Response to the CMA's provisional findings of 29 September 2020

27 October 2020

Table of Contents

Foreword

The PR19 process started in earnest in July 2017 with the publication of Ofwat's draft methodology. Three years later and following the commitment of substantial resources by the regulator, companies and customers alike, all of which is ultimately paid for by customers, we are close to a balanced and fair resolution. It is in no one's interest that this uncertainty is allowed to continue any longer. Customers need clarity over their bills, we need certainty on which to base our operational and financial plans and investors and the financial markets need to be assured over the clarity of the regulatory regime and the resilience of the sector.

The CMA's process over the last eight months has been thorough, rigorous and, above all, transparent. Conducted in difficult circumstances for all parties because of COVID-19, the redetermination has allowed both appellant companies and Ofwat ample opportunity to make their cases in detail and for those cases to be subject to an entirely appropriate level of robust scrutiny. Over 70 third party responses were received, a figure which compares favourably to the number of organisations which responded to Ofwat's consultation on the PR19 methodology.

The Provisional Findings (**PFs**) remain an extremely challenging settlement for Yorkshire Water to deliver. Much of Ofwat's Final Determination (**FD**) remains in place. Customers will receive bill reductions and we will need to make step-change efficiencies in the way in which we deliver both their day to day services and also our longer-term capital investment.

This response sets out how the CMA's PFs achieve a better balance between delivering a good deal for today's customers in the form of bill reductions and a fair settlement for future generations by encouraging investment in long-term resilience. It will mean that we can meet our WINEP obligations more sustainably and further promote innovation in flood defences in Hull.

The PFs are also much closer to what our customers told us are their preferences. In critical areas which customers care about the most, like leakage, Yorkshire Water will now be able to develop and implement the new technologies and techniques for substantial improvements to be made.

We recognise and support the steps taken to protect customers through a fair incentive regime that clearly places delivery responsibility on us without being excessively punitive.

This balanced settlement means that the finance critical to deliver that investment will continue to be available and affordable for Yorkshire Water and our customers.

The response also suggests some additional areas where the PFs could be further balanced and clarified and we look forward to discussing those in detail with the CMA should that be helpful.

Finally, we would like to thank the CMA for the robust and fair procedure that is has implemented so far in these proceedings and for the efforts that it has made to deliver its redetermination by December this year. We remain of the view that this is wholly achievable and would avoid the harm to our customers and stakeholders that would arise otherwise, as outlined in recent correspondence.

1. Introduction

1.1 The PFs make significant progress towards establishing a balanced package that continues to protect customers

1.1.1 Yorkshire Water Services (**YWS**) is grateful for the CMA's acknowledgement in the PFs that it has "*sought to ensure that our provisional findings strike the right balance between bill reductions and the interests of current and future customers in resilient infrastructure, particularly in the face of climate change*" and that "*companies need to be provided with more revenue to secure continued investment in the sector*." These sentiments, which will resonate in future price reviews, succinctly capture some of the long-term challenges facing the water sector and the key reasons why the YWS Board sought this redetermination by the CMA.

1.1.2 When considered in the round, YWS considers that the PFs make significant progress towards achieving these goals. Should the PFs be replicated in the CMA's final determination, then:

(a) YWS would be able to balance better long-term investment with immediate performance improvements, in the way that its customers supported. In particular, YWS could deliver significant investment in resilience and sustainability during AMP7, thereby directly addressing some of its customers' key concerns, such as flooding.

(b) YWS could at the same time deliver a flat and stable real bill profile in line with that proposed in its IAP response, which had the support of 88% of its customers.

(c) YWS's financeability concerns would be mitigated, as the PFs provide a more investable package and show financial ratios that are consistent with a solid investment grade credit rating (i.e. BBB+/Baa1). This would help to provide customers with a stable company that can attract investors in the long term.

(d) The views and priorities of YWS's customers would be reflected much more closely than Ofwat's FD, including the need for intergenerational fairness, the need for YWS to play its part in addressing the significant flood risk that communities in Yorkshire face, and the level and profile of bills.

(e) YWS would be well-placed to maintain its focus on building public value in Yorkshire, through local partnerships and to provide strong social commitment at a time when the region is facing tough economic challenges as a result of the COVID-19 pandemic.

1.1.3 This would clearly be a significant improvement for all of YWS's stakeholders relative to the position under Ofwat's FD, which resulted in the customer harm YWS has previously outlined.

1.1.4 YWS welcomes that the CMA has expressly recognised and addressed many of the serious deficiencies of Ofwat's FD, including:

(a) The CMA's superior approach to assessing financeability, including the consistent adoption of rating agency methodologies in preference to Ofwat's bespoke approach, and the exclusion of accelerated revenues.

(b) The overall level of the WACC – which better reflects the risks faced by YWS than the level set by Ofwat, and helps to ensure that the PFs represent a financeable package overall. The CMA expressly acknowledges the real danger of setting the WACC too low, namely a greater risk of underinvestment.

(c) The CMA's decision to omit Ofwat's inappropriate gearing outperformance sharing mechanism (**GOSM**).

(d) The CMA's recognition that additional funding is necessary to achieve the required step-change in performance on leakage reduction, which goes some way to bridging the costs-outcomes gap that YWS identified within Ofwat's FD.

(e) The de-risking of some elements of YWS's outcomes package in recognition that there are some elements of performance that are inherently outside of management control.

(f) The CMA's recognition that the PR14 reconciliation issue arose out of an unambiguous data-input error.

1.1.5 The CMA's decisions in these areas (amongst others) combine to mean that – when assessed at an overall package level – the PFs represent a significantly more balanced package than Ofwat's FD and mitigate much of the harm that it would have caused.

1.1.6 However, while YWS is grateful to the CMA for its hard to work to date in redressing the imbalance caused by Ofwat's FD – particularly in view of the unforeseen practical constraints that it has faced as a result of the COVID-19 pandemic – YWS nevertheless considers that the PFs do not go all the way to addressing its concerns.

1.1.7 This position is well illustrated by the CMA's own financeability analysis. For the avoidance of doubt, YWS agrees with the CMA's conclusion that it would be financeable (on a notional basis) under the PFs, which addresses one of the principal failings of Ofwat's FD. However, the CMA's analysis expressly recognises that YWS would be left with limited headroom in a downside scenario, the implication of which is that the PFs still represent a significantly challenging package for YWS overall.

1.1.8 Importantly, we should highlight that the CMA's financeability assessment is likely significantly to understate the downside asymmetry relating to ODIs (and thus overstate the headroom available). This is because the CMA has not sought to quantify the downside risk relating to company performance. However, YWS considers this to be a material component of overall ODI risk, given that there is no reason to suppose that the PC targets set coincide with the economically efficient level, or are funded. For these reasons, the CMA's indicative negative ODI package RoRE of -0.1% to -0.2% does not likely reflect the 'expected' performance level.

1.1.9 The scale of the challenge inherent in the PFs is reflected in the updated risk analysis conducted for YWS by Economic Insight, which indicates that the condition of YWS being investable for equity (on a notional basis) is only marginally satisfied and there remains a considerable downside skew in YWS's risk position. The Economic Insight analysis, which does incorporate ODI performance risk, indicates that on a P50 basis, YWS remains exposed to material penalty risk in AMP7.

1.1.10 This means that any material reduction in allowed revenues in the CMA's final determination would likely render YWS unfinanceable. Hence, and in light of the interdependencies between the different elements of the price control (rightly recognised by the CMA), downwards adjustments in any one area would require offsetting adjustments in other areas.

1.1.11 The significant challenge implied by the PFs is further illustrated by the following:

(a) The limited adjustments to costs and outcomes as compared to Ofwat's FD. In particular, YWS remains materially underfunded to deliver its stretching WINEP programme and the required step-change in performance on internal sewer flooding.

(b) The CMA's decision to implement a package of penalty-only and asymmetric ODIs which expose companies and their investors to asymmetric risk and therefore an expected return below the cost of capital.

1.1.12 While YWS recognises and endorses the view that regulated companies must be challenged to deliver for their customers and wider stakeholders, it is axiomatic that the scale of the challenge must be appropriate and reflective of the available evidence.

1.1.13 In view of this, YWS has identified a small number of narrowly defined areas where YWS believes the CMA should take further steps that – together with the steps that the CMA has already taken in the PFs – would serve to further rebalance the disconnect between risk and reward and to ensure that YWS's business plan (**Business Plan**) can be met more effectively. YWS considers that each one of these limited number of additional steps is fully justified by the available evidence and respectfully requests that the CMA considers them carefully when reaching its final determination.

1.1.14 These areas are outlined below and developed in detail in the subsequent sections of this response. Together, they should help deliver a manageable, stable and predictable bill profile, with no intergenerational unfairness, which is in the interests of all YWS's customers and stakeholders.

1.1.15 For the avoidance of doubt, the pragmatic and targeted approach that YWS has adopted in response to the PFs, based on its consideration of the package in the round, does not imply that YWS agrees fully with the CMA's detailed approach in all other areas. Moreover, it is also predicated on the assumption that the CMA will not materially alter its PFs in any other area in its final determination.

1.2 The PFs response is based upon the package in the round

1.2.1 Based on both its recent public statements and communications in these proceedings, it is anticipated that Ofwat will seek to persuade the CMA that its PFs are too generous to YWS and the other disputing companies (together, the **Disputing Companies**) and that material reductions should be made in the CMA's final determination.

1.2.2 When considering any new points raised by Ofwat in this regard, YWS would respectfully ask the CMA to keep in mind – as above – that the price control must be considered at a package level. From this point of view – taking into account the risk analysis outlined above – it is clear that without a corresponding uplift elsewhere in the CMA's final determination, any reductions would leave YWS in a position where the risk and reward imbalance would go from significant to insurmountable, and the probability of harm to customers and other stakeholders would materially increase.

1.2.3 A further corollary of the package-level view outlined above relates to the scope of the matters that YWS wishes the CMA to reconsider. At present, as set out in paragraph 1.1.13 above, YWS is asking the CMA to make adjustments in only certain key areas, on the basis that the combined effects of these changes should assist to rebalance the PFs package, provided that all other areas of the PFs remain unaltered in the CMA's final determination. However, should the

CMA conclude that a wider reopening of the PFs is required then, to the extent relevant to these wider matters, YWS would respectfully request that the CMA also take into account in its final determination:

(a) YWS's prior submissions in these proceedings; and

(b) the points that YWS has addressed in this response with a view to PR24 (as discussed further below).

1.3 Outline of this submission

1.3.1 The remainder of this response sets out YWS's detailed submissions on the PFs. In addition to the areas that YWS has expressly asked the CMA to reconsider in its final determination, these submissions also contain further reflections on the CMA's approach in the relevant areas, including considerations that are likely to be of importance with an eye to PR24. YWS considers that clarifications of the latter kind would be of invaluable assistance in facilitating a constructive approach between companies and the regulator for the future.

1.3.2 YWS's detailed submissions are structured as follows.

1.3.3 **Section 2** discusses financeability of the CMA's PFs. YWS explains that the adjustments made in the CMA's PFs take a clear step forward in ensuring that the allowed revenues for AMP7 result in a financeable notional firm, reflecting a fair deal for customers and investors in both the short and long-term. YWS also considers that the CMA's approach of following the methodologies of credit rating agencies is correct. Critically, when adopting this approach, it is clear that the overall financeability package for AMP7 – although improved – is still highly stretching. This is demonstrated by the limited headroom afforded to YWS in a downside scenario and the downside risk skew of the package which creates a material penalty risk for YWS.

1.3.4 Section 2 is accompanied by an Annex prepared by Economic Insight (Annex 1) which deploys a Monte Carlo analysis to conclude that YWS is likely to be financeable on a notional basis under the CMA's PFs, but that it remains very finely balanced and any significant downward adjustments to overall allowed revenues would call into question this conclusion.

1.3.5 YWS discusses the methodological approach to individual parameters of cost of capital in **Section 3**. YWS considers that the CMA has rightly identified the adjustment to the overall level of WACC to 3.50% as a key factor in achieving a financeable package overall. YWS supports the CMA's (important) acknowledgement of the risks of setting the WACC too low, including due to the asymmetric risk of the package and the significant detrimental impact that a too-low WACC can have on investment and consumer welfare. In terms of the methodological approach taken by the CMA, YWS agrees with adjustments made to certain parameters, but provides additional comments where YWS considers that the CMA's approach can be further refined.

1.3.6 In respect of capital structure, YWS maintains in **Section 4** that the GOSM was an unsubstantiated and inappropriate proposal. YWS is aligned with the CMA's recognition of the need for a more sophisticated assessment of financial resilience and supports the CMA's conclusion not to apply the GOSM.

1.3.7 YWS addresses the CMA's PFs on costs in **Section 5** of this response (save for those in relation to improvements in the upper quartile (**UQ**) Performance Commitments and Leakage, which are addressed in Section 6, in line with the structure of the PFs). Here, YWS requests that the CMA reconsider three key areas of its cost assessment: its approach to certain aspects of YWS's WINEP/P-removal costs, where YWS was awarded only a £12m uplift (taking into account the CMA's in the round efficiency challenge and conclusions on frontier shift); the CMA's adoption of a symmetrical unit rate adjustment for growth costs; and the use of the latest 2019/2020 outturn data in the CMA's cost modelling.

1.3.8 Given the potential importance of these proceedings for future price reviews, YWS also requests the CMA's view on a number of related propositions, including the need for a clear distinction between base and enhancement expenditure.

1.3.9 Section 5 is accompanied by two Annexes prepared by Oxera.

1.3.10 The first Annex contains the detailed supporting arguments underlying YWS's submissions on WINEP (Annex 2). It also addresses two further areas, namely base cost modelling and frontier shift. For the avoidance of doubt, YWS is not asking the CMA to reopen these two aspects of the PFs and the representations in the first Oxera Annex thereon are included because of their importance for PR24. However, as flagged in paragraph 1.2.3 above, should the CMA be minded to reopen those two areas in its PFs on the basis of submissions from Ofwat, then YWS would request that the representations in this Annex be taken into account.

1.3.11 The second Oxera Annex contains the detailed supporting arguments underlying YWS's submissions on the inclusion of 2019/2020 cost data in the CMA's modelling (Annex 3).

1.3.12 The CMA's PFs on outcomes and incentives are considered in **Section 6** of this response. As noted above, YWS welcomes the CMA's appreciation of the industry-wide step-change in leakage targets from PR14 to PR19 and the related acknowledgement that this step-change should be adequately funded. However, YWS considers that according to the CMA's own reasoning and approach, a company-specific step-change also exists in relation to its internal sewer flooding targets. YWS requests that the CMA apply enhancement funding to this step-change in the same way. YWS has also made some suggestions about leakage incentive rates and a modified incentive on internal sewer flooding should the CMA apply enhancement funding.

1.3.13 Section 6 is accompanied by a detailed annex prepared by Economic Insight (Annex 4), which explores the funding and incentives for performance improvement on internal sewer flooding, together with additional operational evidence prepared by engineering consultants, Stantec (Annex 5).

1.3.14 In **Section 7**, YWS considers the PFs in relation to the PR14 data input error. YWS welcomes the CMA's position that that the PR14 reconciliation issue concerned an unambiguous data input error. While it agrees with the CMA that the error should be corrected, YWS explains its concerns with the method of correction and requests that the CMA reconsider its position in relation to the RCV adjustment.

2. Financeability

2.1 Introduction

2.1.1 The CMA's PFs have taken a clear step forward in ensuring that the final determination of allowed revenues for AMP7 results in a financeable notional firm. YWS considers that the CMA's approach of addressing financeability 'in the round' is appropriate. In that context, YWS welcomes the CMA's increased totex allowances and more appropriate cost sharing rates, as well as the adjustment to the overall level of WACC which the CMA rightly identifies as being central to achieving financeability. In totality, the CMA's proposals therefore constitute a more balanced package than Ofwat's FD, in line with Ofwat's (and now the CMA's) customer, resilience and financeability statutory duties.[1]

2.1.2 Furthermore, the approach adopted by the CMA to assessing financeability, which follows the methodologies of credit rating agencies, is correct. This is a rigorous and transparent approach, consistent with credit assessment criteria, which will be appreciated by debt and equity investors for its clarity and sets a clear benchmark for future price reviews.

2.1.3 In this section, YWS comments on:

(a) the CMA's recognition of the long-term challenges facing the water sector and the continuing need to attract investment;

(b) the CMA's approach to assessing financeability and adoption of credit rating agencies' methodologies;

(c) the highly challenging package which remains in AMP7 for financeability; and

(d) the interconnection of the different elements of the price control which means that, in light of the challenging nature of the package, any material changes between PFs and the CMA's final determination will call into question overall financeability and therefore require reassessment of the package as a whole.

