Anglian Water

PR24 CMA Redetermination

Statement of Case

Submitted 21 March 2025

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Executive Summary

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1 Introduction

(1) Anglian Water ("**Anglian**" or the "**Company**") is seeking a redetermination (the "**Redetermination**") because Ofwat's Final Determination ("**FD**") fails to strike an appropriate balance of risk and return capable of attracting the level of investment needed to deliver the FD and puts the long term financial and operational resilience of the Company into jeopardy.

(2) PR24 is a sharp inflection point for the water sector: it marks a paradigm shift towards significant, long-term investment and Regulatory Capital Value ("**RCV**") growth. The FD entails an expenditure programme of £11 billion for Anglian and £104 billion for the industry. This presents a radically different investment proposition. Ofwat assumes that the sector needs to attract £12.6 billion of equity capital in the next five-year period, commencing in April 2025 (AMP8), but this only covers AMP8. Over the next five AMPs, around £117 billion of equity is required to fund water and sewerage companies' ("**WaSC**") projections in their Long-term Delivery Strategies ("**LTDS**").[1]

(3) Absent such investment, the sector will fail to play its critical role in supporting the UK government's growth mission by delivering essential new capacity, investment, and growth to address environmental impacts and deliver the level of performance that customers expect. The societal and environmental costs of failing to meet these needs are significant and long-term.

(4) It is against this backdrop that Anglian considers that the balance of risk and return in its PR24 FD is fundamentally mis-calibrated and ultimately incompatible with Ofwat's duties. Anglian sought redetermination at PR19 because the PR19 FD did not embrace the significant need for investment to address the challenges of the future: whilst accepting Anglian's proposals for a meaningful step-up in investment over AMP7, Ofwat refused to allow Anglian to recover its reasonable costs accompanied with unachievable performance expectations. The underfunding had a significant impact on delivery of infrastructure projects, asset health management plans, and ultimately company performance. The risks that Anglian flagged in its PR19 Statement of Case have, in short, materialised.

[1] Oxera, Investability and Financeability in PR24 (March 2025), page 6 (Annex 001).

(5) While the PR24 FD now practically recognises the need for investment to accommodate growth and protect the environment, it fails to set a price control capable of attracting the investment to solve these challenges.

(6) Ofwat's FD repeats some of the shortcomings of its PR19 approach in critical areas. For Anglian, those are as follows:

(i) First, the FD fails to strike a balance between risk and return capable of attracting the level of investment the sector needs. Even if Anglian retains all earnings allowed through the regulatory process, the FD requires Anglian's investors to inject significant net new equity over AMP8, and this is expected to remain the case over AMP9 and beyond. At the same time, investors would receive, on a notional basis, dividends well below what a reasonable dividend expectation would be over a 25-year time horizon for investors to support investment. As Sir Jon Cunliffe succinctly commented, it is *"very difficult"* to conclude that investors see the water sector *as "a stable and predictable long-term investment"*.[2]

(ii) Second, the PR24 FD fails, once again, to set reasonable expectations of "what base buys", underfunding capital maintenance activities and thereby compromising asset health, as well as failing to recognise that better performance – particularly in relation to leakage - comes at a higher cost.

(a) Ofwat's approach to asset health has consistently been inadequate over many years and while it has recently taken some positive steps in this area, this comes too late: Anglian has been raising the need for more capital maintenance funding since 2009 and its first Strategic Direction Statement ("**SDS**"), however this has largely been ignored by Ofwat. Anglian's assets are particularly vulnerable to climate change and proper, consistent and long-term funding increases are needed. The Company highlighted this issue in its PR19 Statement of Case and detailed what the impact would be of not receiving sufficient capital maintenance funding[3], supported by a report by Bush & Earwaker[4]. Much of that impact has come to pass.

(b) In AMP7 the sector has underperformed against the overly stretching targets set in PR19, despite significantly overspending on base allowances. On average, the sector has reported 69 bps ODI RoRE underperformance[5] contributing to low investor confidence. Despite this, Ofwat's FD fails once again to reflect to the relationship between cost and service, assuming performance improvements can largely be delivered for free. Ofwat's reference to the CMA notes that "*the level of expenditure allowance is inextricably linked to the service levels a company can be expected to achieve*".[6] Anglian agrees – and yet the FD does not fund it to meet the performance improvements it is expected to deliver.

(7) In that context, Anglian has three specific concerns regarding the FD and welcomes the CMA's reconsideration of these issues:

(iii) Ofwat has made insufficient allowances to fund the sector to meet its mains renewal obligations, or for Anglian to maintain its frontier leakage performance or replace

[2] Sir Jon Cunliffe, Speech from Sir Jon Cunliffe, Independent Water Commission (27 February 2025) (See here).
[3] Anglian PR19 Statement of Case, page 144 (para. 625) (See here).
[4] Bush & Earwaker Capital Maintenance Report (May 2019) (See here).
[5] KPMG, PR24 Final Determinations – risk analysis for a notional company (January 2025) (Annex 004).
[6] Ofwat, PR24 Introductory Submission to the CMA (2025), para. 1.12 (See here).

thirty-year old boundary boxes which are now failing as a result of Anglian having embraced additional metering assets ahead of other companies. The inadequacy of funding for leakage reduction is particularly disappointing given that Ofwat has departed from its own, and the CMA's, previous position that marginal costs of leakage reduction are higher for frontier performers. The resulting shortfall in funding across these items is compounded by Ofwat's unrealistic frontier shift for productivity improvements (1% per annum, which is far above what is achieved by the wider economy).

