark of 0.5% p.a.

F. TAX CLAWBACK

F1 INTRODUCTION TO TAX CLAWBACK

F1.1 The policy known as 'tax clawback' is an Ofgem price control policy which has effect through the price control licence conditions. It operates to reduce the revenue allowances for tax by means of the functioning of the Price Control Financial Model, which is an integral part of the conditions.

F1.2 Tax clawback applies in respect of gas distribution licence holders which are more highly geared than the notional company assumed by Ofgem for the purposes of determining the cost of capital. The underlying policy purpose is to remove from those licence holders any tax benefit that would otherwise accrue as a result of exceeding the notional level of gearing and therefore reducing tax costs through higher levels of deductible tax interest costs.

F1.3 For tax clawback to apply, two conditions must be met –

(a) the licence holder's actual cost of debt must exceed the allowance for cost of debt, and

(b) actual gearing must exceed notional gearing.

F1.4 Where both conditions apply, the excess of actual cost of debt over the allowed cost of debt is grossed up for tax, and the grossed-up amount is deducted from the regulatory revenue allowance for tax. This takes place on an *ex post* basis, and hence is a 'clawback'.

F1.5 The detailed rules on tax clawback calculations were set out in a letter issued by Ofgem to all licensees in July 2009 (the **2009 letter**)[461]. There has been no industry-wide update to this letter sent by Ofgem since then.

F2 FACTUAL BACKGROUND

F2.1 WWU has significant amounts of RPI swaps and interest rate swaps within its debt portfolio and therefore derivative costs are a significant component of total actual cost of debt. More detail is set out in section A of this Notice of Appeal (Cost of Debt) and the supporting witness statement of Mr Ian Weldon. For the purposes of tax clawback, WWU has a particular interest in how derivatives are treated.

[461] https://www.ofgem.gov.uk/publications-and-updates/open-letter-clawback-tax-benefit-due-excess-gearing

F2.2 In 2015, WWU wrote to Ofgem to seek clarification in relation to the treatment of derivatives under the 2009 letter. Ofgem responded to WWU (the **2015 letter**)[462] stating in clear terms that derivatives should be excluded from actual interest for the purposes of tax clawback calculations. WWU subsequently applied that approach to all clawback calculations for GD1.

F2.3 On 30 April 2019, Ofgem introduced changes to its regulatory financial performance reporting process (**RFPR**) by means of Regulatory Instructions and Guidance (**RIGS**)[463]. Although these changes strictly related to RFRP, Ofgem included a statement in the RIGS relating to financing inputs, which read as follows –

> 'Row 479 has been included to allow the annual accrued principal inflation on inflation linked swaps to be included for performance assessment if this cost has been otherwise excluded from Net Interest Per Regulatory (RIIO-1) definition. We would expect Net Interest Per Regulatory (RIIO-1) definition to include all inflation derivative payments that attract tax relief (because this definition is used for tax clawback) but to the extent Companies pay inflation derivative principal accretion on a periodic basis (for example every 5 years) and this cash payment is what is reflected in their statutory accounts (or regulatory accounts if still completed) we believe it is more accurate for performance assessment purposes to include an adjustment to remove the cash payment and then add back in the annual accrual associated with this expense. Companies should ensure not to double count and should only include derivative principal inflation accrual costs in this row if not already included in row 475 or if periodic principal inflation cash payments are excluded through an adjustment in one of the other rows 480-483.'[464]

F2.4 The statement underlined in the above quotation appeared to WWU to be inconsistent with the 2015 letter. WWU therefore queried it with Ofgem, but was unable to achieve a resolution of the apparent inconsistency. In the meantime, WWU continued to rely on the clear terms of the 2015 letter.

F2.5 In October 2019, at the request of WWU, Ofgem agreed to a change to WWU tax clawback calculations for 2013/14 to exclude derivatives. This treatment was therefore consistent with the 2015 letter.