2.2 The CMA's recognition of the long-term challenges facing the water sector and the need to attract investment

2.2.1 YWS welcomes the CMA's recognition of the long-term challenges facing the water sector, the importance of investment to ensure resilience and inter-generational fairness and the urgent need to act now. This is critical for water companies, for customers and for tackling wider governmental objectives. In that context, YWS notes the recent findings of the House of Commons Public

[1] Water Industry Act 1991, section 2(2A).

Accounts Committee (***PAC***) "*that the regulatory regime does not adequately recognise the urgent need for long-term infrastructure investment to improve resilience and the emphasis on price is overplayed*".[2] During the PAC hearings, politicians warned that England faces a "*serious risk*" of running out of water within 20 years.[3] YWS is committed to achieving the right balance between reducing customer bills and building and repairing vital infrastructure and as such welcomes the UK government's and CMA's focus on resilience.

2.2.2 In its PFs, the CMA has recognised the need to support this important resilience-focused objective both in the totex allowances and its point estimate for WACC. With regards to the latter, YWS agrees with the CMA's recognition that "*[s]hould the cost of capital be set too low and this lead to an exit of capital from the sector, this would have* ***an adverse effect on the sector's longer-term attractiveness to investors.*** *This would, in practice, be likely to result in a higher medium-term cost of capital and/or a risk to availability of finance for future investment. There are well-established arguments that* ***underinvestment caused by a cost of capital being set too low damages the overall welfare of consumers (and potentially the wider economy) materially more than the welfare lost through bills that may be slightly too high****.*"[4]

2.2.3 The overall insufficient level of allowed revenues set under Ofwat's FD risked precisely the underinvestment of which the CMA warns, and the overall level of WACC provided by the CMA in the PFs provides a firmer footing to avoid these material risks.

2.2.4 It is clear that significant investment is required over AMP7 and beyond, in particular to address resilience and focus on projects that help to mitigate the impacts of climate change.[5]

2.2.5 As explained in section 2.4 below, the PFs remain highly challenging including reduced customer bills in AMP7 combined with a stringent performance commitments package which will improve customer service in the short term.

---

[2] Meg Hiller MP (Chair of the Committee of Public Accounts), letter to Tamara Finkelstein, 29 July 2020, see https://committees.parliament.uk/publications/2569/documents/25858/default/.

[3] House of Commons, Public Accounts Committee (*Water supply and demand management*), Ninth Report of Session 2019-21, held on 1 July 2020, see https://committees.parliament.uk/publications/1825/documents/17744/default/. This report also refers to commentary by the National Audit Office that "*neither DEFRA nor Ofwat has an explicit policy to reduce prices*" – see National Audit Office, Water supply and demand management, HC 107, Session 2019-2021, 11 June 2020, paragraph 11, see https://www.nao.org.uk/wp-content/uploads/2020/03/Water-supply-and-demand-management.pdf.

[4] CMA, PFs, paragraph 9.667.

[5] See, for example, YWS, SoC, paragraphs 8 and 316; YWS, Response, paragraphs 3.62.1-3.62.2; YWS Site Visit (in particular, Case Study 2 on the Living with Water partnership in Hull).

Yet, YWS also recognises that the CMA has taken a more sustainable approach in seeking to balance short-term bills with the longer-term investment required in the sector, which is ultimately in customers' current and future interests. By reducing overall risk exposure, making the industry more attractive for investment, and providing further funding for long-term resilience and infrastructure projects, the CMA's PFs reflect a better deal for customers as well as investors in both the short and long term.

2.3 The CMA's approach to assessing financeability and adoption of credit rating agencies' methodologies

2.3.1 The CMA's approach to assessing financeability allows for a more accurate assessment of YWS's risk which will have greater credibility with investors and should be used as a framework for future price reviews. In light of the serious long-term financeability concerns that YWS had raised during PR19 and this redetermination, YWS agrees that the approach taken by the CMA (including cost of capital assumptions, totex allowances and cost sharing rates) results in *"lower risk exposure in a number of areas"*.[6]

Approach to the CMA's financeability analysis

2.3.2 The CMA's PFs recognise that WACC is the primary factor in the redetermination ensuring that an efficient firm can finance its functions (as discussed in more detail in section 3 below). The CMA has correctly identified the interconnections between the different elements of the price control as a whole and that the WACC must be set at a level which ensures that overall allowed revenues and cashflows support ongoing investment.

2.3.3 The CMA also finds that credit ratio analysis provides a useful cross-check to help it consider whether the allowed return is in practice high enough to be consistent with the investment grade credit quality.[7] YWS considers that the CMA's approach of consistently adopting rating agency methodologies in carrying out its financeability assessment more accurately captures the risks facing YWS and addresses concerns which YWS sets out in its previous submissions.[8] As per YWS's written submissions,[9] YWS is encouraged that the CMA has been consistent with credit rating agency guidance regarding the

---

[6] CMA, PFs, paragraph 93.

[7] CMA, PFs, paragraph 10.58 and 10.59.

[8] YWS, SoC, paragraphs 266 and 271-272; YWS, Response to Ofwat Reply (the **Response**), paragraphs 9.2.3 and 9.2.4.

[9] YWS, Response, Table 26.

thresholds on adjusted interest cover and FFO to debt ratios in order to be eligible for Baa1/BBB+ rating i.e. 1.5 for AICR and 9% for FFO/Net Debt.[10]

2.3.4 YWS endorses fully the CMA's removal of accelerated revenues from the financeability assessment, which – for the reasons previously explained by YWS[11] – cannot be used as a fix for financeability. YWS agrees with the CMA's concerns regarding an approach which uses higher PAYG ratios to improve ratios which would otherwise indicate financeability concerns.[12]

2.3.5 The CMA's approach to assessing financeability is more rational and logical than the approach in Ofwat's FD and, importantly, will add to the credibility of the regulatory regime in the eyes of debt and equity investors. Therefore, this is a more robust and sustainable framework with which to assess financeability, which should be used in future price controls.

2.3.6 Together with this response, YWS submits its response to Question 9 of RFI017, which contains detailed comments on the CMA's financeability models.

Financeability analysis for YWS

2.3.7 The CMA's financeability conclusions, based on the PFs and the assumption of a notional capital structure means YWS could be reasonably confident of achieving financial ratios that are consistent with a solid investment grade credit rating (i.e. BBB+/Baa1).[13] YWS also notes that, in the CMA's downside scenario, YWS's AICR ratio reduces to 1.3 and FFO/Net Debt to 7.3%, which straddles the BBB/Baa2 and BBB-/Baa3 ratings bands and that *"[t]his remains an investment grade credit rating* ***but indicates limited headroom for key credit ratios*** *and suggests that management may need to consider mitigating actions to maintain their credit rating*."[14]

2.3.8 The CMA's inclusion of a specific downside scenario was one of the key elements missing from the financeability assessment as part of Ofwat's FD, as noted previously by YWS.[15] A 1% RoRE penalty, which equates to circa £150m of penalties over the AMP as a whole, is considered by the CMA as a *"severe*

[10] CMA, PFs, paragraph 10.65.

[11] YWS, SoC, paragraph 271.

[12] CMA, PFs, paragraph 10.94 and 10.96.

[13] CMA, PFs, Table 15-5 and paragraph 15.54.

[14] CMA, PFs, paragraph 10.87.

[15] Annex 01 (SoC), Economic Insight: 'Financeability of the notionally efficient firm: a bottom-up analysis', page 8.

downside case".[16] As noted within section 6, YWS believes further significant downside risk remains on both costs and outcomes. YWS's updated RoRE analysis below (paragraph 2.4.9 et. seq.) [CONFIDENTIAL].[17] This highlights the finely balanced financeability position within the CMA's PF.

2.4 A highly challenging package remains for AMP7

2.4.1 Whilst the CMA has improved YWS's financeability position by striking a more appropriate balance between risk and reward, its PFs still leave YWS with a challenging package for AMP7. Indeed, the CMA's own financeability analysis and assessment do not suggest significant headroom. Specifically, in relation to the CMA's own assessment and PFs, YWS highlights the following points:

(a) *Limited headroom on key credit metrics used to assess financeability:* as discussed above at paragraph 2.3.8, under the CMA's downside scenario (of YWS incurring -1.0% RoRE penalty), the CMA concludes there is 'limited headroom' on key credit metrics (with them being consistent with YWS straddling the BBB/Baa2 and BBB-/Baa3 ratings bands).

(b) *Asymmetry of risk:* YWS welcomes the fact that the CMA has highlighted the extent of asymmetric downside risk under Ofwat's FD and has taken steps to mitigate this. However, YWS notes that on its own analysis, the CMA accepts that there continues to be a downside risk skew under its PFs. Specifically, the difference between the CMA's P90 and P10 RoRE figures for YWS's ODIs is -1.5%[18], reduced from a figure of -1.6%[19] under Ofwat's FD. The CMA further acknowledges that expected ODI performance is skewed to the downside, at around -0.2% RoRE[20], which thus results in an expected return below the cost of capital[21] – a concern which YWS flagged in its previous written submissions to Ofwat and the CMA.[22]

(c) *Limited movement on ODIs and totex:* the PFs contain limited movement on totex and ODIs as compared to Ofwat's FD which, for the reasons explained in detail at section 6, creates a substantially more stretching

---

[16] CMA, PFs, paragraph 10.71.

[17] CMA, PFs, paragraph 10.71.

[18] CMA, PFs, Table 7-16.

[19] CMA, PFs, Table 7-4.

[20] CMA, PFs, paragraphs 7.237-7.238.

[21] CMA, PFs, paragraphs 9.671-9.672 and 9.674.

[22] For instance, see YWS, Response, section 6; Exhibit 068-003 (SoC), YWS, 'Financeability – Yorkshire Water Draft Determination Representation', August 2019, pages 8-9.

package than AMP6 and a high level of challenge for YWS in meeting its targets for AMP7. For instance, YWS remains materially underfunded to deliver its stretching WINEP programme[23] and the required step-change in performance on internal sewer flooding.[24]

(d) *Reduction in customer bills*: the PFs result in lower customer bills for AMP7. YWS is committed to this outcome, and to delivering, among other things, major performance improvements and a WINEP programme that is three times larger than before. The stretch of the price control in the CMA's PFs means YWS will achieve these outcomes for customers while still providing its customers comparable value for money and lower than average bills when compared with the industry as a whole.[25] In that context, it is also worth noting that at IAP stage the plan was re-tested with customers because the bill profile had changed to a real flat, stable bill. 88% of customers supported the plan (an increase of 2% from YWS's original Business Plan), and 84% found it affordable (an increase of 18% from YWS's original Business Plan).[26]

2.4.2 As noted above, the CMA's own assessment of YWS's financeability position shows limited headroom once risk is taken into consideration. Moreover, YWS considers both the extent of headroom and asymmetric downside risk is likely understated under the CMA's analysis. This is primarily because, in relation to ODIs, YWS understands that the CMA has quantified the impact of asymmetric penalty/reward rates and penalty only ODIs, but has *not* quantified ODI performance risk in meeting Performance Commitment targets. Whilst YWS agrees with the CMA that the quantification of performance risk is challenging,[27] it considers that:

(a) under the CMA's PFs, there is highly likely to be a material downside skew to performance, with expected ODI performance being below the target Performance Commitment levels; and

---

[23] See section 5.2, below.

[24] See section 0, below.

[25] Throughout PR14, YWS had the third lowest annual combined bill for water and sewerage companies across the UK with a 2014/2015 total of £23 below the national average and a 2019/2020 total of £15 below the national average (see Ofwat, PR14 Overview, page 14, at https://www.ofwat.gov.uk/wp-content/uploads/2015/10/det_pr20141212final.pdf). The CMA's proposed bill profile would result in YWS being £5 below the national average at the end of AMP7.

[26] Exhibit 051 (SoC), YWS's IAP response.

[27] CMA, PFs, paragraph 7.92.

(b) the financial consequences of this will likely be material.[28]

2.4.3 Point (a) above follows from the fact that YWS does not consider the Performance Commitment target levels are likely to coincide with the economically efficient level of performance and, in most cases, will be beyond it. For example, and as explained in section 6 in relation to the comparative/common Performance Commitments, the UQ could only be the economically efficient level by coincidence. This important point was explained more fully in YWS's Statement of Case (**SoC**).[29]

2.4.4 In light of the above, YWS sets out below the additional evidence and information that it has examined to further test the extent of the financeability constraints it faces under the CMA's PFs.

Updated Monte Carlo financeability assessment

2.4.5 Alongside the SoC, YWS submitted a 'bottom up' assessment of the company's financeability under Ofwat's FD, based on a Monte Carlo analysis by Economic Insight.[30] The analysis factored in risk and uncertainty around the key building blocks of the price control, and 'equally weighted' company and Ofwat evidence for each input parameter (e.g., ODI risk; totex risk; etc). At the time, this analysis showed that:

(a) the weighted average RoRE for YWS was below Ofwat's allowed base equity return in 83% of model iterations; and

(b) ACICR and FFO to net debt were below the levels consistent with a Baa rating in 95% and 99% of model iterations.

2.4.6 Hence, the analysis showed that (on a notionally efficient basis) under Ofwat's FD, YWS was neither investable for equity, nor had sufficient credit quality to be confident of maintaining an investment grade rating.

2.4.7 In light of the CMA's PFs, Economic Insight has updated this analysis (see Annex 1). Reflecting the range of changes proposed by the CMA relative to Ofwat's FD, Economic Insight finds that YWS is now likely to be financeable under the CMA's PFs. Specifically, the update shows that: "*under the PFs, the P50 for the expected*

[28] For example, based on the same underlying analysis in Annex 01, Economic Insight, 'Financeability of the notionally efficient firm: a bottom-up analysis: update to reflect CMA provisional findings', [CONFIDENTIAL]. See Annex 05 (SoC), Economic Insight, 'Ofwat's approach to ODI Interventions in the Final Determinations', section 8.3.

[29] YWS, SoC, paragraphs 156-157.

[30] Annex 01 (SoC), Economic Insight: 'Financeability of the notionally efficient firm, a bottom-up analysis.'

return is considerably higher than under Ofwat's FD [CONFIDENTIAL] *[and] the P50 lies within the CMA's estimated range for the cost of equity.*"[31]

2.4.8 YWS would like to draw to the CMA's attention that, whilst Economic Insight's analysis shows that the expected return has increased to 3.88%, which is within the CMA's estimated range for the cost of equity of 3.56% to 5.60%, it remains towards the bottom of this range and is well below the CMA's point estimate for the base expected return of 5.08%. Therefore, the analysis further highlights the 'narrow margin' by which financeability has been achieved under the PFs. This implies that were there to be any significant downward adjustments to overall allowed revenues in the CMA's final determination (relative to its position in its PFs), this would call into question whether YWS was financeable on a notional basis.

YWS RoRE analysis

2.4.9 In addition to Economic Insight's Monte Carlo analysis update, YWS has undertaken its own RoRE risk analysis, which also shows that there remains a significant negative skew in risk (versus YWS's Business Plan) when the CMA's PFs overall package is considered.

2.4.10 In relation to ODIs, YWS notes the CMA's statement "*that an average performing company may expect to face some penalties*"[32] and takes as a starting point the CMA's assumption that "*the scale of these penalties might be around 0.1%-0.2% RORE*".[33] The result of this is that the expected return in the YWS analysis will be slightly below the CMA's proposed base return (and is likely conservative in this regard, due to the omission of performance-related downside risk).

2.4.11 YWS notes that the CMA's proposed base return is higher than that proposed within its Business Plan by 0.05%. However, when the CMA's assumed expected penalty range of 0.1%-0.2% is taken into account, the implied notional return is still 0.05% to 0.15% lower than that included within YWS's Business Plan. This, viewed in conjunction with the remaining downward risk skew relating to costs and outcomes, means that YWS continues to face an extremely challenging package in comparison to the carefully calibrated one included within YWS's Business Plan.

---

[31] Annex 01, Economic Insight, 'Financeability of the notionally efficient firm: a bottom-up analysis: update to reflect CMA provisional findings', page 2.

[32] CMA, PFs, paragraph 10.72.

[33] CMA, PFs, paragraph 10.72.

2.4.12 The chart below contrasts the overall risk and return package in YWS's Business Plan across the three core elements - WACC, costs and outcomes - with the CMA PFs using standard RoRE analysis.

Figure 1: [CONFIDENTIAL]

2.4.13 YWS's Business Plan included a balanced risk and return range of -4.1%/+3.8% that was modified to a slightly negative skew of -4.4%/+2.9% around the base return (as shown in the chart above) in YWS's response to Ofwat's IAP. Subsequently, Ofwat introduced greater cost and outcome challenges leading to a more negatively skewed range at its Draft Determination (**DD**) and FD. This negative skew has largely remained within the CMA's PFs due to the limited changes to costs and outcomes.