(iv) Ofwat's Asset Health Roadmap which Ofwat proposes in the FD does not go far enough. In particular, it is (i) insufficiently developed to provide certainty that asset health risks for other asset classes will be adequately addressed within AMP8 and beyond and (ii) risks repeating Ofwat's mains renewal error by introducing retrospective expectations as to how much companies should have spent in the past on a specific asset class, ignoring their capital maintenance needs in the round and whether those were adequately funded. In combination, this increases the risks to companies and customers that arise from the underfunding of capital maintenance, including that asset failures will occur which could have been prevented.

(v) The above risks are aggravated by elements of the Price Control Deliverables ("**PCDs**"), including time-limited PCDs, which are too prescriptive to be practically or operationally deliverable, constrain flexibility to address risks as and when they arise, drive inefficient choices for companies, and do not reflect the realities of mobilising the supply chain to deliver the investment programmes proposed. Ofwat's approach is, ultimately, not in the interests of customers, resilience, or the environment.

(vi) Despite Ofwat's intention to set an ODI package that is a "fair bet" it has delivered an ODI package at FD with significant asymmetric risk. For a notional company the P50 is expected to be -0.49% of RoRE[8] but for a company with the notional structure in Anglian's region the P50 is even more asymmetric at -0.89%, roughly £240m.[9] The Outcome Delivery Incentive ("**ODI**") framework is therefore disproportionately punitive to Anglian through miscalibration of performance commitments and ODI incentive rates for leakage, total pollutions and external sewer flooding and its approach to water supply interruptions is inconsistent. It is clear that at PR19, Anglian was under-funded to meet unrealistic targets set in these areas. At PR24, Anglian is once again expected to achieve unrealistic performance improvements or face excessive penalties, without being funded to do so. As a result, it is exposed to inevitable penalties from the start of AMP8, even if drives significant reductions on its already world-class leakage levels, and even if it delivers a transformative performance in total pollutions.

(8) The above concerns are compounding and interdependent. One asset health problem can affect multiple ODIs and the inflexibility imposed by underfunding and overly restrictive PCDs further limits the mitigations that the Company is able to take. There is a critical disconnect between Ofwat's expectation that companies accept their FD "in the round" while also prescribing how they deliver the FD in practice, in terms of allocation of resources.

(9) Anglian considers the FD's shortcomings particularly disappointing since it provided Ofwat with the evidence to make a better-informed decision. The Company developed its Business Plan based on robust and innovative customer engagement research, showing that customers expect a constant supply of safe, clean water but also they

expect Anglian to be securing resources for the future in the face of climate change, taking care of the environment, and supporting the most vulnerable in society as top priorities over the next five years. Customers want the sector to do better – and Anglian is ready to engage. The quality of its Business Plan was recognised by Ofwat in its Quality and ambition assessment ("**QAA**").

(10) To assist the CMA in its Redetermination, Anglian has focused on those areas which materially restrict Anglian's ability to deliver its AMP8 Business Plan and can be resolved within the confines of the Redetermination and in that regard, Anglian requests that the CMA make a number of specific adjustments to the FD as summarised in Section 8 below.

(11) However, the issues in dispute are symptomatic of wider and longer-term concerns which have emerged over multiple price controls and which are now critical for water companies and their investors alike. In particular, there remains a lack of long-term thinking driving price control outcomes, which is undermining resilience; there is a lack of consistency in regulatory approaches which is increasing uncertainty and risk; there remains a lack of sufficient evidence-based decision-making in certain areas; regulation is increasingly complex, reactive and unpredictable and the price control framework (in particular the QAA, incentivises agreement with Ofwat over alternative views to avoid being penalised for lack of ambition or quality in plans). Ultimately, it is widely considered that the sector requires a considered long-term re-set and Anglian welcomes the opportunity to engage with the CMA on these issues.[7]

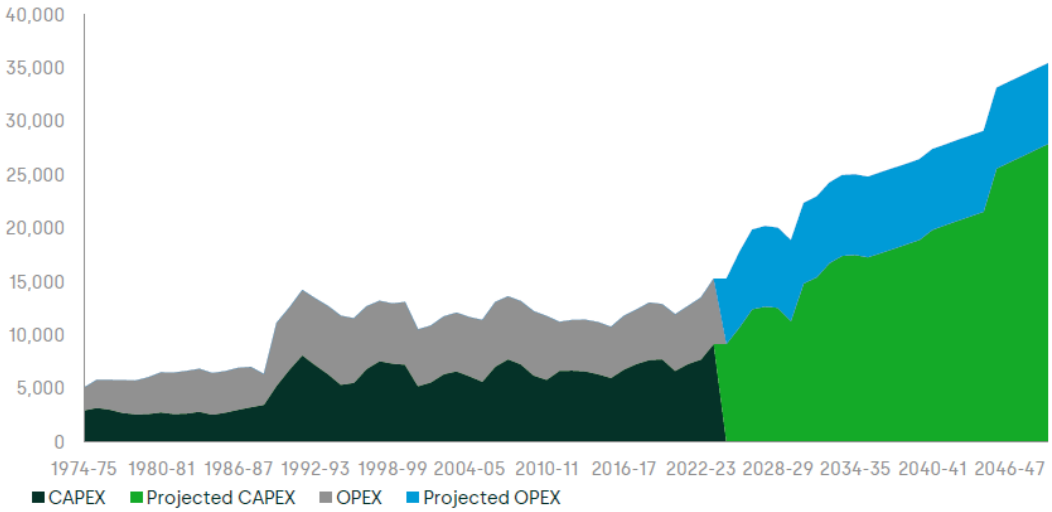
(12) It is imperative that they are addressed before PR29 if the sector is to achieve a sustainable platform from which to drive transformative change and deliver for customers in AMP9 and beyond. Anglian hopes the CMA's Redetermination will assist in addressing them.