F2.6 In September 2020, WWU wrote to Ofgem with regard to (among other things) adjustments in respect of tax clawback relating to the pre-GD1 period. One of these adjustments related to derivatives. WWU sought to exclude these from the tax clawback calculation, consistent both with the 2015 letter and with Ofgem's agreement in the previous year.

[462] Tab M30: Ofgem – Values for use in Tax Clawback Adjustment Calculations for WWW.

[463] Tab M27: Ofgem – RIIO Regulatory Financial Performance Reporting – Regulatory Instructions and Guidance.

[464] Tab M27: Ofgem – RIIO Regulatory Financial Performance Reporting – Regulatory Instructions and Guidance, p.17 (emphasis added).

F2.7 However, in October 2020, responding to WWU's request, Ofgem advised that derivatives should be included in tax clawback calculations, stated that it had updated its guidance by virtue of the RIGS, claimed that the 2015 letter was sent in error, and made it clear that the 2015 letter would no longer be followed.

F2.8 In the weeks immediately following this exchange of correspondence, and to the present date, further dialogue took place between WWU and Ofgem. However, the position as asserted by Ofgem in October 2020 has not changed.

F3 THIS HEAD OF APPEAL

F3.1 The issues arising in this head of appeal can be simply stated –

(a) Ofgem had a clear policy on the treatment of derivatives for tax clawback purposes, as set out in the 2015 letter, which has never been withdrawn.

(b) WWU has relied on that letter, and continues to rely on it. Ofgem has previously acted in accordance with it.

(c) The 2015 letter establishes a legitimate expectation in law as to the continuation of the policy set out in it as part of the price control arrangements.

(d) The 2015 letter also establishes a position that is logically coherent. Ofgem: (i) excludes derivatives from its calculation of the cost of debt, and (ii) also excludes them from the calculation of tax clawback. So long as (i) remains the policy, it is consistent that (ii) should also be the policy.

(e) Ofgem has now indicated that it intends to resile from the position in the 2015. Although this is an important element of the price control, and material sums of money are at stake (see further below), it did not consult on a change to the treatment of derivatives for tax clawback calculations in any of its RIIO-2 consultations, or by any other means. No reference was made to the subject in either its Draft or Final Determinations.

F3.2 WWU says that Ofgem's newly-adopted position is inconsistent and irrational, in breach of legitimate expectation, in breach of requirements to consult, and lacking in policy justification of any kind. It is consequently wrong in law (section 23D(4)(e) of the Act).

F3.3 Ofgem's newly-adopted position will also have a material adverse effect on WWU's revenues, and accordingly fails to have proper regard (section 23D(4)(a) of the Act) or give appropriate weight (section 23D(4)(b) of the Act) to Ofgem's financing duty.

F3.4 In section A of this Notice of Appeal, WWU contends that derivatives should be included in the calculation of the cost of debt. If it succeeds on that ground, it accepts that the logical consequence of that outcome is that derivatives should also be included in the calculation of the tax clawback. That is the consistent and rational position.

F3.5 The 2015 letter also reflected a consistent and rational position given the prevailing position in which derivatives were not taken into account for the purposes of the cost of debt.

F3.6 What cannot be justified, however, is Ofgem's new approach of seeking to regard derivatives as irrelevant for the purposes of calculating the cost of debt but entirely relevant in calculating the tax clawback. That is a clear error.

F4 FINANCIAL IMPLICATIONS

F4.1 The consequences of this error by Ofgem would be materially adverse for WWU in two respects.

F4.2 **First**, WWU estimates that the impact of including derivatives in tax clawback for GD2 would be a reduction to revenues of an average £7m per annum. This estimate is sensitive to inflation, given WWU's RPI swaps. Should the RPI inflation rate increase, the clawback impact would be higher; conversely, if RPI inflation falls (below the rates used by Ofgem in its Price Control Financial Model issued on 3 February 2021) the impact would be less.

F4.3 **Second**, WWU would lose revenue in 2021/22 of an amount of £23.7m and which relates to a pre-GD1 adjustment on the same issue, i.e. exclusion of derivatives in tax clawback.