2.4.14 Therefore, whilst the CMA has reduced the imbalance of certain elements of the risk and reward package, including an increase in the base return to 5.08%, the chart above shows that [CONFIDENTIAL].

2.4.15 Both the Economic Insight analysis and the RoRE analysis above show that whilst the CMA's PFs have improved the overall risk and reward package, it remains very finely balanced and significant challenges remain for YWS. As a result of these narrow margins, any downward adjustments to the CMA's PFs would mean it is likely YWS would no longer be financeable on a notional basis.

2.5 Financeability involves overall calibration of the price control as a whole

2.5.1 The overall changes which the CMA has made in its PFs demonstrate the approach taken to provide a more financeable package, including the more robust and transparent assessment of financeability. However, as is evident from the above, this is a finely balanced package.

2.5.2 YWS expects Ofwat and certain other stakeholders may seek to persuade the CMA that its PFs are overly generous in certain respects such that material reductions may be sought to key parameters impacting overall financeability. YWS would strongly dispute any such changes and would respectfully request that the price control continues to be assessed as a balanced package. Therefore, YWS considers that, without a corresponding uplift elsewhere in the price control, any material reductions would leave it in a position where the risk and reward imbalance is once again insurmountable.

3. Cost of capital

3.1 Introduction

3.1.1 YWS supports the CMA's selection of a 3.50% point estimate for WACC which will be a key factor in attracting much needed investment and achieving a financeable package overall.[34] YWS considers this approach provides a better balance between promoting customers interests in the short term and securing the investment needed for customers in the longer term.

3.1.2 With respect to the individual parameters of WACC, YWS agrees with the PFs as regards certain cost of capital parameters, several of which are in line with the view put forward by YWS in its written submissions. Nevertheless, there remain a number of individual components of WACC where YWS considers that the CMA could make further refinements to its methodological approach.

3.1.3 In the section below, YWS sets out:

(a) its comments on the overall level of WACC and its role in achieving a financeable package (see section 3.2);

(b) its comments on the individual elements of WACC in terms of the methodological approach provisionally adopted by the CMA and comments on the point estimate provisionally selected by the CMA (see section 3.3); and

(c) the caution that should be exercised in making any direct comparisons to cost of capital estimates from other price control processes, such as NATS, and well as to YWS's Business Plan submitted to Ofwat in September 2018 (see section 3.4).

3.2 The overall level of WACC set by the CMA in the PFs in order to achieve a financeable package

3.2.1 YWS agrees with the CMA's recognition of the importance of the cost of capital to the financeability of the wider package and that *"the WACC is the primary factor in the redetermination ensuring that an efficient firm can finance its functions. As a matter of principle, if the WACC is set at a reasonable level, both debt and equity investors should earn sufficient returns to cover the costs of financing"*.[35] YWS also agrees with the CMA's (important) acknowledgement of the risks of setting the WACC too low, including due to the asymmetric risk of YWS's package arising from penalty-only and asymmetric ODIs (and therefore

[34] CMA, PFs, paragraphs 82-83.

[35] CMA, PFs, paragraph 10.58.

an expected return below the cost of capital[36]) as well as the significant detrimental impact that a too-low WACC can have on investment and consumer welfare.[37]

3.2.2 YWS recognises that the CMA has made its decision on WACC by taking into account a vast quantity of information, including submissions from numerous parties and their economic advisers, during the PR19 redetermination process. YWS acknowledges that setting WACC involves an inherent level of uncertainty and requires careful judgement, which has been reflected in the breadth and depth of analysis of the various components of WACC.

3.2.3 In setting the WACC at the level that it has done, YWS supports the CMA's approach of carrying out a cross-check against financeability of YWS's package, particularly regarding the *"legitimate concern"* that, if the WACC is set too low, notionally geared companies would not be able to retain investment grade credit ratings.[38] YWS considers that the overall adjustment to the WACC has materially contributed to the improvement of YWS's financeability position by striking a more appropriate balance between risk and reward, although YWS will remain with a challenging package for AMP7 overall.

3.3 The CMA has conducted a thorough review of the methodological components of cost of capital

3.3.1 For the reasons outlined in YWS's previous submissions,[39] YWS's views align with the methodological interventions that the CMA has provisionally made on a number of elements of WACC including in relation to the approach to estimating the historical TMR, amendments to the upper bound for the risk-free rate to take account of AAA-rated non-government bonds and the CMA's use of longer runs of share price data for beta estimation. However, there remain a number of important areas where YWS considers that the CMA could make further refinements to its calculation. These are set out below.

3.3.2 YWS wishes to elaborate in particular on the following areas:

(a) inflation;

---

[36] See CMA, PFs, paragraph 9.672 – this is in line with the approach taken by the CMA in SONI that if the expected return is below the allowed return, then this also provides justification for an adjustment to the allowed WACC: see CMA (2017), *SONI Limited v Northern Ireland Authority for Utility Regulation - Final Determination,* paragraphs 12.102–12.103 & 12.109-12.111.

[37] CMA, PFs, paragraph 9.667.

[38] CMA, PFs, paragraph 9.673.

[39] See YWS, SoC; YWS NATS submission; YWS, Response, section 6 and technical annex; oral submissions made in YWS's main party hearing; oral submissions made at the cost of capital roundtable.

(b) cost of debt; and

(c) selection of point parameter estimates for the cost of equity.

Further detail is then provided in tabular form on a number of additional areas.

Inflation

3.3.3 The first factor that is not properly accounted for in the CMA's PFs, and which in YWS's view may have distorted the impressions that some commentators have formed of the CMA's findings, is inflation.

3.3.4 For the avoidance of doubt, and contrary to the CMA's assumption, there is no separate process in which deviations from long-term inflation targets during AMP7 can be "*considered and dealt with by Ofwat at the industry level*".[40] YWS therefore considers that it is incumbent on the CMA to calibrate the cost of capital allowance in its upcoming determinations based on the current outlook for CPIH and RPI inflation over the five-year period 2020/21 to 2024/25.

3.3.5 The current outlook has both CPIH and RPI inflation below 1% per annum during 2020/21 before recovering towards long-term equilibrium values in the later years of the AMP7 period. YWS accepts that there is a margin of uncertainty about the precise inflation readings one can expect. However, there can be no real dispute about the shape of the overall inflation trajectory that companies face in the coming years of AMP7.[41]

3.3.6 The current low-inflation environment means that RCV growth in 2020/21 and 2021/22 will be worth less than Ofwat had assumed in its FD and lower than the CMA has modelled in its PFs. This has two main implications for the CMA's analysis:

(a) first, companies' debt-to-RCV and interest cover ratios will be weaker than the CMA's modelling suggests;

(b) second, companies will not be able to recover the CMA's estimated 5.57% nominal cost of capital in full.

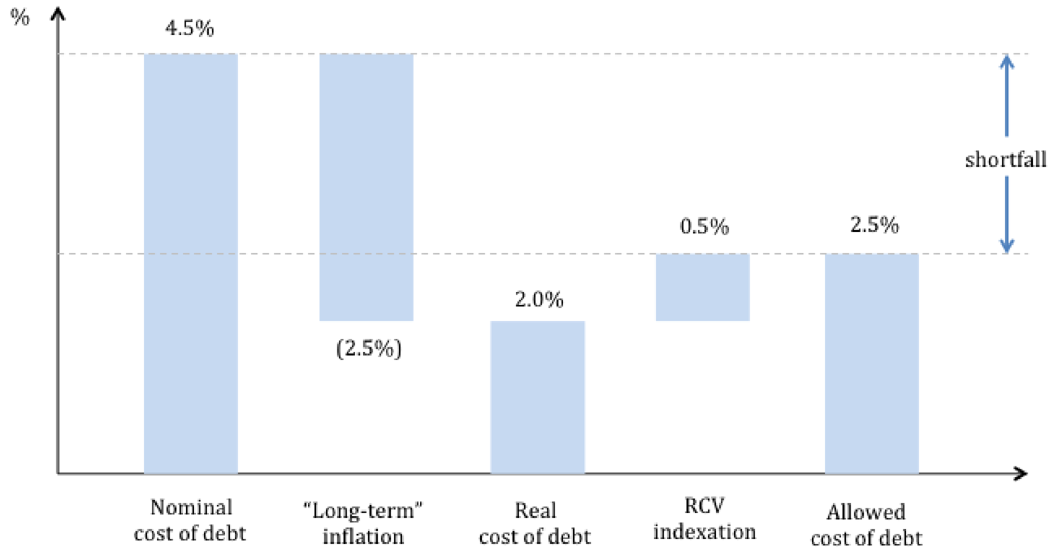
3.3.7 The materiality of the second factor can be shown by considering the allowance that the CMA has provided for cost of debt. The CMA has provisionally found that companies (i) face an average nominal cost of debt of 4.50% and (ii) only the first ~2.0% of this amount needs to be factored into price controls in 2020/21, on the basis that the remaining ~2.5% will be paid to companies via

[40] CMA, PFs, paragraph 9.28.

[41] YWS explained in its Response, section 7.3, the reasons why the shortfall that Ofwat would have the CMA engineer in 2020/21 is not likely to be offset by any kind of overpayment later in AMP7.

the indexation of the RCV. If, in reality, the indexation of the RCV will be worth only around 0.5% in 2020/21, the total remuneration that companies will receive is likely to be only approximately 2.5% or around 200 basis points short of the interest that companies are required to pay on debt with fixed nominal coupons.[42]

Figure 2: Cost of debt vs allowance, 2020/21



3.3.8 There is no recognition for the kind of shortfall shown in the chart above anywhere in the CMA's PFs. YWS submits that the current inflation outlook and the expected value of RCV indexation in AMP7 ought to be accounted for explicitly within the CMA's cost of capital calculations. Alternatively, if for some reason this is not practicable, it should be one of the factors that the CMA takes into consideration when it decides where to position its point WACC estimate within its cost of capital range.

Cost of debt

3.3.9 YWS in its SoC sought a cost of debt allowance that covered its efficiently incurred financing costs in full. YWS's submissions explained that it is natural for there to be variation in interest expenses across companies due to (i) differences in historical profiles of capital requirements for investment and (ii) choices made by companies as to tenor of debt. YWS's position is that, in the absence of any reason to think that companies should have identical costs of debt, it would not be consistent with Ofwat's financing duty, to ensure that each

[42] In practice, YWS expects a 200 basis points inflation shortfall to be spread over two years, 2020/21 and 2021/22.

appointed business is able to finance its activities, for the CMA to consciously underfund a company's debt costs.[43]

3.3.10 The CMA states in its PFs that it does "*not see strong evidence for Yorkshire's submissions relating to the adoption of actual costs as the basis*"[44] for the cost of debt allowance. YWS does not agree with this view. In particular, for the reasons set out in Table 1 below, YWS disputes the CMA's assertions that "*there would be little to no incentive for companies to ensure that their debt costs were as low as possible*"[45] or that companies with high debt costs "*can, at some point in the future, roll their debt book at lower than average costs and will move (potentially significantly) below the benchmark used to calculate the notional cost of debt*".[46]

3.3.11 YWS has nevertheless approached its assessment of the PF's cost of debt allowance in a pragmatic way. Whichever way the CMA ultimately calibrates the regulatory allowance, the key requirement as regards long-term financeability/investability is that YWS should receive sufficient revenue to cover its 4.93% embedded cost of debt. The CMA's proposed allowance of 4.81% comes close to satisfying this requirement, and YWS sets out in Table 1 a small correction for an error in the CMA's calculation that would bring the allowance up to 4.89%.

3.3.12 If the CMA goes on to confirm a notional cost of debt allowance in its final determination, YWS considers that it is imperative that the CMA retains its 20-year averaging period. The CMA states in its PFs document that "*20 years is longer than the average current maturity of debt within the sector*" but notes that "*Anglian's and Ofwat's analysis suggests that 20% of industry debt was issued longer than 15 years ago*".[47] YWS has reviewed the profile of industry debt issuance and has identified £9.8 billion of water company bonds that were originally issued by companies prior to 31 December 2004 which were still outstanding as at 31 March 2020. This is equivalent to around 13% of the industry RCV or more than one fifth of the debt on the notional 60% geared industry balance sheet.

[43] YWS, Response, section 7.5.

[44] CMA, PFs, paragraph 9.343.

[45] CMA, PFs, paragraph 9.343.

[46] CMA, PFs, paragraph 9.344.

[47] CMA, PFs, paragraph 9.357.

Figure 3: Pre-2005 bonds by company (as at 31 March 2020)

Company	Amount, £ billion
Anglian Water	2.3
Dwr Cymru	1.6
Northumbrian Water	0.8
Severn Trent Water	1.1
Southern Water	1.3
Thames Water	0.9
United Utilities	0.9
Wessex Water	0.5
South East Water	0.2
South Staffordshire Water	0.1

** Note: does not include £0.5bn bonds issued by Yorkshire Water prior to 2005 that were subject to an exchange issue in 2009.*[48]

Source: KPMG spreadsheet provided to Ofwat and the CMA by Anglian Water on 7 October 2020.

Selection of point parameter estimates for cost of equity

3.3.13 It would clearly be inappropriate for the CMA to strand debt issued during the period 2000-2004. Accordingly, YWS submits that the CMA arrived at the right judgment when it determined that it was necessary to extend Ofwat's proposed 15-year trailing average period by an additional 5 years and that there are no grounds for the CMA to move from this position in its final determination.

3.3.14 Given the uncertainty inherent in any cost of capital estimates, YWS supports the CMA's position that it is appropriate to reflect the risk of error when choosing a point estimate for the WACC in light of the potential detrimental consequences of setting the cost of capital too low.[49]

3.3.15 The CMA has presented its estimate of the cost of equity as a 75th percentile cost of equity value. However, YWS does not consider this characterisation to be a fair representation of the CMA's findings as regards the methodologies that

[48] YWS company information.

[49] CMA, PFs, paragraph 9.674.

a regulator should adopt when calculating the values of the risk-free rate, the TMR and beta. Specifically, YWS notes that the CMA finds that:

(a) It is unsound for a regulator to rely exclusively on index-linked gilt yields as a proxy for the CAPM riskless asset (the CMA states "*we consider AAA-rated non-government bonds to be a suitable estimate into our estimate of the RFR"*[50] and, compared to index-linked gilt yields, the yield on AAA-rated non-government bonds is *"closer to representing a rate that is available to all (relevant) market participants*[51]*"*);

(b) CPI-stripped estimates of historical stock market returns cannot carry the weight that Ofwat and other regulators have been asking such measures to carry in recent regulatory reviews (the CMA states "*we observe that the CPI data series has some issues"*[52] and *"we believe it is appropriate to take into account both CPI- and RPI-deflated estimates of the TMR*"[53]); and

(c) A regulator should not rely on 'spot' estimates of beta (the CMA states "*we acknowledge the presence of 'noise' in short term [beta] estimates, and therefore consider that this estimation method should be used along with longer periods and frequencies to provide the most robust data from which to estimate equity betas*"[54]).

3.3.16 These statements of principle are an unequivocal support for the proposition that Ofwat's PR19 FD calculation of the cost of capital came out too low due to inappropriate methodological choices. However, in constructing its own range for the cost of equity, the CMA goes on to place the lower ends of its ranges for the risk-free rate, TMR and beta below the values that Ofwat selected in its decision. YWS submits that this positioning, when then combined the CMA's later evaluation of the appropriate point estimate from within the cost of equity range, gives a misleading impression of the overall findings in the PFs.

3.3.17 Rather than set up a cost of equity range that is defined at the low end by values that the CMA has found are too low to be credible and then "aim up" within that range, it would be more reasonable for the CMA from the outset to select point values for the risk-free rate, the TMR and beta that follow directly from its

[50] CMA, PFs, paragraph 9.93.

[51] CMA, PFs, paragraph 9.93.

[52] CMA, PFs, paragraph 9.165.

[53] CMA, PFs, paragraph 9.166.

[54] CMA, PFs, paragraph 9.262.

findings on appropriate methodology. This would mean, in particular, identifying parameter values which:

(a) in the case of the risk-free rate: give explicit recognition to the yields on AAA-rated non-government bonds;

(b) in the case of the TMR: appropriately reference the RPI-deflated historical TMR; and

(c) in the case of beta: use longer periods of share price data.

3.3.18 YWS considers that such an exercise would lead naturally and directly to the CMA's preferred risk-free rate of -0.96%, TMR of 6.95% and unlevered beta of 0.3075 without the need for "aiming up". These estimates should not therefore be painted as 75th percentile values; rather, they can be presented as the logical product of a series of deliberate judgments that the CMA has made about the calibration of the capital asset pricing model.