2 The multiple, unprecedented challenges and risks facing the sector are not counter-balanced by reasonable returns for investors

(13) AMP8 and future price control periods are radically different to those that have come before. Regulatory and statutory obligations are driving a step-change in capital investment programmes to meet the supply and demand balance, accommodate growth, and protect the natural environment. This investment is not discretionary. It is vital to maintain resilient water supplies and environmental improvements. The total expenditure programme over AMP8 is £11 billion for Anglian and £104 billion (a 71% increase on AMP7) for the industry, including c. £44 billion of enhancement. It is also only part of a much longer-term approach to investment: the sector's LTDS expect approximately £270 billion of enhancement investment between AMP8 and the end of AMP12, as shown in **Figure 1** .[8]

[7] Sir Jon Cunliffe, Speech from Sir Jon Cunliffe, Independent Water Commission (27 February 2025) (See here).
[8] Oxera, Investability and Financeability at PR24 (March 2025), page 4 (Annex 001).

Figure 1: WaSC historical and projected spend (£m real, 2022-23 terms)

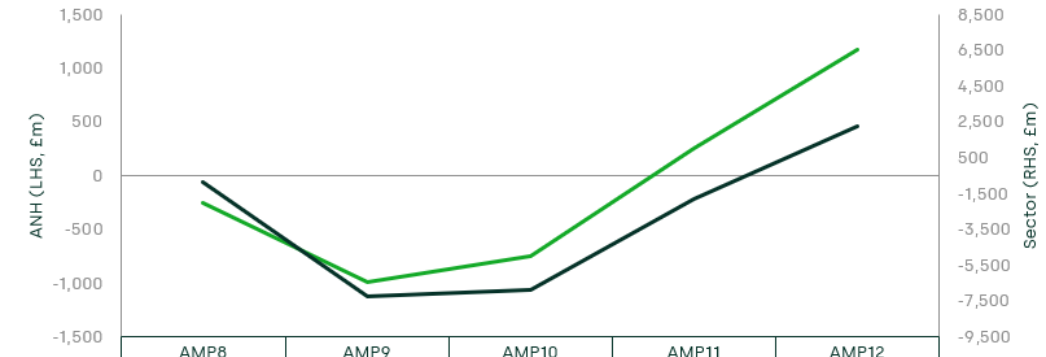


Source: Oxera, *Investability and Financeability in PR24*, p. 3[9]

(14) Such expenditure is predicated on investors providing a significant increase in new equity over AMP8 and beyond. However, the consequence of this step change in investment is that investors' cash returns will be significantly constrained for at least 25 years on a notional basis. As illustrated in **Figure 2** below, Anglian's investors are expected to forego any cash returns for the next decade and would not be net investment cash-flow positive until after AMP10 (i.e., 15 years). Even then, investors would receive a dividend yield on notional regulated equity of below 2% p.a. in AMP11 and AMP12, a level of dividend distributions clearly below what current and future investors would be reasonably expected to receive. In practical terms, this means that investors will not be able to generate a sufficient return on their investment, commensurate to the level of that investment and the risk of the sector, for the next 25 years on a notional basis. The picture is similar for the sector.

[9] Note to chart: Expenditure forecast based on PR24 Final Determinations for AMP8 and LTDS forecast enhancement capex for the following periods. For AMP9 onwards maintenance capex is assumed equal to the RCV run-off rate. Opex forecast is based on the Price Control Financial Models up to 2030, and is then assumed to remain constant thereafter.

Figure 2: Cumulative net dividends, Anglian and sector (WaSCs only), no de-gearing (£m real, 2022-23 prices)



	AMP8	AMP9	AMP10	AMP11	AMP12
Anglian	-249	-993	-747	247	1167
Sector	-901	-7257	-6870	-1799	2263

Source: Oxera, *Investability and Financeability in PR24*, p. 9[10]

(15) In the face of this investment challenge, the FD's return on equity of 5.1% offers a negligible return for equity over debt, creating a "lose-lose" situation for WaSCs' investors. This is most intuitively illustrated by the convergence in the costs of equity and debt. On an unlevered basis (cost of equity at zero gearing), Ofwat's FD implies a negative spread to the cost of new debt, as the unlevered cost of equity v cost of new debt is -0.32%.[11] Ofwat's proposition of a lower return for a higher risk investment is untenable and exposes the notional company to the prospect of not obtaining the necessary equity. It is also illustrated by the expected returns in infrastructure investments. Oxera's assessment of infrastructure fund returns demonstrates that equivalent investments have a cost of equity in excess of 7%.[12]

Figure 3: Spreads of cost of equity determinations relative to selected cost of debt benchmarks (CPIH-real)

Source: Oxera, *PR24 Cross-checks to CAPM estimation*, p. 10[13]