F5 REMEDY

F5.1 WWU respectfully requests that the CMA quash Ofgem's decision to the extent that it entails taking into account derivatives for the purposes of tax clawback, and that it should substitute a decision to write into the licence conditions the principle that derivatives should not be taken into account for the purposes of tax clawback.

F5.2 To the extent that WWU succeeds on its arguments in respect of the treatment of derivatives under section A of this Notice of Appeal, it acknowledges that this head of appeal should not continue to be pursued.

F6 FURTHER EVIDENCE AND ARGUMENT

F6.1 Given the absence of any consultation by Ofgem on a change of policy position, and therefore the lack of any published rationale for its decision which can be addressed in this Notice of Appeal, WWU will seek leave from the CMA to adduce further evidence and argument on this matter if permission is granted and following Ofgem's formal response.

PART IV. SUMMARY OF RELIEF SOUGHT

1 RELIEF SOUGHT

1.1 A summary of the relief sought by WWU for each head of appeal is set out below.

Cost of Debt

1.2 WWU requests that the CMA quashes Ofgem's decision in relation to WWU's cost of debt allowance, and either substitutes its own decision to replace that allowance with one calculated in the manner described immediately below or alternatively remits the matter to Ofgem with a direction that Ofgem must do so:

(a) for **embedded debt**, the allowed cost of embedded debt to be set equal to the actual cost of debt (and derivatives) in situations where debt and derivatives were undertaken at rates below the benchmark (i.e. the iBoxx index); and in situations where embedded debt and derivatives were undertaken at rates above the benchmark, the allowance to be capped at the benchmark rates level;

(b) for **new debt**, an indexed benchmark allowance to be set.

Cost of Equity

1.3 WWU invites the CMA to conclude that Ofgem was wrong in its decision on the cost of equity allowance, to quash that decision, and to substitute for it a decision of the CMA which –

(a) determines an allowed cost of equity within the range 5.61% to 6.78%, and

(b) chooses a point estimate in respect of the cost of equity from above the midpoint of that range.

Repex

1.4 WWU requests that the CMA grants the following relief to correct Ofgem's errors in respect of this head of appeal –

(a) quash Ofgem's decision to make licence modifications which set the unit costs for WWU's repex work at the levels reflected in the Final Determination; and

(b) substitute the CMA's decision for that of Ofgem with the effect of granting a blended unit rate for WWU's repex work of £[✂] per metre.

Licence Conditions and Revenue Uncertainty

1.5 WWU requests that the CMA grants the following relief to correct Ofgem's errors in respect of this head of appeal –

(a) quash Ofgem's decision to make licence modifications under which significant and key aspects of the RIIO-GD2 price control are to be set out in a large number of subsidiary documents; and

(b) corrects Ofgem's errors by substituting its decision for that of Ofgem such that each condition which provides for a subsidiary document (whether an Associated Document or a GD2 Price Control Financial Instrument) to be issued by Ofgem (a 'relevant condition') is modified to the effect described below.

1.6 The substituted decision shall make modifications to each relevant condition such that it –

(a) provides for the relevant subsidiary document which is issued under it to form part of, and therefore in all respects has the same status as, the relevant licence condition, e.g. in the same manner as the GD1 Price Control Financial Instruments have such status; and

(b) provides that –

(i) any change to the relevant subsidiary document which Ofgem wishes to make that has or is likely to have a 'significant impact' on WWU and/or any other affected party (including consumers) shall and can only be made pursuant to the provisions of section 23 of the Gas Act;

(ii) in making an assessment on whether a change has or is likely to have a significant impact on any such persons, Ofgem shall have particular regard to any impact which an intended modification would be likely to have on any component of WWU's allowed revenues or on any value, rate, time period, or calculation used in the determination of those allowed revenues;

(iii) a change which serves to correct a manifest error shall be presumed not to have or likely to have a significant impact, but that presumption can be rebutted by representations made by WWU which demonstrate that WWU reasonably considers the proposed change has or would be likely to have a significant impact; and

(iv) where the licensee reasonably demonstrates in its representations to Ofgem that a change proposed by Ofgem has or is likely to have a 'significant impact' on

WWU or on any component of WWU's allowed revenues or on any value, rate, time period, or calculation used in the determination of those allowed revenues, the change shall and can only be made pursuant to the provisions of section 23 of the Gas Act.