Other observations

3.3.19 A full review of the CMA's calculation of the cost of capital is set out in the following table. Most of the points highlighted in the table suggest that the CMA has tended to under rather than over- estimate the individual WACC parameters, in particular due to:

(a) the selection of unnaturally low ranges for the risk-free rate, TMR and beta;

(b) the use of incorrect start and end dates in the calculation of the embedded debt cost allowance;

(c) an error of logic in the computation of the weights that assigned to embedded and new debt;

(d) under-estimation of the required retail margin; and

(e) unnecessary aiming down on the cost of debt.

Table 1: YWS cost of capital table – comments on CMA PFs

Issue	CMA provisional finding	YWS's observations
• Context	Ofwat's 2.96% FD cost of capital allowance is significantly below the cost of capital allowances suggested by Disputing Companies in their submissions [Para 9.4].	This statement as written is broadly correct. However, YWS wishes to make it clear that it did not advocate a specific point estimate in its submissions to the CMA on the basis that it considered that the CMA would carry out its own thorough and independent assessment on WACC as the expert body on the matter as part of its overall assessment of the price control in the round. In citing the 3.78% figure quoted in Table 9-1 of the PFs at pages 29 and 504, the CMA has ascribed views to YWS that were in fact made by KPMG (i.e. third-party economists not appointed by YWS).
• Risk-free rate	It is not necessary to make a forward rate adjustment in the calculation of the risk-free rate [Para 9.133].	YWS does not agree with the CMA's departure from the approach that is conventionally used by regulators when estimating the value of the risk-free rate that investors are likely to be looking at over the course of a five-year regulatory period. The Bank of England/iBoxx data that the CMA references in its report provides the CMA with a snapshot of the risk-free rate as it stood over the last 180 days. However, this is not the same as the risk-free rate that investors anticipated would prevail one, two, three, four or five years in the future. The extra information that forward curves provide about the expected value of the return on riskless assets during AMP7 has worth and should not be discarded.
• TMR	Historical stock market returns have been around 6.1-6.9% per annum in real CPI terms and around 5.9-6.6% per annum in real RPI terms [Para 9.183].	The stated ranges do not appear to be a fair reflection of the data in table 9-3. Excluding the geometric mean, the ranges emerging from the table are 6.1-7.2% in real CPI terms and 5.9-6.8% in real RPI terms. If the CMA chooses to exclude the non-overlapping 20-year estimates, it should also exclude the 20-year JKM MSE estimates on the grounds that the figures are clear outliers when compared to the values produced by the other available estimation methods.
• Beta	The unlevered beta is in the range 0.27 to 0.32 [Para 9.289].	The stated range is a skewed reading of the available data, which gives too much credence to spot estimates of beta and/or estimates taken from very short measurement periods. The tables below show the CMA's estimates of unlevered betas up to the end of June and the end of February respectively. The red highlighting shows that all of the trailing average beta estimates that make use of at least five years of share price data but no more than ten years of data – i.e. the estimation window that the CMA, Ofwat, Indepen and GHT have all said in the past provides the most accurate insights into investors' perceptions of risk. YWS notes that all of the highlighted values sit above the CMA's preferred point estimate of beta of 0.3075.

<table>
<tr><th>Issue</th><th>CMA provisional finding</th><th>YWS's observations</th></tr>
<tr><td></td><td></td><td>
Table 9-6: CMA analysis of Severn Trent and United Utilities unlevered equity betas June 2005 to June 2020
<table>
<tr><th>Data to June 2020</th><th>Spot 30/06/2020</th><th>1-year average</th><th>2-year average</th><th>5-year average</th></tr>
<tr><td>SVT/UU 2y daily Unlevered beta</td><td>0.25</td><td>0.26</td><td>0.27</td><td>0.32</td></tr>
<tr><td>SVT/UU 2y weekly Unlevered beta</td><td>0.26</td><td>0.26</td><td>0.28</td><td>0.34</td></tr>
<tr><td>SVT/UU 5y daily Unlevered beta</td><td>0.28</td><td>0.31</td><td>0.32</td><td>0.32</td></tr>
<tr><td>SVT/UU 5y weekly Unlevered beta</td><td>0.30</td><td>0.33</td><td>0.34</td><td>0.33</td></tr>
<tr><td>SVT/UU 5y monthly Unlevered beta</td><td>0.28</td><td>0.33</td><td>0.35</td><td>0.34</td></tr>
<tr><td>SVT/UU 10y daily Unlevered beta</td><td>0.28</td><td>0.27</td><td>0.27</td><td>0.28</td></tr>
<tr><td>SVT/UU 10y weekly Unlevered beta</td><td>0.29</td><td>0.28</td><td>0.27</td><td>0.28</td></tr>
<tr><td>SVT/UU 10y monthly Unlevered beta</td><td>0.26</td><td>0.24</td><td>0.22</td><td>0.21</td></tr>
</table>
Table 9-9: CMA analysis of Severn Trent and United Utilities unlevered equity betas Feb 2005 to Feb 2020
<table>
<tr><th>Data to February 2020</th><th>Spot 30/06/2020</th><th>1-year average</th><th>2-year average</th><th>5-year average</th></tr>
<tr><td>SVT/UU 2y daily Unlevered beta</td><td>0.28</td><td>0.27</td><td>0.28</td><td>0.33</td></tr>
<tr><td>SVT/UU 2y weekly Unlevered beta</td><td>0.28</td><td>0.25</td><td>0.29</td><td>0.34</td></tr>
<tr><td>SVT/UU 5y daily Unlevered beta</td><td>0.33</td><td>0.32</td><td>0.33</td><td>0.31</td></tr>
<tr><td>SVT/UU 5y weekly Unlevered beta</td><td>0.34</td><td>0.33</td><td>0.34</td><td>0.32</td></tr>
<tr><td>SVT/UU 5y monthly Unlevered beta</td><td>0.34</td><td>0.35</td><td>0.39</td><td>0.34</td></tr>
<tr><td>SVT/UU 10y daily Unlevered beta</td><td>0.28</td><td>0.26</td><td>0.27</td><td>0.29</td></tr>
<tr><td>SVT/UU 10y weekly Unlevered beta</td><td>0.28</td><td>0.26</td><td>0.27</td><td>0.28</td></tr>
<tr><td>SVT/UU 10y monthly Unlevered beta</td><td>0.25</td><td>0.22</td><td>0.22</td><td>0.20</td></tr>
</table>
YWS submits that the estimation methodologies highlighted in red are more accurate than the approaches to estimating beta that are not highlighted. Accordingly, they should be given more weight in the CMA's analysis.
</td></tr>
<tr><td rowspan="2">• Cost of debt</td><td>An allowance set with reference to YWS's actual cost of debt would eliminate incentives to ensure that debt costs are as low as possible [Para 9.343].</td><td>YWS does not agree. Regardless of how the CMA sets the PR19 allowance for embedded debt costs, YWS will bear out- and under-performance against Ofwat's indexed allowance for the cost of new debt in the period through to 31 March 2025. This in-period exposure to out- and under-performance gives YWS's treasury team full incentive to optimise borrowing costs to the greatest extent possible – i.e. in an exactly analogous manner to the way in which RPI – X incentives give the business incentive to minimise its opex, capex and other costs.</td></tr>
<tr><td>Companies that have a disproportionately older, more expensive debt book can, at some point in the future, roll their debt book over at lower than average costs and will move (potentially significantly) below the benchmark used to calculate the notional cost of debt [Para 9.344].</td><td>YWS does not agree with this analysis. In the case of very long tenor debt, the opportunity that a company will have to refinance its debt will likely come too late to give the company any bankable out-performance benefit.

Take, as an example, YWS's £800m of pre-2010 index-linked debt that matures between 2050 and 2058. YWS will bear the cost of this debt for another 30-plus years. There is then no reason to think that interest rates after 2050 will be any lower than interest rates in the years 2020 through to 2049. As such, there is no reason to think that the refinancing that YWS will be required to do starting from 2050 will drive its interest costs below the notional cost of debt.</td></tr>
</table>

Issue	CMA provisional finding	YWS's observations
	Comparing individual issuance yields without taking account of tenor or credit rating is inconsistent with a benchmark-led approach to estimating the cost of embedded debt [Para 9.353].	If the CMA is to use a notional cost of debt, rather than a company-specific cost of debt, it must construct the notional cost of debt using appropriate notional assumptions about tenor and credit rating. The long average tenor of the bonds in the iBoxx A and BBB 10+ year indices is clearly appropriate for an industry with very long-lived assets. A switch to shorter tenor series, either directly or indirectly via the insertion of a tenor-driven 'out-performance wedge', would make it unsustainable for companies like YWS to issue long tenor bonds due to the potential for mismatch to emerge in the future between the actual and allowed cost of debt. YWS notes that any move to shorter-term financing would lead to an increase in refinancing risks and expose customers to unnecessary interest rate volatility.
	The allowance for embedded debt should be calibrated in accordance with the yields on two iBoxx indices over a 20-year period from August 2000 to July 2020 [Para 9.360].	YWS agrees with the CMA's use of a 20-year trailing average. The water industry continues to service a large quantity of debt issued before 2005 and a 20-year trailing average ensures that the cost of this debt is appropriately recognised within the cost of capital calculation. YWS notes that the CMA's 20-year trailing average period ought to be April 2000 to March 2020 to reflect Ofwat's 31 March 2020 dividing line between embedded debt and new debt. This will ensure that there is no overlap with Ofwat's April 2020 to March 2025 cost of debt indexation mechanism. The average of the selected A index over the period April 2000 to March 2020 was 4.89%. The average of the selected BBB index over the period April 2000 to March 2020 was 5.31%.
	It is not necessary to make a forward rate adjustment in the calculation of the risk-free rate [Para 9.371].	YWS disagrees with this provisional decision for the reasons set out above under the risk-free rate heading. In this case, YWS notes that any resulting forecasting error will be trued-up at the end of AMP7 via Ofwat's cost of debt indexation mechanism. (NB: there is no true-up mechanism for the risk-free rate.)
	The weights for embedded and new debt can be calibrated using a N = T/M formula [Para 9.384].	YWS considers that this is not correct. The formula says that when T=M all of a company's embedded debt will have matured and the weight for new debt ought to be 100%. However, M is the <u>average</u> number of years to maturity across a company's debt portfolio. When T=M, it is more logical to assume that approximately half of the embedded debt will have matured and half will still be in place. The CMA should correct for this error by adjusting its formula to: N = 0.5 x T/M.
• Retail margin adjustment	The retail margin deduction should be 8 basis points [Para 9.564].	The CMA appears not to have evaluated the submissions that YWS and Northumbrian Water made in early August 2020 following the companies' respective hearings.[55] In particular, the CMA has: a) made a computational error by using a vanilla WACC rather than a pre-tax WACC in its calculation of the required pre-tax retail margin; b) failed to make allowance for the cost of financing investments in intangible assets (e.g. software); and

[55] YWS, Annex 1: Post-Hearing Notes, August 2020, pages 5-6, see https://assets.publishing.service.gov.uk/media/5f96c7f98fa8f543f9433c61/Yorkshire_Water_post-hearing_submission_---.pdf; and Northumbrian Water, Post-hearing submission, August 2020, pages 23-26, see https://assets.publishing.service.gov.uk/media/5f96c7e9d3bf7f35e9ea1a34/Northumbrian_Water_13_August_submission_---.pdf .

Issue	CMA provisional finding	YWS's observations
		c) failed to make proper allowance for the cost of contingent financial capital. More generally, YWS invites the CMA to consider if an approach focused solely on ROCE makes sense for a business with the characteristics of a water retailer. YWS noted in its August submission that Ofwat has stated previously that *"return on capital analysis … may omit the full amount of retail capital employed*". The CMA will recall that it reached a very similar view in its 2017 decision for the asset-light SONI business, ultimately determining that it was necessary to supplement the return on fixed investment with a number of additional allowances for profit. YWS also considers that, strictly speaking, the CMA should apply its findings in this area by adjusting the retail margin directly rather than by adjusting wholesale price controls. When looked at in this way, YWS submits that a 0.2% margin fits incongruently with the profits earned by other businesses that manage risks around revenue collection and associated costs. As evidence of this, the CMA might wish to compare its proposed 0.2% margin to the 1.5% margin that the Department for Transport is paying to train companies that take no revenue risk and no cost risk.[56]
• Selection of a point estimate from within the range	The notional company will replace older and more expensive debt with newer and cheaper debt within a control period. This gives grounds for aiming down in the cost of debt range [Para 9.664].	YWS does not consider that this provides a rationale for aiming down. The replacement of old debt with new debt is already reflected in the weights for embedded and new debt and therefore does not need to be considered a second time within the calculation of the cost of embedded debt itself.
	The cost of equity should be set at the 75th percentile of the cost of equity range [Para 9.685].	For the reasons set out in paragraphs 3.3.14 to 3.3.18, YWS does not consider that it is accurate or helpful to present the cost of equity as a 75th percentile value. It would be better for the CMA to select preferred point estimates (or narrower ranges) for the risk-free rate, TMR and beta based on the methodological considerations identified in the PFs <u>before</u> turning to questions about the need for any statistical aiming up.

[56] Department for Transport, 'Rail franchising reaches the terminus as a new railway takes shape', 21 September 2020, see https://www.gov.uk/government/news/rail-franchising-reaches-the-terminus-as-a-new-railway-takes-shape.

3.4 Further remarks on cost of capital

3.4.1 Following the publication of the PFs, YWS understands from public statements made by Ofwat that it considers that the CMA's cost of capital calculation:

(a) is lower than the level that companies presented in their Business Plans;

(b) is inconsistent with the approach taken in the CMA's recent redetermination in NATS; and

(c) is inconsistent with the approach of the UKRN.

3.4.2 YWS does not agree with any of these assertions for the following reasons.

The PFs are not directly comparable to company Business Plans

3.4.3 Since the CMA's PFs were published, Ofwat has noted that the CMA's WACC figure is higher than the level included by the companies at the Business Plan stage. YWS submits that these assertions lack validity when considered in more detail. They seek to create an artificial comparison between (i) a Business Plan with completely differently calibrated set of parameters in the wider price control; and (ii) the CMA's PFs, which largely rely on the incentives and costs packages designed by Ofwat's FD.

3.4.4 The CMA's assessment of the WACC should not be swayed by the incorrect implication that the CMA's overall package is in some way less stretching than YWS's Business Plan. As the CMA is no doubt already aware, even with an increased WACC figure, the overall package contained in its PFs for YWS is significantly more stretching than YWS's original Business Plan, its response to Ofwat's IAP or its response to the DD given the remaining cost gap and expected level of penalty (see paragraph 2.4.9).

3.4.5 Furthermore, in setting the WACC in its Business Plan, YWS was heavily incentivised to follow Ofwat's December 2017 preliminary estimate of appointee cost of capital of 5.47% (2.40% real RPI stripped at 3.0%).[57] As a result of this very low level of WACC, YWS calibrated the price control elsewhere at a level commensurate to achieving a balanced package.[58] Indeed, the YWS Board gave assurance over the financial resilience of the Business Plan in the round, taking

---

[57] Exhibit 001 (SoC), YWS's Business Plan, page 100.

[58] For example, YWS stated in its Business Plan, "*This real return of 2.40% represents a significant decrease in the return from the last price review of 3.74%. As there is the potential to earn a comparable return through an enhanced incentive regime if our performance commitments are met, we consider that there is an overall balance between risk and reward presented within this plan.*" Exhibit 001 (SoC), YWS's Business Plan, page 100.

into account the overall risk/reward balance inherent in the plan,[59] as well as its impact on the short-term and long-term financeability of YWS as a whole.[60]

3.4.6 As the CMA knows from this redetermination process, Ofwat made considerable cuts to the costs that YWS presented in its Business Plan and significant interventions in the incentives package to increase (i) stretch and (ii) YWS's possible penalty position. These interventions, when coupled with the low WACC level (which was subsequently then lowered even further), left the balance of risk and reward skewed significantly to the downside. If YWS had known the approach that Ofwat would take in other areas of the price control, then it would not have adopted the WACC from Ofwat's guidance in its Business Plan.

The PFs are not directly comparable to the approach taken in the NATS RP3 Final Report

3.4.7 The CMA's PFs followed only a few months after the Final Report for RP3 in NATS (**NATS FR**),[61] where the CMA was also considering the approach to cost of capital. The NATS and PR19 processes have resulted in a plethora of public and non-public submissions on WACC over the past year, not just from the main parties, but also from a wide range of stakeholders.