[10] Note to chart: Anglian shown on LHS axis. Sector refers to WaSCs only. We assume no de-gearing of the notional company in this scenario.
[11] Oxera, PR24 Cross-checks to CAPM estimation (March 2025), page 12 (Annex 003).
[12] Oxera, PR24 Cross-checks to CAPM estimation (March 2025), page 30 (Annex 003).
[13] Note to chart: iBoxx yields deflated to CPIH-real terms assuming 2% long-run inflation. Historical RPI-real determinations have been converted to CPIH-real using the long–term wedge as stated by the Office for Budget Responsibility (OBR). We have reflected the changes in the long-term wedges over time. The respective wedges used for PR04, PR09 and

(16) The disparity of returns in UK water versus other investment opportunities comes at a time of a macro-economic climate shifted towards higher interest rates and an acute competition for infrastructure capital. The investment needs of the water sector are replicated across the infrastructure space in the UK and globally. There is currently between £700-900 billion of planned capital expenditure across eight major sectors in the UK in the period 2025-2030.[14] This is more than double the previous five-year period. Similar investment needs exist globally.[15] However, the UK is now viewed as a particularly unattractive investment location: the FD itself recognises this*: "an April 2024 Barclays investor survey rated UK water as the riskiest utility sector and the UK as the riskiest European country".*"[16] This is particularly important for private infrastructure investors who typically are investing across regions (particularly in comparison to investors in public markets). In its response to the DD, GIA noted the proposed nominal cost of equity was "*significantly lower than those available in other regulated sectors globally, making the UK water sector less competitive for investor capital*".[17]

(17) The challenge of raising investment in this climate, in competition with multiple similar assets globally, is further exacerbated by the sector's worsening risk profile with a consequent worsening of the prospect of investors achieving the base returns assumed in the FD. S&P recently concluded the water sector "*is riskier than electricity transmission networks*".[18] This is attributable to a variety of factors, including: the restructuring of Thames Water (driving the so-called Thames premium), regulatory uncertainty and the mis-calibration of AMP7. The effects are evident in recent credit rating downgrades driven by tightened methodologies accounting for the increased perceived risk in the sector. The effect is, however, clear. As shown in **Figure 4** below, companies and their investors have been exposed to an increasing spread in risk exposure. In parallel, investors have received increasingly diminishing and, in AMP7, negative returns since privatisation.

PR14 are 0.49%, 0.49%, and 0.69% respectively. For the years before the Bank of England started targeting CPI, we use the 2.5% RPI target.

14 BCG, Uplift in Demand, Shortfall in Supply: Can the UK Deliver on Its Infrastructure Investment Ambitions? (February 2025) (See here).

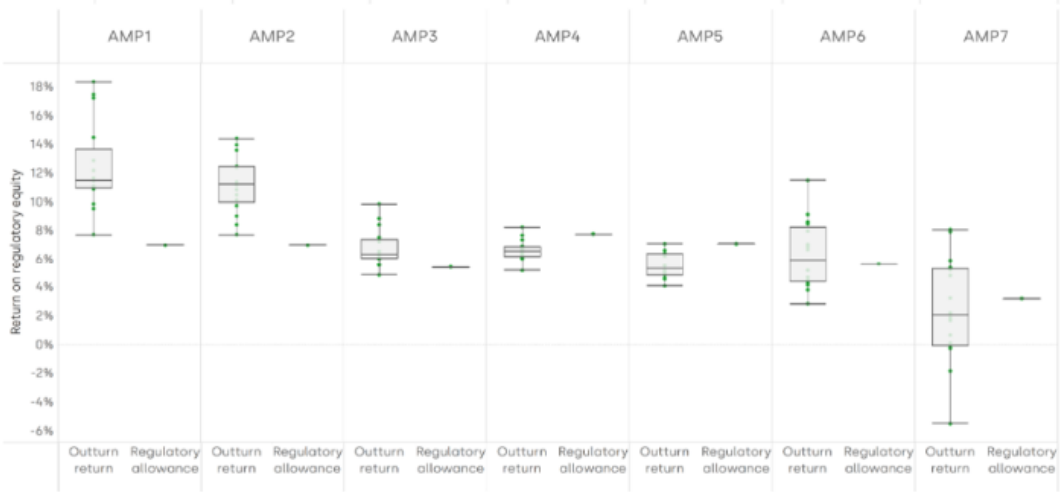
15 European Investment Bank, Investment report 2024/25, Innovation integration and simplification in Europe (March 2025) (See here). The report notes the "*consensus on the need for a sharp increase in investment*" (p. 50) and flags a number of key areas of interest. According to the report, the gaps identified amount to at least 3% of 2023 GDP, when taking GDP growth into account. BCG also suggests there is a $96 trillion required investment in infrastructure worldwide, with $15 trillion funding gap to meet infrastructure needs.

16 Ofwat, PR24 final determinations: Allowed return appendix, page 64 (See here).

17 Global Infrastructure Investor Association (GIIA), Response to Ofwat's PR24 Draft Determinations, page 5 (See here).

18 S&P Global Ratings, U.K. Water Regulatory Framework Support, Low Financial Flexibility in Coming Regulatory Period Drive Rating Actions (February 2025), page 4 (See here).