1.7 In the alternative, in the event the CMA were not minded to give the relief sought above, WWU requests that the CMA substitutes its decision for that of Ofgem's such that additional modifications are made to the conditions of the WWU licence which have the effect that where Ofgem amends any of the requirements set out in a subsidiary document issued by it under a relevant condition it shall also make modifications to the price control licence conditions so as to provide for WWU to recover, by way of pass-through, the costs incurred by it in consequence of the amended requirements and/or Ofgem's subsequent interpretation of the requirements. In this case, WWU would request the CMA to make the requisite additional modifications to Special Condition 6.1 of the WWU licence.

Ongoing Efficiency

1.8 WWU requests that the CMA grants the following relief to correct Ofgem's errors in respect of this head of appeal –

(a) quash Ofgem's decision to set the ongoing efficiency challenge at 1.15% p.a. for capex and repex, and 1.25% p.a. for opex, and

(b) substitute an efficiency benchmark of 0.5% p.a.

Tax Clawback

1.9 WWU respectfully requests that the CMA quash Ofgem's decision to the extent that it entails taking into account derivatives for the purposes of tax clawback, and that it should substitute a decision to write into the licence conditions the principle that derivatives should not be taken into account for the purposes of tax clawback.

PART V. STATEMENT OF TRUTH

The Appellant believes that the facts stated in this Notice of Appeal are true.

Signature of Authorised Representative

Name of Authorised Representative: **Graham Edwards**

Date: **3 March 2021**

for and on behalf of Wales & West Utilities Limited

ANNEX 1 – SUMMARY OF SUPPORTING EVIDENCE

Witness Statement of Ian Weldon (**Tab C1**)
Oxera – RIIO-2 Cost of debt allowance (**Tab D1**)
Oxera – Cost of equity report (**Tab E1**)
Oxera – Expected outperformance adjustment (**Tab F1**)
Oxera – RIIO-GD2 Financeability Report (**Tab G1**)
Witness Statement of Rob Long (**Tab H1**)
Turner & Townsend – WWU Mains Replacement Appeal – Export Report (**Tab I1**)
Oxera - The impacts of labour market pressures and sparsity on Repex in the Wales & West Region – A Report Prepared for WWU (**Tab J1**)
KPMG – Analysis of use of subsidiary documents in RIIO-2 (A report for WWU) (**Tab K1**)
Oxera – Review of Ofgem's ongoing efficiency decision in the RIIO-2 Final Determinations (**Tab L1**)

Note: Where we refer to 'Tab XX' in this Notice of Appeal this is a reference to the tab reference and document in the Bundle as listed in the Bundle Index.

ANNEX 2 – CHRONOLOGY

Date	Event
1 April 2013 – 31 March 2021	Price control period RIIO-GD1
12 July 2017	Commencement of RIIO-GD2 development process with publication by Ofgem of an open letter setting out aims and context for RIIO-GD2
7 March – 2 May 2018	Consultation on changes to the RIIO framework for the RIIO-GD2 price control
30 July 2018	RIIO-GD2 framework decision published
18 December 2018 – 14 March 2019	RIIO-GD2 sector specific methodology consultation on the key elements of the regulatory framework for RIIO-GD2 for gas transmission, electricity transmission, gas distribution, and the electricity system operator
24 May 2019	RIIO-GD2 sector specific methodology decisions published, including guidance for companies on the development of business plans for the RIIO-GD2 period and the enhanced engagement process
9 December 2019	Submission of network companies business plans to Ofgem
December 2019 – July 2020	Ofgem raises supplementary questions directly with network companies and holds bilateral discussions and working groups to explore relevant issues
3 January 2020	Submission of reports to Ofgem by RIIO-GD2 Independent Customer Engagement Groups and User Group on the network companies' business plans for RIIO-GD2
24 January 2020	Submission to Ofgem of independent reports by RIIO-GD2 challenge group on the network companies' business plans for RIIO-GD2
9 July – 4 September 2020	Consultation on Draft Determinations for gas transmission, electricity transmission, gas distribution and the electricity system operator
30 September – 28 October 2020	Informal licence drafting consultation
October 2020	Ofgem holds open meetings with each of the network companies
8 December 2020	Final Determinations for RIIO-GD2 published
17 December 2020 – 19 January 2021	Statutory consultation on proposed modifications to network companies' licence conditions to give effect to the RIIO-GD2 price control
17 December 2020	Publication, in draft form, of – • ECP Guidance