3.4.8 YWS agrees that it is important and helpful to take account of previous CMA decisions where comparable and relevant. However, the precedential value of the CMA's previous decisions depends upon the context of the case under review. In particular, there are certain features of the NATS redetermination which mean that the NATS FR cannot be directly applied in PR19 and that an abundance of caution should be adopted when using it as a comparator:

(a) *The NATS FR takes into account certain specific circumstances of NERL as a company, which do not and cannot apply to YWS.* In considering NATS' financing position, it is worth noting that the CMA was considering a business with a stable, industry-led ownership structure in which the UK government has a 49% stake. Furthermore, NATS had gearing of below 30%[62] and an A credit rating underpinned by the promise of implicit Government support.[63] This meant that financeability did not

[59] Exhibit 001 (SoC), YWS's Business Plan, pages 98-100.

[60] Exhibit 001 (SoC), YWS's Business Plan, page 21.

[61] The core business of NATS is to ensure the safe separation of aircraft in UK controlled airspace through its operating subsidiary NATS (En Route) plc (***NERL***).

[62] CMA, NATS FR, paragraph 13.115(b).

[63] See Moody's report, 15 March 2019, see https://www.moodys.com/research/Moodys-changes-NATS-En-Route-PLCs-outlook-to-negative--PR_396582.

feature as an issue in the NATS inquiry; indeed, the CMA's NATS FR does not contain a financeability chapter. The financing considerations feeding into the CMA's NATS FR were therefore entirely different to those in the PR19 redetermination and they cannot be compared on a like-for-like basis.

(b) *The NATS appeal was overwhelmingly influenced by the COVID-19 pandemic*. Any comparison to the NATS appeal needs to be treated with caution on the basis that:

(i) the NATs provisional findings constitute an interim report (which was put out for consultation) and therefore cannot be characterised as definitive findings from the CMA; and

(ii) due to the significant impact of the COVID-19 pandemic on the air traffic sector, the NATS FR expressly confirmed that the CMA did not continue with a considered review of responses after its provisional findings, including regarding the cost of capital.[64] Indeed, the NATS FR only applies for a temporary period and the CMA explicitly stated that the NATS FR does not reflect an assessment of the merits of points raised in response to the PFs.[65]

3.4.9 It is therefore clear that any comparison to the NATS appeal must take into account the fact that the financeability issues were not fully evaluated and, importantly, there was a materially different set of circumstances to consider for the NATS FR than has been the case for this redetermination. In this redetermination, the wider financeability assessment involves a host of different considerations. It is therefore not a valid criticism to say that the CMA's PFs on cost of capital do not align with the approach to NATS, given the drastically different circumstances.

The CMA's PFs are contrary to the approach of the UKRN

3.4.10 YWS disagrees with the suggestion from Ofwat that the CMA has rejected quite a lot of what the UKRN and an academic study has recommended on approaches.

[64] CMA, NATS FR, paragraphs 60-61.

[65] CMA, NATS FR, paragraphs 60-61.

3.4.11 In two key areas: estimation of beta using a longer run of share price data[66] and 'aiming up' to protect customers from the risk of under-investment[67], the CMA's PFs are more attuned to the 2018 UKRN study recommendations than Ofwat's FD.

3.4.12 On the TMR, YWS notes that the CMA has agreed with the UKRN authors that it is necessary to revisit the calculation of historical real stock market returns. In doing so, it has provided a more thorough and accurate analysis of historical inflation indices than the UKRN report presented,[68] resulting in a more robust estimate of the TMR.

3.4.13 Only in the case of the risk-free rate can it be said that the CMA has departed in a relatively small way from the UKRN recommendations with its widening of the basket of proxies for the riskless asset to include AAA non-government bonds. The reasons for this approach are explained very clearly in the CMA's PFs and reflect compelling evidence in this area which was not considered by the UKRN authors three years ago.

Concluding remarks

3.4.14 YWS agrees with the CMA that the cost of capital is a critical lynchpin for the financeability of YWS's price control package and cannot be considered in a silo given the finely balanced nature of the price control as a whole. Therefore, in the event that all other elements of the price control remain equal in the CMA's final determination, YWS would be very concerned by any suggestion of a reduction in the cost of capital from the level proposed in the CMA's PFs without material adjustment elsewhere to protect the overall financeability of the package. Similarly, should there be any material change to other elements of the price control which could impact negatively on YWS's financeability as a whole, YWS would respectfully request the need for further reassessment on the level of cost of capital given the central role it plays in achieving a balanced package overall.

[66] See the UKRN report (Exhibit 054 (Response)), Wright, Burns, Mason and Pickford: 'Estimating the cost of capital for implementation of price controls by UK regulators', 2018, section 4.5, and the further work carried out by Indepen for UKRN (Exhibit 055 (Response), Indepen: 'Ofgem beta study RIIO-2', 2018).

[67] See the UKRN report (Exhibit 054 (Response), Wright, Burns, Mason and Pickford: 'Estimating the cost of capital for implementation of price controls by UK regulators', 2018, section 8.2 and appendix I).

[68] YWS notes that the UKRN analysis of inflation is spread somewhat disjointedly across two appendices to the published report (appendices D and E) and was not set out clearly in the main text. One of the UKRN authors, Phil Burns, stated publicly in 2018 that he did not agree with the interpretation that Ofwat and other regulators were drawing from the discussion (see Exhibit 1, Burns: 'Inflation in the Context of Real TMR', 13 March 2019).

4. Capital structure

4.1 Introduction

4.1.1 YWS supports the CMA's conclusion not to apply the GOSM. The CMA's PFs address a large number of concerns regarding the justification for, and design of, this flawed mechanism.

4.1.2 YWS has been clear in its submissions to the CMA that it considered the GOSM to be an unsubstantiated and inappropriate proposal, representing a significant break from well-established regulatory practice. Typically, Ofwat has carried out notional financeability assessments and not sought to intervene in an arbitrary manner on companies' actual capital structures. As explained throughout the PR19 redetermination,[69] YWS accepts full responsibility for its capital structure which it has managed proactively and prudently over time together with its shareholders.

4.1.3 Overall, YWS considers that financial resilience is a concept which cannot be reduced to one simple metric but rather one which needs to take account of the array of existing regulatory and financing protections in place for water companies. YWS is therefore aligned with the CMA's recognition of the need for a more sophisticated assessment of financial resilience, taking into account the existing regulatory and other protections in place.[70] YWS shares the CMA's concerns with the application of Ofwat's GOSM.

4.1.4 In the following section, YWS focusses on:

(a) the CMA's findings regarding its concern on effectiveness of the GOSM;

(b) the conclusion that the design of the GOSM is flawed;

(c) there being insufficient evidence to justify a theory that high gearing results in customer harm and that financial resilience requires an assessment in the round; and

(d) the GOSM being a stark departure from regulatory precedent and having a detrimental impact on investor confidence.

4.2 The CMA's findings regarding its concern on effectiveness of the GOSM

4.2.1 YWS supports the following concerns expressed by the CMA:

---

[69] YWS, Response, paragraph 2.18.4.

[70] CMA, PFs, paragraphs 9.588-9.590.

(a) *Effectiveness of the mechanism:* YWS supports the conclusions of the CMA that:

(i) financial resilience is not dependent on simply one factor and there are other factors that can influence the financial resilience of a water company which would not be addressed by a GOSM;[71] and

(ii) if a company chooses not to de-gear then this does nothing to reduce the risks associated with leverage while diminishing the cash that the company will have available to deal with financial shocks that may occur.[72]

(b) *Cost effectiveness:* YWS also welcomes the CMA's comments that the GOSM would introduce a significant change to the regulatory framework without sufficient opportunity for companies to respond in a cost-effective manner (even with the addition of a glidepath).[73] This was a core concern of YWS, particularly in light of the fact that Ofwat had but a few years ago endorsed the capital structures which it now seeks to criticise.[74]

4.2.1 Therefore, even in a scenario where there is an underlying concern to address, which YWS contends is not the case for the reasons described in section 4.4 below, then YWS agrees with the CMA's reasoning as to why the manner in which Ofwat has proposed to address the issue through the GOSM would be ineffective.

4.3 The conclusion that the design of the GOSM is flawed

4.3.1 YWS has maintained throughout this redetermination that there has been a glaring absence of any semblance of a defence for the formula that Ofwat used in its FD for the GOSM to calculate the gearing 'out-performance' amount.[75] The idea that companies with gearing of more than 65% can profit by taking the cost of equity from customers for a portion of their financing but pay out only the cost of debt to lenders is not one that any economist or financial expert would recognise.

4.3.2 YWS therefore agrees with the CMA's conclusion that Ofwat provided "*limited evidence in support of the mechanism on the actual effects of higher gearing*

---

[71] CMA, PFs, paragraph 9.626.

[72] CMA, PFs, paragraph 9.626.

[73] CMA, PFs, paragraph 9.621-9.622.

[74] Exhibit 011 (Response), Ofwat, Water 2020: consultation on the approach to the cost of debt for PR19, September 2016, pages 18-19.

[75] YWS, SoC, paragraphs 246-253; YWS, Response, paragraph 8.1.1.

on financing costs or the relationship between gearing and the cost of equity"[76] and specifically that "*Ofwat has not provided evidence that highly-geared companies have achieved overall WACCs substantially lower than the notionally geared*".[77]

4.4 There is insufficient evidence to justify a theory that high gearing results in risk for customers

4.4.1 YWS does not concur with the CMA's comments that they "*consider that Ofwat has legitimate concerns that customers face costs where the water companies have gearing well above notional levels, and this increase in gearing could have an adverse effect on financial resilience*".[78]

4.4.2 YWS has outlined already in its Response why it rejected Ofwat's contention that high gearing reduces financial resilience and transfers some risk to customers and/or potentially taxpayers in the event that a company fails. YWS maintains its position in this respect and Ofwat has failed to substantiate its claims on this contention since YWS's Response.

4.4.3 As explained in its Response, YWS considers that any risk arising from higher gearing is negligible given the protections and existing regulatory tools that exist – for example, the CMA has recognised the regulatory protections in the licence,[79] the large physical asset base which suffers from little variability in demand,[80] and the special administration arrangement.[81] All of these operate in the long-term interests of customers. The CMA refers to[82] historical examples, such as Railtrack, Metronet, Hyder and Azurix (subsidiary of Enron), and has concurred with YWS that these are not a cause of concern, or risk transfer, to customers or taxpayers.[83]

4.4.4 YWS believes it is well established that financial resilience cannot be simplified to a metric that is solely determined by gearing, but requires an assessment in the round, taking into account the various elements of a company's capital

---

[76] CMA, PFs, paragraph 9.627.

[77] CMA, PFs, paragraph 9.610(a).

[78] CMA, PFs, paragraph 9.623.

[79] CMA, PFs, paragraph 9.588.

[80] CMA, PFs, paragraph 9.588.

[81] CMA PFs, paragraph 9.588.

[82] CMA, PFs, paragraph 9.589.

[83] Annex 2 (Response), Economic Insight, An Evidence Based Approach to Ofwat's Gearing Outperformance Sharing Mechanism, 27 May 2020.

structure. For instance, YWS has previously explained,[84] that its regulated debt platform creates significant protections that go beyond its licence requirements, which are also in the long-term interests of its customers. The benefits of this platform include beneficial treatment from credit rating agencies (due to credit enhancements afforded by the platform), strong covenant package, flexibility as to the form of debt raised and ability to resolve issues without unnecessarily disrupting customer service. Ofwat recognised this itself in various publications only a few years ago where it cited evidence that securitised structures were "*viable and sustainable over the longer term and did not necessarily present a higher risk for customers*".[85]

4.4.5 Furthermore, for the reasons also set out in its Response and as highlighted by Ofwat only a few years ago, YWS contends that higher gearing can also lead to direct financial benefits (e.g. in the form of tax allowances[86]) and also indirect financial benefits (e.g. in putting company management under increased scrutiny and promoting more efficient delivery of services, therefore reducing consumer bills[87]). These considerations should also factor into any overall assessment.

4.5 Ofwat's GOSM marks a clear and unjustified departure from regulatory precedent and would detrimentally impact investor confidence

4.5.1 YWS agrees with the CMA that Ofwat's proposed intervention represents "*a significant break from a well-established regulatory approach*" as well as the risk that it is seen by investors as "*punishing companies for previously sanctioned capital structures without offering sufficient evidence, clarity of justification or time to make cost-effective adjustments*".[88]

4.5.2 Ofwat recognises that it regulates companies with different capital structures and financing approaches. However, this appears to have not been considered in its development and introduction of the GOSM e.g. the differences between gearing levels of companies with secured and unsecured financing arrangements, and the resilience to withstand shocks.

---

[84] Annex 13 (Response), Linklaters LLP, YWS's Regulated Debt Platform Paper, 31 March 2020, section 2.

[85] Exhibit 011 (Response), Ofwat, Water 2020: consultation on the approach to the cost of debt for PR19, September 2016, page 19; see also Exhibit 063 (Response), Ofwat, Monitoring financial resilience, November 2016, page 28.

[86] Exhibit 011 (Response), Ofwat, Water 2020: consultation on the approach to the cost of debt for PR19, September 2016, page 19.

[87] Exhibit 011 (Response), Ofwat, Water 2020: consultation on the approach to the cost of debt for PR19, September 2016, page 19.

[88] CMA, PFs, paragraph 9.628.

4.5.3 For the reasons explained above, YWS does not believe it is in the interests of the water sector to have the GOSM or a similarly arbitrary mechanism in the future seeking to address high gearing. Such an approach would also avoid reducing the diversity of approaches that the CMA notes "*gives investors the option to adopt the risk/reward trade-off that best matches their requirements, which should be positive for the overall attractiveness of the sector to investors.*"[89]

4.5.4 YWS contends that the impact that the GOSM could have on investor confidence in the sector should not be underestimated. YWS considers that at a time when UK regulated industries are in need of investment in the pursuance of important public policy goals which the CMA has (rightly) recognised in relation to resilience and sustainability, the introduction of an ineffective, unjustified and disproportionately punitive gearing mechanism would very much work against, rather than for, achieving such objectives.

[89] CMA, PFs, paragraph 9.607.

5. Costs

5.1 Introduction

5.1.1 As explained in the introduction to this response, when considered at an overall package level, the CMA's PFs make good progress towards correcting the disconnect between risk and reward inherent in Ofwat's FD and avoiding much of the harm that it would have caused. This result is in part due to the net uplift in totex that the CMA has provisionally determined, and YWS welcomes many of the CMA's decisions on this building block of the price control. These include:

(a) the CMA's recognition that additional funding is necessary to deliver the required performance improvement in leakage reduction;

(b) the adoption of less stringent catch-up efficiency benchmarks, in recognition of concerns about the accuracy of Ofwat's modelling approach;

(c) the reduction in the level of frontier shift;

(d) the CMA's additional cost allowance for YWS's important and ground-breaking approach to flood resilience in Hull and Haltemprice;

(e) the recalibration of the totex sharing rates for wholesale expenditure;

(f) the CMA's decision to implement 90/10 customer/company proportional sharing on business rates; and

(g) the CMA's pragmatic approach to the sharing rate for IED expenditure.

5.1.2 These steps will help YWS better deliver its Business Plan – including a more appropriate balance between long-term capital investment in resilience and sustainability, and short-term operational expenditure on performance improvement – and ultimately help to mitigate much of the financeability risk implied by Ofwat's FD. This is undoubtedly in the best interests of all of YWS's stakeholders.

5.1.3 That being said, it is nevertheless the case (as also explained in the introduction to this response) that the PFs still represent a significantly challenging package for YWS, part of which can be attributed to the CMA's costs assessment. Indeed, despite the positive steps by the CMA outlined above, there remains a considerable gap between the level of efficient costs that YWS and the CMA respectively consider to be supported by the evidence.

5.1.4 This is most starkly illustrated by the efficient costs of YWS's stretching WINEP programme, where YWS remains materially underfunded by over £150m as compared with its Business Plan. Similarly, while the CMA has gone some way to reconnecting costs and outcomes in the PFs as regards leakage performance, it has not taken the logical next step of applying a similar analysis to the required UQ performance level on internal sewer flooding.

5.1.5 Moreover, while the CMA's PFs on certain aspects of the price control certainly improve the position relative to Ofwat's FD, such as the catch-up efficiency benchmarks and frontier shift, the CMA has not gone all the way in addressing YWS's concerns on these issues.

5.1.6 YWS acknowledges that the parties' respective arguments on the wide-ranging cost-related issues in dispute have been fulsomely ventilated in the proceedings to date and that the CMA had exercised its judgment in full view of this evidence. On that basis, YWS is not proposing that the CMA reopen every aspect of its cost assessment.

5.1.7 YWS has instead identified four narrowly defined areas of the cost assessment that it would invite the CMA to reconsider. Further movement by the CMA in these areas is fully justified on the available evidence and would, when considered in the round with the remainder of the changes proposed in this response, serve to move the PFs further towards the fully balanced package contained in YWS's Business Plan, and thereby mitigate the residual risk imbalance in a pragmatic and proportionate manner.