Figure 4: Trends in the return on regulatory equity over time



Source: Oxera, *Investability at PR24, Final Report for Water UK* (August 2024), p. 26[19]

(18) As the Cunliffe Call for Evidence notes, "*average returns for the sector, measured by return on capital employed between 1990 Return on Regulatory Equity (RORE), have declined from around 11.5% during 1989-1994, to around 2% during 2019-24. The figure also shows that the spread between the best and the worst operational performers has become much larger and that the poorest performers are now seeing negative returns. The majority of water companies also notably appear to be receiving returns below the allowed returns set by Ofwat. This was also true during 2004-09 and 2009-14, but a tighter spread much closer to the allowed returns means that this was not a significant concern during a period of economic volatility and stagnation*".[20]

(19) The significantly asymmetric risk and volatility in the sector are evident, especially considering the sector's performance in FY21-FY24.[24] The same asymmetric risk for WaSCs and their investors is also likely at AMP8. Contrary to Ofwat's claims, the FD is characterised by a significant downside skew in returns for the sector and companies are likely to underperform on the Return on Regulated Equity ("**RoRE**").

(20) No reasonable investor in Ofwat's notional company would make the level of investment required over AMP8 and beyond without appropriate recognition of its cost of investing. However, the FD sets a level of returns, the weighted average cost of capital ("**WACC**"), which ignores the economic circumstances facing the sector and falls significantly below what is necessary to attract investment. First and foremost, the FD's cost of equity of 5.1% does not reflect the market reality it is intended to address. It ignores, on the one hand, the significant weaknesses in Ofwat's own CAPM analysis due to the shift to a high-interest rate environment and the impact of the sector's investment programme. On the other hand, it dismisses the relevance of the negligible spread between the cost of

[19] Notes to chart: we show the 'return on capital employed' value reported in Ofwat's financial performance and expenditure reports up to AMP6. From AMP6 onwards we use the Return on Regulatory Equity as reported in Ofwat's Monitoring Financial Resilience reports. AMP6 based on the data underpinning Ofwat (2020), 'Monitoring financial resilience report', December, p. 12. AMP7 based on the average Return on Regulatory Equity reported across the three AMP7 Monitoring financial resilience reports to date and the values reported in companies' 2023/24 APR within table 1F.17 (RoRE). Allowed return on equity deflated in RPI-real basis for consistency across regulatory periods. The regulatory allowance shown in each AMP represents Ofwat's CoE allowances. For AMP7, we show the PR19 Final Determination allowance, although we note that several companies received a CoE allowances in excess of this through a Small Company Premium (PRT and SSC), and the four companies that appealed the PR19 Final Determination also received a higher CoE allowance.

[20] Independent Commission on the Water Sector Regulatory System, Call for Evidence (27 February 2025) (See here).

debt and equity as well as data from public equity markets and returns in comparable infrastructure funds, which demonstrate that a far higher cost of equity prevails. Furthermore, Ofwat assumes a large equity injection during AMP8 to meet financeability thresholds, Nevertheless, the thresholds have subsequently been tightened, and it is no longer the case that minimum debt financeability metrics are satisfied under the FD. Second, the FD makes a series of errors in calculating the cost of embedded and new debt, which ignore regulatory precedent and economic theory and evidence, to conclude that the cost of debt is only 3.15%.

(21) To address this, **Chapters H.1** (***Investability & Financeability***) and **H.2 (*WACC*)** explain why the cost of equity needs to be 6.25% for Anglian to be investable and financeable on a notional basis. This is the top end of a correctly calibrated CAPM to reflect the notional company's downward skew in the circumstances faced by companies at PR24. It also better reflects the analyses of debt-equity spreads, public equity markets and infrastructure fund returns, which support a cost of equity between 6.13-7.34%. **Chapter H.2 (*WACC*)** also suggests a series of amendments so that the cost of debt is updated and correctly calculated. On this basis, the appointee WACC should be 4.86%. The amendments to the WACC assume that the overall downward asymmetry in returns due to miscalibration elsewhere in the FD is addressed "at source" (i.e., no further "aiming up" is required).

(22) The CMA should also recognise that the cost of equity is likely to need to increase materially in future AMPs from 6.25% to ensure long-term investability of the sector. **Chapters H.1** (***Investability & Financeability***) and **H.2 (*WACC*)** demonstrate that long-term debt and equity investability will require a higher cost of equity on current projections. Setting expectations that this will be forthcoming if the current investment programme and economic conditions continue will be vital for supporting investment decisions at AMP8, given investors are being asked to commit significant equity in AMP8 and future AMPs, but are not expected to see net cash returns over a 15-year time horizon, and negligible in the following AMPs.

3 Against that backdrop, Anglian faces specific challenges

(23) Anglian, serving nearly 7 million domestic and business customers across the East of England, stands as the largest water and water recycling entity by geographic area in England and Wales. The Company's purpose, enshrined in its Articles of Association, is to bring environmental and social prosperity to the region its serves through a commitment to "*love every drop*".

(24) Anglian has a strong track record of delivering for customers. Examples include being a pioneer in the switch to metering and leading on smart meters; having reduced leakage per kilometre of mains by more than two fifths since privatisation to reach industry-leading levels; and having kept the amount of water supplied every day at 1989 levels, despite supplying an extra 700,000 properties. It has managed to do all this while maintaining an increase in real terms in customer bills of just over 3% since privatisation prior to PR24 (the industry average is 23.4%) and the bill increase in its PR24 FD (29%) is below the industry average (36%).[21]

(25) The Company's focus on efficient delivery is exemplified by its approach to PR24: Anglian aligned its base expenditure requirements in its Business Plan on Ofwat's econometric

[21] Anglian analysis, Bill change since privatisation (Annex 005).

models, reflecting the CMA's broad endorsement of these at PR19. Similarly, on enhancement, Anglian prioritised cost benchmarking activity, aligned with Ofwat's cost assessments and was supported by external partners (alliances). As part of this process, Anglian leveraged existing key supply chain relationships and challenged each of its Alliance partners on their ability to efficiently scale up and their commitments to the Company to ensure it would be able to deliver the significant enhancements envisaged over AMP8. The Company's supply chain alliance model, which has been running since the early 2000s, demands close collaboration between partners and has reduced costs for customers.