Date	Event
	• Environmental Reporting Guidance
3 February 2021	Decision on licence modifications published
3 February 2021	Publication of – • GD2 Price Control Financial Handbook • GD2 Price Control Financial Model
16 February 2021	Publication, in draft form, of – • Net Zero And Re-opener Development Fund Governance Document • Net Zero Pre-Construction Work and Small Net Zero Projects Re-opener Governance Document
18 February 2021	Publication, in draft form, of – • Network Asset Risk Workbook • NARM Handbook
26 February 2021	Publication, in final form, of – • FPNES Governance Document • RIIO-2 NIA Governance Document • VCMA Governance Document • PCD Reporting Requirements and Methodology Document • Re-opener Guidance and Application Requirements Document
2 March 2021	Publication, in final form, of – • Environmental Reporting Guidance
1 April 2021	Proposed commencement date for RIIO-GD2 price control

ANNEX 3 – GLOSSARY

TERM	MEANING
Act	The Gas Act 1986 (as amended).
Associated Documents	Documents issued and amended by Ofgem by direction in accordance with the special conditions of the licence.
Biogas	A gas produced by the biological breakdown of organic matter in the absence of oxygen. This gas can be used in a similar manner to natural gas to produce heat or electricity but unlike natural gas, biogas can be renewable fuel.
CMA	The Competition and Markets Authority.
Decommissioning	In relation to a pipe, replacement with a new pipe or disconnection with no replacement where the pipe is no longer required.
Ductile iron	A form of iron used for pipes which is harder to cut through than other forms of iron (such as cast or spun) when undertaking repex work.
Gas Act	The Gas Act 1986 (as amended).
Gas Distribution Networks (GDNs)	GDNs transport gas from the National Transmission System to final consumers and to connected system exit points. There are eight network areas managed by four companies that are subject to RIIO price controls.
HSE	Health and Safety Executive.
Insertion, or mains insertion	A technique for undertaking repex work that involves digging a pit at each end of the main, inserting the new main inside the old one and digging pits at each service connection to transfer services to the new main. Insertion costs less than using the open cut technique.

TERM	MEANING
Iron Mains Risk Reduction Programme (IMRRP)	The Health and Safety Executive's current policy in relation to the mandatory replacement of certain categories of iron gas mains which run within 30m of an occupied building. Under the IMRRP, such pipes are divided into different tiers (Tier 1, Tier 2A, Tier 2B and Tier 3) depending on their diameter and risk profile.
MEAV (modern equivalent asset value)	The current replacement value of an asset.
Mains replacement	Replacement of old, deteriorating metallic mains pipes and associated activities, including under the IMRRP.
Net Zero	Achieving a balance between the amount of greenhouse gas emissions produced and the amount removed from the atmosphere.
Network Asset Risk Metric (NARM)	The monetised risk associated with a NARM asset or the monetised risk benefit associated with a NARM Asset intervention.
New Roads and Street Works Act	New Roads and Street Works Act 1991.
Ofgem	The Gas and Electricity Markets Authority (also referred to as the Authority)
Open cut	A technique for undertaking repex work that involves digging and backfilling a trench the full length of the main to be replaced, laying the new main in the trench and transferring all services. Open cut costs more than using the insertion technique.
PE pipe	A pipe made from polyethelene, used to replace a metallic mains or service pipe.
Performance Management Framework (PMF)	A relative measure of workforce productivity against set target times for completing certain tasks. A mechanism used in WWU's internal cost model for repex work.
Price Control Deliverable (PCD)	In RIIO-2, Ofgem will use PCDs to capture those outputs that are directly funded through the price control and where the funding provided is not transferrable to a different output or project.