5.1.8 YWS's proposed areas for reconsideration are as follows:

(a) the costs necessary to achieve UQ performance on Internal Sewer Flooding;

(b) the efficient costs of YWS's WINEP programme;

(c) restoring the asymmetrical growth costs adjustment; and

(d) the inclusion of the latest 2019/2020 data in the CMA's cost modelling.

5.1.9 Issues 5.1.8(b), 5.1.8(c) and 5.1.8(d) are addressed in detail below. The discussion of YWS's efficient WINEP costs is supplemented by the corresponding section of Annex 2,[90] and the discussion of the inclusion of the latest 2019/2020 data is supplemented by Annex 3. The discussion of issue 5.1.8(a) is deferred to the following section of this submission on outcomes, in line with the structure of the PFs.

5.1.10 Before turning to the discussion of the above issues, it is important to stress two points:

(a) The first is that YWS's pragmatic approach to responding to the PFs on costs should not be construed as full agreement with the CMA's

[90] Annex 02, Oxera, 'Responding to the CMA's provisional findings', October 2020, section 2.

approach on all other issues. Moreover, many of the points of disagreement touch upon principles that have potential importance for future price controls. On that basis, in addition to the four costs items that YWS would like the CMA to reconsider, YWS has also included within these submissions a number of observations on other cost-related issues that contributed to the difficulties in PR19. The most important of these, namely the need for a clear distinction between base and enhancement costs, is treated in paragraph 5.5.1 *et seq.* below. The remainder, including the need to consider model quality when assessing efficiency benchmarks, are included in Annex 2.

(b) The second point is that the discussion of base modelling and frontier shift set out in Annex 2, which YWS is addressing with an eye to PR24 would again become highly relevant if the CMA is minded to reopen these aspects of the price control on the basis of Ofwat's submissions. In these circumstances, YWS would respectfully request that the relevant matters set out in the Annex be taken into account in the CMA's final determination.

5.2 WINEP costs

5.2.1 As explained in YWS's prior submissions in these proceedings, there was a significant £169m gap between YWS's estimated costs of delivering its AMP7 WINEP obligations and Ofwat's assessment of such costs.[91] In accordance with the size of the disallowed costs, a significant amount of time and effort has been spent by the parties in addressing their respective assessments and much evidence has been provided to justify YWS's position.

5.2.2 In light of this, while YWS welcomes that the CMA has provisionally allowed additional costs in this area, it is both surprised and disappointed that the uplift is limited to £12m (taking into account the CMA's approach to in-the-round efficiency and frontier shift), meaning that YWS remains significantly underfunded to deliver the largest WINEP programme in the industry. Given the size of the gap in question, it is vital to the success of YWS's environmental programme, and the delivery of its ambitious Business Plan more generally, that this issue be addressed.

5.2.3 In its reasoning, the CMA has accepted the following important principles:

(a) the absence of UWWTD drivers (e.g. WFD-only sites) permits the use of catchment solutions that can lead to significant cost savings;[92]

---

[91] YWS, SoC, paragraph 120(a) and Table 8.

[92] CMA, PFs, paragraph 5.81.

(b) a first-time imposition of consents leads to higher costs;[93] and

(c) the change in consent level can have a cost impact (albeit not directly modelled).[94]

5.2.4 However, there are several areas where the CMA's insights on the cost drivers are not fully reflected in its cost assessment. [95]

5.2.5 The first issue relates to the companies against which YWS is benchmarked. The CMA has recognised that it is wrong to benchmark YWS, which is largely unable to use catchment solutions owing to its prevalence of UWWTD and dual driver sites, against companies that can do so.[96] However, the CMA has only removed the catchment-based solutions of United Utilities from its models, which fails to reflect the fact that many other companies can also employ such solutions more readily than YWS. This means the CMA's models remain likely to underestimate YWS's efficient cost for P-removal. To resolve the issue the CMA is encouraged to make further adjustments to its models to account for the catchment-based solutions available to these other companies.

5.2.6 This situation is exacerbated by a technical error arising from the relationship between the CMA's P-removal modelling and the UQ WINEP benchmark, which is based on Ofwat's FD models. This means that YWS in fact remains inappropriately benchmarked against United Utilities in the PFs, despite the CMA's attempt to correct this.

5.2.7 YWS is also concerned about the CMA's use of triangulation, which inappropriately dilutes the estimated cost impact of the UWWTD, despite robust engineering and statistical evidence showing this to be a highly relevant cost driver.

5.2.8 In its response to RFI006, YWS set out the P-removal sites corresponding to each cost driver and the population equivalents that they respectively serve. This table is replicated below (with additional summary columns).

93 CMA, PFs, paragraph 5.70.

94 CMA, PFs, paragraph. 5.70.

95 These matters are discussed in detail in Annex 02, Oxera, 'Responding to the CMA's provisional findings', October 2020, section 2.

96 CMA, PFs, paragraph 5.81.

Table 2: Statutory drivers at YWS's P-removal sites

Driver	No of sites	Existing P Consent	Population Equivalent (PE)	%age PE	IAP Rep £m	%age £m
UWWTD Only	10	0	405,920	9.1%	44.018	6.7%
UWWTD & WFD (Dual drivers)	39	1	3,932,622	88.2%	482.68	74.0%
WFD Only	32	3	118,282	2.7%	122.665	18.8%
Sampling programme	N/A	N/A	N/A	N/A	3.093	N/A
Total	**81**	**4**	**4,456,824**		**652.456**	

5.2.9 One can observe that 49 out of the total 81 sites have either UWWTD or dual drivers, which means compliance with the standard must be achieved on site at those locations ('end of pipe' hard engineered solutions). Catchment management solutions are not an option under the requirements of the UWWTD legislation. It can also be observed the 49 sites account for 97.3% of the population equivalent in the Yorkshire region, as the sites in question include all of YWS's largest sewage treatment facilities.

5.2.10 YWS acknowledges that, on straight count of sites, WFD-driver-only sites account for 39.5% of the total. However, this count of sites should not be taken as a dominant variable in the modelling analysis when considering expenditure implications or the ability to innovate through catchment management options.

5.2.11 Of the 32 sites with a sole WFD driver, YWS has previously identified that only seven are amenable to catchment management solutions as the remainder are subject to site-specific and regulatory limitations.[97] However, even if these limitations were lifted and it were possible to deliver catchment management solutions at all 32 sites, this would still account for only 18.8% of YWS's WINEP expenditure and make up 2.7% of its population equivalent.

5.2.12 On this basis, the CMA's decision to give each model equal weighting in the triangulations within the P-removal modelling is not representative of YWS's circumstances, nor fairly reflects its ability to achieve the implied efficiency in that decision.

[97] YWS, SoC, paragraph 305.

5.2.13 It should also be noted that addressing the issues in the P-removal modelling would impact on the overall WINEP in-the-round catchup efficiency, which would need to be recalculated accordingly.

WINEP – Conclusion

5.2.14 YWS would respectfully request that the CMA reconsider these issues outlined above (and in the attached Annex) and make an appropriate further upward adjustment to its WINEP delivery costs accordingly. Specifically, we request that the CMA make incremental adjustments to its P-removal modelling approach to fully incorporate the principles that it has set out in its PFs. These include: (i) fully accounting for the impact of UWWTD in the industry and not just United Utilities; (ii) avoiding biasing the outcome for YWS by diluting the impact of UWWTD and first-time imposition of consents through triangulation; and (iii) ensuring consistency between the benchmark and the modelling undertaken. These issues are addressed in more detail in Annex 2, where specific remedies are suggested to address the issues highlighted. The overall impact of these adjustments on YWS's allowance would be £75m.

5.2.15 Looking forward to PR24, the source of a number of these problems is the interaction of the environmental programme, as agreed with the Environment Agency (**EA**), and the price review as determined by Ofwat. This inevitably leads to companies having to submit investment plans to Ofwat that are still subject to considerable change with the EA. YWS would therefore welcome any views the CMA has on the benefits of aligning the regulatory timetables for the proper assessment of enhancement costs.

5.3 Growth costs

5.3.1 The second area that YWS would invite the CMA to reconsider is its symmetrical application of the unit cost adjustment for growth costs.

5.3.2 YWS welcomes the CMA's update to the ONS forecast data and the expansion of the true-up mechanism to cover all growth costs, which provides protection for both the company and customers. However, this does not address the fundamental underlying concerns about Ofwat's assessment of growth costs by way of a unit rate adjustment.

5.3.3 It is common ground that some, but not all, forward-looking population growth is included in the base model variables. Therefore, an element of the variation in growth rates is already implicit in the modelling. Moreover, given the "lumpy" nature of expenditure in growth (e.g. once certain thresholds are reached, large capital investments are required to expand capacity) there is in-built uncertainty in the unit rate calculation.

5.3.4 Moreover, the true-up mechanism protects against an underestimate of growth rates by the ONS, but only from a correct starting point, and only after the fact. It will not produce the right answer if, as here, the growth disallowance is double counted (because the unit rate adjustment assumes that there are no growth variables in the base modelling).

5.3.5 In light of the uncertainty inherent in the use of the unit rate adjustment, and the inability of the true-up mechanism fully to address this issue, YWS respectfully requests that the CMA reinstate Ofwat's asymmetrical approach, and reduce the downward adjustment by half.

5.3.6 Moreover, YWS would be grateful for the CMA's view on the benefit of further dialogue on the treatment of growth between companies and the regulator ahead of setting the PR24 methodology, to ensure it reflects the actual need as accurately as possible and thereby avoids excessive true-ups at the end of the AMP.

5.4 The inclusion of 2019/2020 data in the CMA's cost modelling

5.4.1 At this stage in the redetermination, the CMA has access to the latest year of data (2019/20) for cost assessment. This data can be readily incorporated within the CMA's existing cost assessment modelling as presented in the PFs. It would be appropriate to use this data because:

(a) it increases the size of the dataset available for econometric modelling of the industry cost function, in principle improving the accuracy of the CMA's econometric models, and therefore the robustness of the predictions used to project efficient cost levels for AMP7;

(b) assessing catch-up efficiency incorporating information from the most recent year of data ensures that the resulting target represents the most accurate assessment of the efficiency frontier as of the end of AMP6/the beginning of AMP7; and

(c) it addresses, to some extent, concerns raised by the Disputing Companies with regard to the capital maintenance cycle, as setting a catch-up target over a full asset management period, 2015/16 to 2019/20, helps to mitigate the potential for differences in investment profiling to be interpreted as efficiency/inefficiency.

5.4.2 Annex 3 from Oxera sets out the benefits and impact of the extra year of data on water and wastewater services for three of the Disputing Companies within the CMA's existing modelling framework. YWS has also provided a dataset including the APR 2019/20 data and Stata do files to allow the CMA to run its modelling with this data.[98]

5.5 The distinction between base and enhancement expenditure

5.5.1 In the final analysis it appears to YWS that many of the cost-related issues that arose in PR19, in particular the costs-outcomes disconnect, have their root in the lack of clear distinction between base and enhancement costs.

5.5.2 This distinction ought to be intuitively simple. In short, base expenditure is to maintain the current level of service and enhancement expenditure is to improve the level of service.

5.5.3 The PR19 price review process, including these proceedings, has exposed the need for clearer definitions and understanding of expenditure to enable Ofwat appropriately to carry out comparative regulatory assessments. As has been seen, where costs and performance are not recorded and measured in a common way across all companies, it can lead to incorrect regulatory assessments.

5.5.4 A key example of this is the early replacement of existing assets that would otherwise not have been required without the enhancement drivers. It was initially considered that these costs would be assessed within base – however there was no mechanism in the Ofwat base modelling approach to allow the expenditure needed to achieve this. This meant that such costs were inappropriately ascribed to inefficiency.

5.5.5 Without consistency in the cost allocation between base and enhancement across the industry, or between regulatory periods, there is a risk that Ofwat's modelling assessments are neither accurate nor fair.

5.5.6 Of particular importance is how enhancement expenditure in one period is incorporated into base expenditure for the next period, and relatedly, the historical investment and performance decisions companies have made under previous regulatory incentive regimes. For example, P-removal activity is currently assessed under enhancement expenditure but will feed into base for AMP8. If Ofwat uses similar cost driver specifications at PR24, this will underestimate YWS's efficient cost allowance (and the efficient cost allowance of other WASCs with large P-removal enhancement programmes in AMP7).[99]

5.5.7 Similarly, while YWS welcomes the CMA's recognition that the costs required to achieve significant PR19 improvements required in leakage are not covered in

[98] See Annex 03, Oxera, 'On the use of 2019/20 APR data in econometric modelling', 23 October 2020, section 2.

[99] Annex 02, Oxera, 'Responding to the CMA's provisional findings', October 2020, section 3.4.1.

base expenditure, the question remains how other significant improvements in service should be treated in the future. It should be recognised that step-changes in performance above previously agreed targets cost money and therefore are not included in base modelling as it currently stands.

5.5.8 YWS respectfully requests that the CMA: (i) indicates that the *need* for service quality performance should be assessed jointly with cost assessment rather than independently; and (ii) acknowledges that multiple methods of integration have been considered in regulation and that these need to be explored further in future regulatory periods.[100] YWS also encourages the CMA to underline the importance of ensuring both expenditure and service performance are measured and assessed on a comparative basis to allow Ofwat to make more considered decisions.

[100] Integrating service quality into the cost assessment is discussed in Annex 02, Oxera, 'Responding to the CMA's provisional findings', October 2020, section 2.1.

6. Overall provisional findings on costs and outcomes

6.1 Introduction

6.1.1 As YWS has consistently maintained in its redetermination submissions, it is right that companies are challenged to meet demanding outcomes targets at PR19. YWS is pleased that the CMA has recognised that YWS shares Ofwat's commitment to having robust outcomes incentives within the price control and that this point of principle is not a matter of dispute.

6.1.2 Consistent with the CMA considering the impact of the outcomes package within its broader redetermination and assessment of financeability, it has taken a pragmatic approach to certain aspects of outcomes incentives. The CMA rightly notes that, in a redetermination, it is not feasible to: (i) collect new customer evidence; (ii) assess each Performance Commitment in detail; nor (iii) examine differing definitions or performance measures.[101] YWS agrees with the CMA's approach, which has two implications. First, to the extent that the ODI package might contribute to financeability concerns (as was the case under Ofwat's FD), remedies outside of the ODI package, such as increasing the WACC, are logically required. Second, the more detailed aspects of the outcomes framework not fully addressed under the CMA's PFs remain pertinent to the future, as the industry looks ahead to PR24. The implications of this are addressed in this chapter.

6.1.3 YWS's concern with Ofwat's FD was the 'in practice' application of its framework. Specifically, YWS was concerned that: (i) the outcomes targets set were not always achievable for an efficient firm (i.e. they were not set at the economically efficient level); (ii) notwithstanding the appropriateness of the target levels, efficient funding had not been allowed to achieve the targets; and (iii) the ODIs as a whole were significantly skewed to the downside and had not been calibrated as part of a package.

6.1.4 Overall in relation to the outcomes package, YWS welcomes the CMA's position in respect of:

(a) recognising the importance of companies having strong incentives to deliver against outcomes targets;

(b) going some way to address the costs/outcomes gap;

(c) de-risking some elements of the outcomes package to recognise that there are some elements that are inherently outside of management control; and

[101] CMA, PFs, paragraph 7.45.

(d) recognising that the outcomes package as a whole impacts the balance of risk and that, therefore, it is essential to take account of this within the wider redetermination, including in relation to financeability and the WACC (and particularly, as the CMA notes, where the ODI package is asymmetrically skewed to the downside for an efficient firm).

6.1.5 In particular, YWS is pleased to see the CMA's acknowledgement that YWS's leakage target of a 15% reduction represents a significant change from its PR14 target, which was calculated according to the Sustainable Economic Level of Leakage (**SELL**). YWS agrees that it requires enhancement funding in order to attain its leakage targets, given the associated necessary extra levels of activity that it has evidenced for the CMA in its response to RFI018A.

6.1.6 YWS considers that the same principles that guided the CMA's decision to award enhancement funding for leakage should also apply to internal sewer flooding. YWS's main outstanding concern with regard to internal sewer flooding is that the CMA has not yet adequately taken account of the company-specific features that impact the achievability of the targets set (and relatedly, the relative efficiency of YWS's previous performance). Once these features are accounted for, YWS considers that incremental enhancement funding of £79m is required. This conclusion is evidenced at section 6.8, below, with supporting evidence from Economic Insight's report 'Funding and incentives for internal sewer flooding' (Annex 4) and Stantec's report 'Evaluation of the CMA's findings related to internal sewer flooding' (Annex 5).