(26) Asset health and resilience is a core focus for the Company, given the water-scarce region it serves and Anglian has been at the forefront of the campaign for forward-looking, long-term approaches to capital maintenance for many years. The Company made extensive representations (to both Ofwat and the CMA) on the importance of this approach for sector resilience in PR19, emphasised it in its PR24 Business Plan, and has continued to take a leading role on industry initiatives since (e.g., the Asset Management Maturity Assessment and the Infrastructure health in the water sector, developed with participation from Water UK, Ofwat and the Department for Environment, Food and Rural Affairs, and supported by Reckon).[22]

(27) The Anglian region has heightened susceptibility to climate change and unique geographic conditions. The region's topography is characterised by slow moving rivers and agricultural intensity, resulting in some of the toughest compliance standards in the industry. The region also faces the lowest rainfall across England and is flat and low-lying (with 28% of land below sea-levels) rendering it prone to flooding and drought. These factors significantly exacerbate the challenges in securing the supply/demand balance, creating significant risk for the business and its owners: Despite being in a growing region, without action Anglian will experience a shortfall of 593 megalitres a day by 2050; equivalent to approximately half the amount of water Anglian currently puts into its network.[23] However, despite that the FD fails to fund Anglian to deliver the leakage improvements which it needs to deliver for its current and future customers, or to adequately fund its mains renewals.

(28) Anglian's region is experiencing rapid urban growth (being home to 15% of England's population, with projected population growth of 8% over the next 20 years) and significant economic ambition (with Eastern England being home to four of the UK's fastest growing cities, important energy infrastructure projects such as Sizewell C, and with over 75% of land used for agriculture).

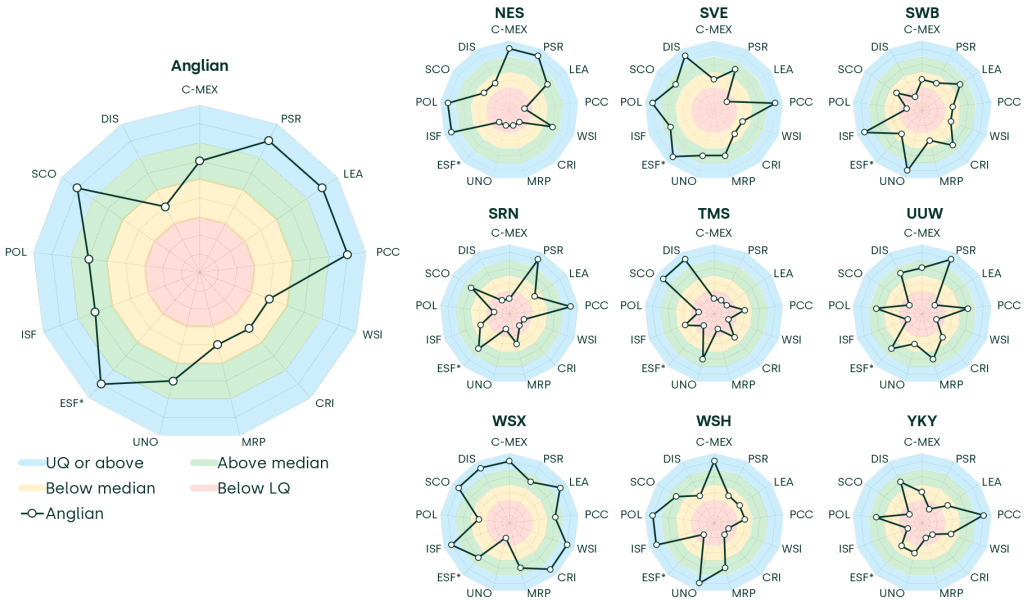
(29) These regional factors intensify the need for substantial investment in Anglian's infrastructure, to ensure customer, environmental and growth needs can be properly served both now and in the longer term. As a result, Anglian has the largest Water Resources Management Plan ("**WRMP**"), and among the largest (4th) combined WRMP, Drainage and Wastewater Management Plan ("**DWRMP**"), and Water Industry National Environment Programme ("**WINEP**") in the sector. Delivering these statutory obligations drives 94% of its enhancement requirements for PR24. Failure to set a cost of capital which ensures that these investments can be funded and delivered conflicts with Ofwat's (and in turn the CMA's) duties to promote the resilience, customer and environmental

[22] Water UK, Infrastructure health in the water sector (See here).
[23] Anglian Water Resources Management Plan (Sept 2024) – Page 1 (See here).

outcomes which they are designed to deliver and runs counter to the UK's growth agenda and Government's strategic steer to the CMA.[24]

(30) The Company has a strong long-term record of performance and remains a strong industry performer in absolute terms, as illustrated in the figure below. The figure shows the distribution of performance for Anglian against each of the 12 metrics reported in Water Company Performance Report ("**WCPR**"), alongside the new common metrics for external sewer flooding and across the four quartiles of performance.