TERM	MEANING
Regulation 13A Programme	A GND's programme for mains replacement, approved by the Health and Safety, required under regulation 13A of the Pipelines Safety Regulations 1996. A GDN must comply, so far as practicable, with its Regulation 13A Programme.
Repex	The decommissioning of metallic mains and service pipes, including in line with the IMRRP.
RIIO	Revenue = Incentives+Innovation+Outputs.
RIIO-GD1 (or GD1)	The price control for gas distribution companies for the period 1 April 2013 – 31 March 2021.
RIIO-GD2 (or GD2)	The price control for gas distribution companies for the period 1 April 2021 – 31 March 2026.
Service pipe	Smaller (mainly metallic) pipes that come off the mains pipe to deliver gas to a domestic dwelling or a non-domestic property.
Sparsity	In relation to a gas network, the condition of having a widely dispersed customer base and serving areas of low population density. In such areas, customers can be clustered together, with large empty patches between clusters and long driving distances on less well developed road networks.
subsidiary document(s)	A document issued or to be issued by Ofgem under and in accordance with a licence condition.
System Architecture	System Architecture covers a range of processes which ensure 1:20 demand requirements can be met, including forecasting future customer demand requirements, identifying physical network investment required to support load growth, booking NTS Flat Capacity to ensure sufficient gas is available at the NTS Offtakes, putting in place commercial agreements with significant sites and developing and implementing operational strategies for daily balancing.
System Balancing	System Balancing happens on an LDZ and NTS basis for each gas day. The LDZ process begins with production of a demand forecast from which storage and intake requirements are calculated. Volumes for intake are booked with NTS and controlled (by the GDN) via the NTS Offtakes. Processes are documented in the Uniform Network Code.

TERM	MEANING
System Operation	System Operation is the action of operating the gas network to ensure demands and supplies are balanced as described under "System Balancing" above.
Tier 1 pipe	The highest risk category of pipe under the IMRRP being an iron pipe of 8 inches diameter and below that runs within 30m of a qualifying building. Under the IMRRP, all Tier 1 pipes must be decommissioned by the end of 2032.
Tier 2A pipe	Iron pipes with a diameter of above 8 inches and below 18 inches, which run within 30m of a qualifying building and exceed the risk-action threshold agreed between a GDN and the Health and Safety Executive. Tier 2A pipes must be decommissioned under the IMRRP.
Tier 2B pipe	Iron pipes with a diameter of above 8 inches and below 18 inches, which run within 30m of a qualifying building and fall below the risk-action threshold agreed between a GDN and the Health and Safety Executive. Such pipes are subject to monitoring and management regimes which may include decommissioning where the pipes have deteriorated beyond safe or effective repair. Such pipes may also be subject to decommissioning where this is approved by Ofgem as economically justified.
Tier 3 pipe	Iron pipes with a diameter of 18 inches and above which run within 30m of a qualifying building. Such pipes are decommissioned where they have become unsafe or where replacement is approved by Ofgem on the basis that it is economically justified.
Total expenditure (totex)	Totex includes capital expenditure (capex), operating expenditure (opex) and replacement expenditure (repex).
Uncertainty mechanism	Uncertainty mechanisms allow changes to the ex ante base revenue during the price control period to reflect significant cost changes that are expected to be outside the company's control.

TERM	MEANING
Volume driver	An uncertainty mechanism allowing revenue to vary as a function of a volume measure (e.g. number of new connections).
WWU	Wales & West Utilities Limited.