6.2 Setting of Performance Commitments and ODIs

6.2.1 In relation to Performance Commitment levels and ODIs (incentive rates), in its PFs the CMA took the view that where Ofwat intervened in company plans, "*the reasons for intervening and the form of the interventions* […] *are consistent with normal regulatory practice.*"[102] Whilst YWS agrees with the CMA that there are sound 'in principle' reasons for regulatory interventions, it does not entirely agree with its overarching conclusion.

Performance Commitment levels

6.2.2 YWS considers that the central principle of relevance is that targets should be set at the 'economically efficient' level. YWS would therefore agree that a regulator should make interventions in cases where a company's proposed target is not consistent with this, but otherwise interventions will likely be harmful to customers. References to 'good', or 'challenging' levels of performance are potentially unhelpful in this context, as they are ambiguous terms, open to subjectivity. YWS would therefore welcome additional clarity

[102] CMA, PFs, paragraph 7.51.

from the CMA on this point in its final determination, as it is important in the context of future price controls.

6.2.3 The CMA implicitly recognises this in noting that: "*one reason not to intervene to address regional differences in targets across companies would be if targets which were achievable in one region were unachievable in another for reasons of topography or weather conditions.*"[103] That is to say, the efficient level of performance may objectively vary across different companies, a proposition with which YWS agrees.

6.2.4 In coming to its view that, overall, Ofwat's interventions in Performance Commitment levels are appropriate, the CMA points to three factors: (a) that regional variation can be addressed through enhancement funding; (b) Ofwat only mitigated the largest differences across companies; and (c) that the nature of Ofwat's interventions should 'balance out' for an efficient company. YWS's response to these points is as follows:

(a) YWS agrees with the CMA that regional variations can be addressed through enhancement funding. In practice, YWS's primary concern was that Ofwat had not done so in its FD. As discussed subsequently, YWS therefore welcomes the CMA's position with respect to leakage, where it has rightly recognised the need for additional enhancement funding in order for the target levels to be met by an efficient firm. Nonetheless, in practice, under the CMA's PFs, YWS does not think its regional specific factors have been fully recognised across other Performance Commitments (most pertinently in relation to internal sewer flooding).

(b) YWS agrees with the CMA that Ofwat focused its interventions on Performance Commitments for which there was the greatest variation across companies. However, this neither provides comfort that the interventions were warranted (in principle or in practice), nor that their impact has not harmed customers.

(c) YWS also disagrees with the CMA that Ofwat's approach to interventions 'balances out' for an efficient firm. Ofwat has consistently assessed YWS to be efficient; yet despite this, evidence shows that Ofwat's interventions in YWS's plan were highly asymmetric to the downside.[104]

6.2.5 In light of the second and third points above, whilst YWS appreciates the CMA's need to prioritise its own work, further clarification on these matters would be welcome in the CMA's final determination. Specifically, YWS would welcome the

[103] CMA, PFs, paragraph 7.51.

[104] See Annex 05 (SoC), Economic Insight, 'Ofwat's approach to ODI Interventions in the Final Determinations'.

CMA setting out more directly how: (i) the appropriateness of interventions; and (ii) their impact on an efficient firm, should be established.

The role of customer evidence

6.2.6 YWS is pleased that the CMA recognises the important role that customer evidence plays in the setting of appropriate outcomes incentives, noting that: "*customer research can be highly informative in relation to particular issues* [...] *the extensive engagement and research undertaken has gone a long way to encourage company business plans and regulatory decisions to reflect the specific priorities and values of customers.*"[105]

6.2.7 YWS agrees with (i) the CMA's finding that customer evidence is imperfect and that there must, therefore, be some limits to the weight placed on it; and (ii) the CMA's reasoning that this stems from questions regarding research methods, the extent to which customers can understand complex matters and cross-company comparability. Consistent with this, YWS also agrees with the CMA's observation that customer evidence at PR19 includes *some* instances whereby the extent of variation implied in customer valuations is too large to plausibly only reflect differences in preferences across regions.

6.2.8 YWS is, however, concerned that the nature of Ofwat's interventions in PR19 has not been consistent in practice with the rationale outlined by the CMA. Specifically, Ofwat interventions were based on a set of arbitrary criteria and the nature of its interventions was similarly arbitrary. Ofwat did not forensically identify interventions based on assessments of relative evidence quality for each specific ODI/Performance Commitment. It seemingly gave equal weight to companies' customer evidence, notwithstanding the fact that it was assessed by Ofwat to be of differing quality. It would be most unfortunate if this continued into PR24 and beyond, as it would undermine confidence in the importance of customer feedback.

6.2.9 YWS is concerned that the absence of a single consistent cross-company source of customer evidence makes it almost impossible to differentiate between genuine differences in customer preferences on the one hand and measurement error on the other. With this in mind, YWS is pleased to see that Ofwat is considering this[106] and YWS would be supportive of the implementation of such an approach at PR24. For the same reason, YWS would welcome the CMA's views on the water industry undertaking a comprehensive review of the customer evidence process prior to PR24, covering (i) methods of evidence

[105] CMA, PFs, paragraph 7.55.

[106] For example, as explained in Exhibit 065 (SoC), Ofwat, 'Time to act, together: Ofwat's strategy', October 2019.

collation; and (ii) how the evidence should be evaluated and used in the price control process.

6.3 Cost-outcomes disconnect

6.3.1 YWS agrees with the CMA's position that the relevant question is whether there is a cost-outcomes disconnect in practice, rather than in principle[107]: "*the question that we have to address is whether there are improvements in service required which go beyond the service performance that should be achievable by an efficient firm through base totex.*"[108] YWS agrees with the way in which the CMA frames this and notes that this, in turn, depends on the level of service performance (either explicitly or implicitly) contained in base allowances. YWS's position throughout the redetermination has been that Ofwat's methodology means that *both in principle and in practice* a disconnect arises, because of the absence of any explicit base funding (and evidence regarding implicit funding indicating that this is insufficient for an efficient firm to meet its targets).

Potential for implicit funding

6.3.2 In its PFs, the CMA finds that Ofwat's setting of Performance Commitments with harder targets "*does not automatically result in increased expenditure relative to Ofwat's models of base expenditure. In some cases, improvements to service could be achieved at little cost, or may be of a recurring nature that would be included in base funding.*"[109] The CMA also gives examples of how service quality can be improved without a consequential impact on cost.

6.3.3 YWS agrees with the distinction between recurring expenditure and one-off expenditure and, thus, whether it is a 'level' or 'rate of change' in improvement that is being implicitly funded in base costs. This implies that, for any individual Performance Commitment, careful analysis is required in order to distinguish between the two (which are further not mutually exclusive). However, YWS disagrees with the other factors raised by the CMA, which seem to provide reasons as to why cost impacts might be mitigated (but, nonetheless, impacts arise). YWS therefore disagrees with the CMA's inference that in many cases there are factors that mean the targeted service improvement does not require additional expenditure.

[107] CMA, PFs, paragraph 7.72.

[108] CMA, PFs, paragraph 7.72.

[109] CMA, PFs, paragraph 7.73.

Trade-offs at the efficiency frontier

6.3.4 YWS welcomes the CMA's recognition that at the efficiency frontier "*improvements in performance will only come at a cost. For example, an efficient company using optimal approaches and technology may find utilisation of more inputs is the only practical way to improve outcomes.*"[110] This is consistent with YWS's SoC and subsequent submissions.[111] YWS also highlights that, consistent with the CMA's statements regarding interventions in Performance Commitments and ODIs, regional factors (outside of management control) should be taken into account when assessing the efficiency frontier in the context of outcomes. YWS subsequently sets out why this has important implications for how the CMA has considered the funding of outcomes in practice within its PFs.

6.4 Asymmetric rates

6.4.1 In the PFs, the CMA set out an analysis, indicating that exposure to downside ODI risk for YWS under Ofwat's FD was -3.2% RoRE (penalty), with an overall asymmetry of -1.6% (once the maximum rewards are netted off).[112] YWS is pleased that the CMA agrees with its assessment that the ODI package under Ofwat's FD was materially skewed to the downside. YWS is also pleased that the CMA made a small number of amendments to the ODI package that, on the CMA's analysis, reduced the asymmetry fractionally to -1.5% RoRE. It is also right that the CMA has recognised that such large downside skews on the ODI package can significantly impact expected returns.

6.4.2 However, YWS considers that the CMA's analysis (which indicates that this asymmetry results in an expected overall RoRE ODI net penalty of -0.1% to -0.2%) understates the extent of the skew.

6.4.3 The CMA's assessment reflects asymmetry relating to the incentive rates, penalty -only ODIs and other ODI parameters. However, YWS's understanding is that the CMA's figures do not capture whether the expected performance of an efficient firm is likely to be below the target Performance Commitment level.[113] Analysis by Economic Insight submitted alongside YWS's SoC, which included the impact of performance risk, found the expected RoRE from ODIs to be [CONFIDENTIAL]. YWS continues to take the view that Performance

[110] CMA, PFs, paragraph 7.76.

[111] See, for example, YWS, SoC, paragraphs 135-138.

[112] CMA, PFs, Table 7-4.

[113] Specifically, the CMA states that *"[g]iven the difficulty in accurately measuring the likelihood of significant outperformance against underperformance, we have not attempted to measure the effect of differences in approach to setting caps relative to collars, which would represent an additional source of asymmetry."* (see CMA, PFs, paragraph 7.92).

Commitment target levels do not align to the economically efficient level and should not, therefore, be assumed to be the expected level of performance for an efficient firm. Therefore, there remains a risk of the CMA significantly understating the expected net penalty position relating to ODIs.

6.4.4 YWS agrees with the CMA that there are reasons why asymmetric ODIs may be warranted *in specific circumstances*. YWS further considers that two of the three criteria identified by the CMA for assessing the appropriateness of individual asymmetric ODIs are appropriate. However, YWS does not consider the 'is the Performance Commitment hard to measure?'[114] criterion to be suitable because measurement challenges are more relevant to determining whether having a Performance Commitment at all is likely to be in customers' interests (rather than the balance of risk for said Performance Commitment). In addition, for an efficient firm, the overall balance of risk should be symmetrical around the expected performance level. YWS would therefore welcome the CMA's further consideration of this issue in its final determination.

6.5 Assessment of ODIs/Performance Commitments

Views on the CMA's overarching approach

6.5.1 Rather than commenting on the detail of the CMA's assessment of each individual ODI, YWS makes some overarching observations that it would ask the CMA to reflect on. These should be seen in the context of points raised earlier in this section. Namely, YWS agrees with the CMA that: (i) what matters is whether outcomes improvements are funded (explicitly or implicitly in practice); (ii) implicit funding may relate either to a maintenance of an existing service level, or a rate of change (but that the distinction between one-off or recurring costs must be carefully evidenced); and (iii) at the efficiency frontier, there is an inherent trade-off between cost and outcomes. With these observations in mind, YWS has three concerns regarding the CMA's assessment of Performance Commitments/ODIs, and their funding:

(a) Firstly, the CMA may be applying the concept of the 'frontier' in an overly narrow way. Specifically, the CMA has evaluated individual ODIs in isolation and then undertaken an assessment of whether a firm is likely to require additional funding for improvements, based on its relative performance on that ODI, set against the gains it is being asked to make (i.e. considering whether the firm is, or is not, at the 'frontier' for that ODI). YWS does not consider this to be an appropriate approach. Rather, the efficiency frontier is a broader concept that represents the overall balance between price and output (quality) in all its dimensions.

[114] CMA, PFs, paragraph 7.101.

(b) Secondly, YWS notes that when considering the appropriateness of comparative Performance Commitment levels (and thus required funding) the CMA states: "*the use of upper quartile as a target for companies to achieve efficient performance is fairly standard in regulation and has also been used in the assessment of base totex.*"[115] YWS does not consider that the UQ on outcomes provides an indication of the economically efficient, or funded, level of outcomes performance. The key intuition is that efficiency, in totality, is the combination of both cost and output (quality). Therefore, once a company's relative inefficiency has been estimated, if that gap is applied in its entirety to its allowed costs, the company has already been benchmarked to the frontier where, by definition (and consistent with the CMA's position) a trade-off between costs and outcomes exists. As Ofwat's method for setting cost allowances included no explicit control for outcomes performance, this means that: (i) unless one can find evidence of implicit funding of outcomes improvement, the presumption should be that improvements are not funded; and (ii) historical analyses of correlations between cost and outcomes performance are uninformative of the central question correctly identified by the CMA (i.e. whether, in practice, the improvements are funded).

(c) Thirdly, and related to the above, whilst the CMA has recognised that regional factors are relevant to the concept of the efficiency frontier, YWS does not consider that, in practice, the CMA has sufficiently taken these into account when assessing whether, and to what extent, it is funded to deliver the outcomes targets it has been set.

6.5.2 YWS considers these to be very important points and would welcome the CMA giving further consideration to these matters in its final determination. YWS would like to see clarity on the following points: (i) the UQ on an individual outcome is unlikely to coincide with the economically efficient level; and (ii) prior performance against a single ODI on an historical basis does not provide information as to whether a new (different) target level is funded.

6.6 Practical implications for leakage and internal sewer flooding

6.6.1 Whilst the matters discussed above are important, YWS's assessment is that the 'in practice' implications are most material in relation to leakage and internal sewer flooding. The following sections set out YWS's position in relation to these in more detail, but in summary:

[115] CMA, PFs, paragraph 7.109.

(a) Firstly, YWS agrees with the CMA that the substantial performance gains required in leakage are not efficiently funded and that significant additional funding is required in order for YWS to achieve them.

(b) Secondly, YWS disagrees with the CMA's position in relation to internal sewer flooding. On this Performance Commitment, for the reasons outlined above, YWS is materially underfunded relative to the performance it is required to deliver. This is primarily because regional factors have not been adequately taken into account when assessing the 'frontier' in practice.

6.7 Leakage

6.7.1 YWS remains committed to reducing its leakage by 15% in AMP7 and has well-developed plans in place to do so.[116] It has maintained through PR19 and this redetermination that the step-change in leakage performance that is associated with the move away from SELL means that YWS requires enhancement funding to deliver it. YWS therefore welcomes the CMA's provisional decision to allow enhancement funding in relation to leakage.

6.7.2 In this section, YWS briefly comments on the CMA's PFs in relation to leakage in terms of the leakage targets, funding and incentives.

Leakage targets

6.7.3 YWS agrees with the PFs that setting a target of a 15% reduction in leakage is appropriate during AMP7. YWS also agrees that the use of the three-year running averages is appropriate in view of the impact that events outside of management control (such as extreme weather) can have on in-year performance.

6.7.4 YWS also agrees with the CMA's observations regarding the development of leakage targets beyond AMP7. It will be critical to develop a better understanding of the efficient costs and benefits of leakage reduction to ensure that further reductions are in customers' long-term interests.

6.7.5 As part of this, YWS considers that the future role of customer research in long-term planning and the price review process will need very careful consideration, especially in terms of the weight that is attached to company-evidence and the preferences of customers in specific regions. YWS welcomes any guidance or suggestions the CMA might have in this regard.

[116] See particularly YWS responses to RFI012 and RFI018A.

Leakage funding

6.7.6 YWS agrees with the CMA's provisional decision to allow enhancement funding for leakage. It also agrees with the CMA's underlying reasoning that:

(a) the leakage target represents a step-change in expectations compared to the last decades and so there will be an additional cost associated with this scale of leakage reduction;[117]

(b) that the cost of leakage reduction has not been included in its base cost models;[118] and

(c) there is no reason not to allow enhancement funding. For the reasons set out above in section 6.5, YWS does not consider that underperformance on one ODI implies that enhancement funding[119] should be disallowed and, in any event, there is no evidence that YWS has underperformed its leakage targets in AMP6, or in prior AMPs.

6.7.7 The CMA has since sought additional information regarding the basis for the level of enhancement funding as part of RFI018A. YWS's response to that RFI demonstrates clearly that there is a need for funding, that there is a tried-and-tested plan to deliver the leakage reductions (based on YWS's experience during the last years of AMP6) and that its forecast costs are robust and efficient.

6.7.8 YWS notes that the CMA has deducted £1.4m for frontier shift (net of RPEs) from its estimate of £94.7m to arrive at its provisional decision to allow £93.3m in enhancement funding. However, YWS's response to RFI018A shows that the £94.7m already captures expected future efficiencies of £5.7m and that a further deduction applied to account for frontier shift would double-count these forecast efficiency gains.[120] YWS therefore suggests that its original figure of £94.7m is the appropriate sum.