Figure 5: WaSC AMP7 performance by quartile



Source: *Oxera Analysis. Leakage (LEA) compared on normalised basis, per unit length of mains. Total pollution incidents (POL) normalised per adjusted sewer length—proposed in section 5 of this chapter. * External Sewer flooding is not one of the current 12 WCPR metrics, but will become a common ODI at AMP8.*

(31) As **Figure 5** shows, Anglian is above median for 9 of the 13 metrics.[25] A well-calibrated Performance Commitment ("**PC**") and ODI package should ensure that a median or good performer, like Anglian, is able to earn a reasonable return on the PC package through the associated ODIs: The system is intended to balance rewards and penalties to ensure that the package as a whole is a "fair bet". However, the FD does not achieve this.

(32) Leakage is a strategic priority for Anglian given its water scarce region. It is the leading performer within the UK as a whole, which is itself strong against global comparators and has been at the frontier for many years, driving leakage down for the industry as a whole. However, the last five years have been challenging for the Company and its performance record has dipped over the course of AMP7 in certain areas. This is partly driven by the size of the totex gap (£744 million[26]) between Anglian's PR19 Business Plan and PR19 FD but also by subsequent unfunded obligations, including the strategic interconnector programme which has cost the Company over £500 million more than its PR19

[24] Department for Business and Trade, Strategic steer to the Competition and Markets Authority (13 February 2025) (See here).

[25] The figure shows red for below lower quartile and blue for at or above upper quartile. The same chart is shown for each of the WASCs on the right-hand side. A greater area within the black line indicates better performance—if a company was above upper quartile for each measure, then it would record a blue value for each measure (taking up the most area), while if a company was below lower quartile for each measure, then it would record a red value (taking up the least area).

[26] Anglian Water, PR19 CMA Redetermination, Statement of case, para 19 (See here).

allowance. Extreme weather events and macro-economic factors (including the impact of Covid, energy prices and the invasion of Ukraine) have placed additional pressure on expenditure allowances.

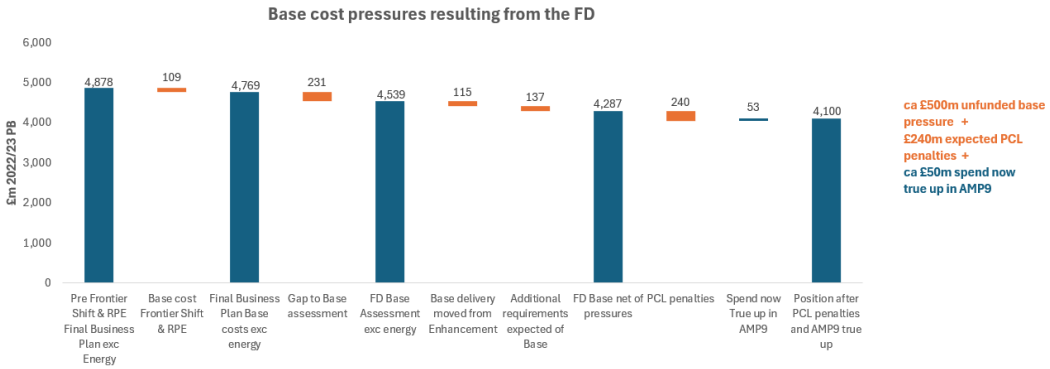
(33) Regardless of these external challenges, Anglian recognises that significant performance improvements are required and has, with the support of its shareholders, actively engaged in addressing the challenges it faces. This has included working to understand and enhance pollution performance, backed by a Board commitment in 2024 of an additional £100 million in AMP7 to expedite improvements in AMP8. However, the FD sets it an impossible task, by failing to account for normalisation issues in setting Anglian's PCL and setting a disproportionate underperformance rate which is divorced from customer priorities.

(34) The Company is committed to securing a Redetermination which enables it to meet its ambitious targets and deliver the investments its customers and region need.

4 Ofwat's expectations of what base buys are unrealistic and unevidenced

(35) Anglian submitted a highly ambitious plan with rigorous challenge on scope and efficiency, including using Ofwat's backward-looking econometric models to determine its costs. However, Ofwat continues to add to the list of activities that companies must deliver from their already stretched base envelope, and to hold unevidenced and unrealistic expectations as to what base allowances enable an efficient company to deliver, as shown by **Figure 6** below.

Figure 6: Base cost pressures resulting from FD



Source: *Anglian analysis*

(36) **Figure 6** shows that (excluding energy costs): (i) Anglian's base allowances were artificially reduced by £109 million due to the impact of RPEs and the overly-stretched 1% p.a. Frontier Shift; and the Company (ii) was not awarded £231 million of costs requested in its final Business Plan; (iii) is required to deliver £115 million of its requested enhancement funding via base (*relating to flooding mitigation, network reinforcement and sludge growth, together with smart metering costs moved from enhancement to base at FD*); (iv) must bear £137 million of additional requirements not anticipated at Business Plan stage via base (*namely the additional funds needed to deliver Ofwat's wrongly assumed implicit allowance for mains renewals and the additional charges for rates*); (v) must spend an additional £53 million on base activities (energy) without recovering that cost until AMP9 (*applying additional pressure on equity on top of the significant investment programme already required at AMP8*); and (vi) anticipates £240 million in AMP8 penalties against overly-stretching ODI targets that must be funded from base

spend. This, in practice, leaves Anglian with c. £500 million of unfunded base cost pressure, exacerbated by the c. £240 million of penalties which it anticipates in AMP8 together with c. £50 million spend that will only be recovered in AMP9. This base cost pressure is in addition to the significant efficiencies which Anglian built into its October 2023 Business Plan. The position in which the Company finds itself as a result of AMP7 underfunding compounds the issue, creating additional totex pressure (including from maintenance underfunding) and a weaker starting point from which to meet performance commitments in AMP8.