Leakage incentives: the design of the Tier 1 and Tier 2 incentives

6.7.9 Regarding the leakage incentives, YWS fundamentally agrees with the importance of protecting customers and it agrees with the CMA that the use of underperformance incentives is a necessary part of providing enhancement funding responsibly. At the same time, it is important that the underperformance incentives are set at an appropriate level to achieve their aims, while not exposing the company to unnecessary (and costly) financial risk.

---

[117] CMA, PFs, paragraph 8.57.

[118] CMA, PFs, paragraph 8.59.

[119] CMA, PFs, paragraph 8.62.

[120] YWS response to RFI018A, response to Q2d, particularly paragraphs 2.25-2.28.

With this in mind, YWS considers that some features of the CMA's leakage incentives go somewhat beyond what is necessary.

6.7.10 In particular, the Tier 1 incentive involves both a 'clawback' of enhancement funding (in the event that YWS does not deliver the expected performance improvements) and a 'penalty'. YWS agrees that the clawback element of enhancement funding is appropriate (conditional on it being properly calibrated to the enhancement funding received). However, YWS considers that the addition of the penalty element of the Tier 1 incentive is unnecessary in circumstances where customers have not experienced a loss of service requiring compensation and, through the clawback, receive a refund for any service that is not delivered.

6.7.11 This feature of the Tier 1 incentive is exacerbated by the facts that:

(a) the penalty element of the Tier 1 incentive (and indeed the Tier 2 incentive, which it is based on) is twice the size of the penalty rate implied by YWS's own customer research; and

(b) the clawback rate of 50% combined with the totex cost-sharing rate of 55% would, in some circumstances, clawback more than 100% of the allowed enhancement expenditure.

6.7.12 Therefore, YWS requests the CMA to reconsider: (i) the addition of the penalty element to the Tier 1 incentive; and (ii) to the extent that the penalty element remains, whether it (and the Tier 2 incentive on which it is based) should take some account of YWS's customer research, which reflects the preferences of its customers.

Leakage incentives: calculation of the Tier 1 incentive

6.7.13 Notwithstanding the above, YWS notes that the CMA has calculated the clawback element of the Tier 1 incentive based on leakage reductions implied by the in-year leakage reductions, rather than the three-year rolling average. YWS considers that the CMA should use the performance profile set out in Table 3 below for the calculation of the Tier 1 incentive. Using this profile results in a revised Tier 1 incentive of £0.484m per Ml/d, instead of £0.692m per Ml/d as presented in the PFs or £0.534m per Ml/d as presented in the Excel table that the CMA shared with YWS on 13 October in response to its clarification question.

Table 3: Revised leakage performance profile for the purpose of calculating Tier 1 incentives.

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
3 year avg (Ml/d)	313.4	302.7	290.2	283.9	276.7	266.4
3 year avg (%)		3.4%	7.4%	9.4%	11.7%	15.0%

6.8 Internal sewer flooding

6.8.1 As YWS explained during its virtual site visit and in its submissions, making improvements in relation to internal sewer flooding is one of its highest priorities for AMP7.[121] Given the particularly adverse effect that such incidents can have on its customers, YWS agrees with the need for stretching targets in this area and recognises that its customers want YWS to catch up to the industry UQ. So, not only has YWS exceeded its internal sewer flooding targets in each year of AMP6,[122] it has also invested its outperformance rewards in the latter part of AMP6 in order to undertake an 'early start' to improve its internal sewer flooding performance ahead of AMP7.[123] This has put YWS on the front foot to meet the challenges ahead.

6.8.2 In spite of having met its regulatory targets in AMP6, the targets in Ofwat's FD, which have been replicated in the CMA's PFs, require a 73% improvement between the Year 5 target of AMP6 and the Year 1 target of AMP7.[124] This requires a clear step-change in performance for YWS between AMP6 and AMP7.

6.8.3 As a consequence, YWS disagrees with the position outlined in the PFs in relation to internal sewer flooding. YWS articulates its position further below.

6.8.4 YWS is pleased to see that the CMA recognises that regional factors can affect the frontier, for example finding that "*some companies would have varying degrees of company specific challenges to address*" in relation to internal sewer

[121] See, for example, YWS, SoC, paragraphs 36-37; Annex 06 (Response), YWS: Internal Sewer Flooding Case Study.

[122] See, for example, YWS, Response, paragraph 4.34.1; Annex 06 (Response), YWS: Internal Sewer Flooding Case Study, pages 2-3.

[123] Annex 06 (Response), YWS: Internal Sewer Flooding Case Study, page 3. The CMA has recognised the improvements that YWS's increased activity has brought: "*We note that Yorkshire has made some improvement over the past two years.*" (see CMA, PFs, paragraph 7.133).

[124] YWS, SoC, paragraph 160(b).

flooding.[125] However, YWS would suggest that the PFs have not yet taken adequate account of the company-specific challenges that YWS has demonstrated throughout the redetermination.[126]

6.8.5 YWS considers that the same principles that the CMA has in YWS's view correctly applied in relation to leakage (see paragraph 6.7.7, above) should be applied to internal sewer flooding. If the same principles are applied, YWS would be allocated additional enhancement funding, which would help YWS deliver the step-change in performance contained in the PFs to properly address this issue.

6.8.6 The following subsections outline the issues in relation to YWS's funding and ODI for internal sewer flooding, along with YWS's proposed solutions. Further details can be found in Economic Insight's report 'Funding and incentives for internal sewer flooding', Annex 4.

Internal sewer flooding funding

6.8.7 As YWS has previously explained, it has a higher proportion of cellars and back-to-back properties in its supply area compared to other companies.[127] This means that it is costlier and more time consuming for YWS to limit and reduce internal sewer flooding compared to other companies.[128] This view is supported by YWS's engineering adviser in a report commissioned for these purposes.[129]

6.8.8 As such, industry-wide cost allowances and Performance Commitment levels are not appropriate for YWS, unless they are subsequently adjusted to reflect the prevalence of cellars and back-to-back properties in YWS's region.

6.8.9 In order to address this issue, YWS considers that there are two[130] main options:

---

[125] CMA, PFs, paragraph 7.127.

[126] See, for example, YWS, SoC, paragraph 160; YWS, Response, sections 4.34-4.44; and Annex 06 (Response), YWS: Internal Sewer Flooding Case Study.

[127] See, for example, Annex 06 (Response), YWS: Annex 6 Internal Sewer Flooding Case Study, pages 7-9.

[128] See, for example, Annex 06 (Response), YWS: Internal Sewer Flooding Case Study.

[129] Annex 05, Stantec, 'Evaluation of the CMA's findings related to internal sewer flooding', 23 October 2020.

[130] In principle, a third solution would be to introduce a 'split' Performance Commitment whereby there are separate targets for sewer flooding taking place in: (i) non-habitable cellars; and (ii) other domestic settings. While this is not an appropriate solution at this stage, YWS would be supportive of further discussion with Ofwat on this topic as a consideration for PR24 rather than the current proceedings.

(a) In its Response, YWS suggested that the solution was to adapt its internal sewer flooding Performance Commitment levels.[131] YWS's proposed solution was to introduce a 10-year glide path towards meeting UQ performance at the end of AMP8 rather than AMP7. This would have had the effect of (i) setting YWS less onerous internal sewer flooding targets over AMP7; and (ii) in effect, giving YWS two AMPs' worth of base allowance to reach the targets included in Ofwat's FD and subsequently in the CMA's PFs; or

(b) Leaving the more onerous targets intact and providing additional cost allowances to address the step-change described in 6.8.2 above.

6.8.10 The PFs indicate that the Performance Commitment targets were set at reasonable levels in Ofwat's FD and that any regional factors in terms of internal sewer flooding should be addressed through cost allowances.[132]

6.8.11 Reflecting this, the CMA has provisionally provided YWS with an enhancement allowance that will help to address internal sewer flooding in Hull and Haltemprice. However, this funding will address only hydraulic flooding, which accounts for significantly less than 10% of internal sewer flooding incidents.[133] Hydraulic flooding is distinct from flooding caused by blockages, which is how cellars are typically flooded (a problem which is exacerbated in areas with back-to-back properties). Therefore, the Hull and Haltemprice funding does not take account of the challenges that YWS faces in terms of cellars and back-to-back properties. In order to address these problems, YWS requires sufficient additional funding.

6.8.12 Consistent with the above, Economic Insight's report 'Funding and incentives for internal sewer flooding', Annex 4, sets out an estimate of the enhancement funding required by YWS to meet Ofwat's Performance Commitment levels – specifically taking account of the prevalence of cellars and back-to-back properties in Yorkshire. The analysis firstly confirms that, as per the CMA's approach to leakage and the UQ Performance Commitments, YWS should receive additional enhancement expenditure once regional factors are properly reflected. It subsequently estimates the required funding by:

(a) Calculating 'cellar-adjusted' Performance Commitment levels. This represents the level of performance that is funded by base costs, once the prevalence of cellars in the Yorkshire region is taken into account.

[131] YWS, Response, paragraph 12.1.51. Please note this is contrary to the CMA's position that the disputing parties "*did not raise specific issues with this PC*" (see CMA, PFs, paragraph 7.129).

[132] CMA, PFs, paragraphs 7.130 and 7.127.

[133] See YWS, Response, paragraph 4.41.11.

The adjusted Performance Commitment level is based on YWS's estimate that if it had the industry average prevalence of cellars, it would experience 50% fewer internal sewer flooding incidents.[134]

(b) Calculating the gap between Ofwat's Performance Commitment level and the 'cellar-adjusted' Performance Commitment level in 2025. This gives an estimate of the improvement in performance for which YWS is not funded through its base allowances.

(c) Multiplying this gap by an efficient unit cost. This provides an estimate of the efficient enhancement funding required to meet Ofwat's Performance Commitments due to the prevalence of cellars. The unit cost is taken from evidence previously submitted by YWS in support of enhancement expenditure for internal sewer flooding.

(d) Subtracting the CMA's enhancement allowance for Hull and Haltemprice. This recognises that the CMA has provided some enhancement funding that relates to internal sewer flooding. As noted in 6.8.11, above, the Hull and Haltemprice funding does not relate to the effects of cellars and back-to-back properties, but it has been removed for the avoidance of doubt and to provide a conservative estimate.

6.8.13 This calculation implies that YWS should receive an additional £79m enhancement allowance for achieving the internal sewer flooding Performance Commitment levels.

6.8.14 Addressing problems related to internal sewer flooding is one of YWS's highest priorities. However, the scale of the task in Yorkshire is large – far larger than in other regions of the country – and although YWS has already focussed on the problem and undertaken a lot of activity to address it, it needs to be properly funded to do more over AMP7. Given the approach outlined above, YWS requests that the CMA reconsiders YWS's evidence in relation to cellars and back-to-back properties and provides an additional enhancement allowance.

Internal sewer flooding ODI

6.8.15 Were the CMA to provide an additional enhancement allowance to enable YWS to combat internal sewer flooding to a greater scale, YWS suggests that the incentive package should also be changed to protect customers and ensure consistency with the CMA's approach to leakage. In particular, YWS suggests

[134] This 50% estimate is broadly consistent with YWS's previous suggestion of adapting its targets. Specifically, YWS proposed to meet Ofwat's end of AMP7 target by the end of AMP8. Thus, YWS considered it could meet Ofwat's target level in double the time, over which it would receive double the base funding. Therefore, it is understandable that YWS would be funded to perform at double the internal sewer flooding incidents without enhancement expenditure.

that a Tier 1 clawback incentive should be added in order to provide a fair balance between incentivising performance and appropriate customer protection.

6.8.16 YWS's proposed incentive structure is set out in Economic Insight's report 'Funding and incentives for internal sewer flooding', Annex 4. In summary, YWS proposes that:

(a) A Tier 1 incentive rate will apply to performance immediately worse than the Performance Commitment levels. The Tier 1 rate will apply between the Performance Commitment level and the 'cellar-adjusted' Performance Commitment level.

(b) The Tier 1 incentive rate would be set such that it will recover the enhancement allowance if YWS does not close the performance gap accounted for by cellars.

(c) If performance is worse than the 'cellar-adjusted' Performance Commitment level, the Tier 2 incentive rate will be applied (equal to YWS's current penalty rate).

(d) The CMA's collar should be maintained, except for the early years in which it will be set equal to the 'cellar-adjusted' Performance Commitment level. This would allow for full recovery of enhancement expenditure.

6.8.17 YWS considers this provides a balanced solution to providing enhancement funding.

6.8.18 Should the CMA decline to provide an additional enhancement funding allowance for internal sewer flooding, YWS considers that the CMA's provisional decision to change YWS's collar exposes the company to inappropriate financial risk. Furthermore, YWS disagrees that it would not face sufficient incentive to improve performance from current levels based on Ofwat's collar. Therefore, in those circumstances, YWS considers that the CMA should return the collar to the level in Ofwat's FD.

7. WRFIM

7.1 Introduction

7.1.1 YWS is grateful for the CMA's agreement that the PR14 reconciliation issue concerned an unambiguous data input error and that the error should be corrected.

7.1.2 YWS notes the approach taken by the CMA on this issue and the PFs' indication that it will be reconciled by revenue and RCV adjustments in line with Ofwat's previous submissions and not through the application of the Wholesale Revenue Forecasting Incentive Mechanism (**WRFIM**).

7.1.3 YWS supports the CMA's approach in considering the available evidence (based on information previously supplied to Ofwat) to resolve a long outstanding matter that has grown unnecessarily to become a material issue in PR19 and this redetermination.

7.1.4 As noted in its main party hearing, YWS has adopted a new policy to ensure that similar issues in the future will be resolved more formally to avoid a repetition of the current situation.

7.2 Unambiguous error

7.2.1 YWS's previous submissions have set out in detail the unambiguous nature of the data input error.[135] The PFs reflect this evidence in reaching the conclusion that the error was an unambiguous data input (and not forecast) error;[136] that YWS provided sufficient information to Ofwat during the PR19 process to correct the issue;[137] and that the error should be corrected.[138]

7.3 Level of the adjustment

7.3.1 YWS believes the CMA has based its assessment on Ofwat's original approach to calculate the impact of correcting the data input error. This relies on totex adjustments, rather than applying the WRFIM, to reach its revenue and RCV adjustments. Therefore, YWS and the CMA have coincidentally arrived at broadly similar figures for the revenue adjustment, but, as explained below, YWS does not believe it is correct to make an RCV adjustment.

---

[135] See, for example, YWS, SoC paragraphs 204-215, Annex 11 (SoC), Mark Ballamy, 'Forensic Accountant's report to the Competition and Markets Authority', 2 April 2020, and YWS, Response, section 10.

[136] CMA, PFs, paragraphs 11.38-39.

[137] CMA, PFs, paragraphs 11.40-41.

[138] CMA, PFs, paragraph 11.42.

7.3.2 In principle, as per its previous submissions, YWS believes that the appropriate approach would be to correct the PR14 price control for the data input error and calculate the resulting revenue adjustment using the WRFIM. The resulting revenue adjustment calculated by YWS using the WRFIM (£36.3m) is broadly similar to the CMA's assessment (£35m).

7.3.3 The PFs refer to YWS's original claim for £44m (PR19 prices), which YWS had presented in line with the approach agreed with Ofwat in May 2016. As noted in YWS's response to RFI014, this approach was not in line with reopening the PR14 price control, but rather it had been accepted by Ofwat as its preferred method of resolution.[139]

7.3.4 YWS identified in its RFI014 response that it had estimated the adjustment to allowed revenues to be £36.3m (PR19 prices) by reopening the PR14 price control.[140] This estimate was calculated on the basis that (i) the data input error was corrected and (ii) the WRFIM was used to calculate the correct impact to revenues for AMP6. This was based on Ofwat's assessment that the wholesale water price control would be restated by £27m (12/13 average RPI base) for the data input error.

7.3.5 As noted in YWS's response to Q7 of RFI014, YWS referred to "*gross/net adjustments*" associated with capital contributions from new connections in accordance with Ofwat's guidance for PR14. Essentially, this means there should be no impact on PR14 totex allowances by correcting the data input error.

7.4 Concluding remarks

7.4.1 In YWS's view, the adjustment to correct for the data input error must be *solely* a revenue adjustment, since there is no impact on PR14 totex allowances. As there is no impact on PR14 totex allowances, there is no requirement for an RCV adjustment.

7.4.2 YWS requests that the CMA reviews its PFs to take account of the points raised here, together with those raised previously in its Response and RFI014, particularly to remove the proposed RCV adjustment. If the CMA's final determination maintains the RCV adjustment, YWS does not believe it is appropriate to net off any revenue and RCV adjustments.

---

[139] Please see YWS's response to Q2 of RFI014, which refers to the options for solving the data input error described in YWS, SoC, paragraph 206.

[140] YWS has chosen not to comment on the additional blind year adjustment for the reasons given in RFI014.