(37) As a result, Anglian is underfunded to deliver the FD, severely compromising its ability to manage capital maintenance risks, particularly when combined with the restrictive effects of the ODI and PCD regimes. This has real impacts for customers and resilience, including through increased risk of critical asset failure (as per the examples in para (49) below), being unable to meet the performance improvements customers expect and storing up disproportionate costs for future customers to bear. Against that backdrop, Anglian has prioritised the following targeted requests.

(38) The FD wrongly assumes that companies are implicitly funded in base to **renew 0.3% of their water mains annually** rather than the 0.2% which evidence suggests base allowances have historically funded. As a result, companies must deliver one-third of the industry standard base PCD with no additional funding, creating a shortfall of **£60 million** for Anglian alone. This compromises the sector's asset health, by undermining its ability to move towards sustainable water mains renewal rates, and forcing companies to reallocate already over-stretched funds from other asset classes to meet the PCD.

(39) Ofwat has reversed its own, and the CMA's, previous position that **marginal costs of leakage reduction are higher** for frontier performers and denied Anglian the **£68 million** funding it needs to **maintain its frontier leakage position**. This is despite the importance of leakage avoidance for Anglian's customers and the imperative to maintain and improve its leakage performance, given climate risks to Anglian's region. Ofwat's approach is inconsistent and at odds with its recognition that "*the level of expenditure allowance is inextricably linked to the service levels a company can be expected to achieve*".[27] Ultimately, its approach disincentivises frontier performance, by removing the funding Anglian requires to maintain it.

(40) Ofwat has also rejected Anglian's claim for **£138 million** of funding to replace failing boundary boxes. Boundary boxes are generally underground assets housing water meters and were first installed some thirty years ago as part of Anglian's proactive metering roll-out to tackle water scarcity issues. Anglian was ahead of the industry then and remains so now. Anglian's failing older boxes now need replacement, but base models, which capture data from an industry which generally installed meters later than Anglian, do not reflect the material expense Anglian now uniquely anticipates incurring in AMP8.

(41) The base cost pressures arising from the above are compounded by Ofwat's unrealistic assumed **frontier shift** of 1% per annum to reflect expected ongoing productivity improvements over AMP8. This reduces Anglian's base allowances by **£36 million** and its enhancement allowances by £41m (i.e. a total reduction of totex allowances of c**. £77 million**) relative to the challenging but evidently more realistic assumption of 0.8% per

[27] Ofwat, PR24 Introductory Submission to the CMA (2025), para. 1.12 (See here).

annum which Anglian proposed in its Business Plan, which is above the top end of the range proposed by Economic Insight.

(42) The impact of the FD in reduced allowances and additional performance obligations is to create a £500 million funding gap as against Anglian's original Business Plan. This has significant practical consequences, with Anglian already calculating that it will not be able to fund important maintenance activities at AMP8. Anglian has identified specific pressing funding gaps for maintenance of critical **storage points and gravity sewer assets** that cannot now be managed within Anglian's PR24 base allowances and overall totex envelope, as hoped at the time of its Business Plan. Anglian, therefore, requests specific use-it-or-lose-it funding for these assets in AMP8 in the event that the CMA does not grant Anglian's wider funding requests in relation to Base, ODIs and PCDs, as set out in this Statement of Case.

(43) Finally, it is requested that the CMA utilise in its Redetermination the most recent data available for its base and retail models, and the most recent forecast data for the calculation of business rates.

5 Ofwat has failed to take sufficient action to protect longer term asset health

(44) Anglian has consistently advocated (both at PR19 and during PR24, but also long before) for the need for a forward-looking approach to asset health. This was raised as a key issue in Anglian's first long-term SDS in 2009, which identified specific asset classes which should be prioritised over the following 25 years and Anglian engaged through Ofwat's "Market Place for Ideas" initiative. While the Company has continued to lead on asset health initiatives ever since, Ofwat's price review approaches have largely ignored this issue.

(45) The CMA also called at PR19 for Ofwat to develop forward-looking metrics, but Ofwat's approach does not rise to this challenge. Its approach is partial and defers addressing the fundamental challenge to a future period (as it did previously at PR19). This is in stark contrast to other regulators – not least Scotland's Water Industry Commission – which has made fundamental changes to its regulatory framework in recognition of the need to embrace a longer-term approach in the interests of resilience and fairness for future customers.

(46) Ofwat's FD has little in the way of asset health measures, and those that are included are (i) underfunded (given the underfunding or rejection of the vast majority of Cost Adjustment Claims ("**CACs**"), including the sector-wide mains renewal claims and Anglian's boundary box and leakage CACs discussed above) or (ii) underutilised (such as Ofwat's failure to apply the LTDS to base allowances); and (iii) constrained by the stringent PCDs that drive risk and inefficient choices by limiting companies' ability to address risks as they arise.

(47) While Ofwat has set out a plan to gather data into a range of asset classes, this fails to address the urgency of the issue and leaves the sector in a position where Ofwat has not adequately assessed what base allowances buy at PR24 across many asset types.

(48) Where Ofwat has assessed assets, in the context of water mains renewal, Anglian has deep concerns regarding Ofwat's historical approach and that it will apply a similar approach for future asset classes. In particular, Ofwat is wrong to apply retrospective expectations as to how much companies should have spent in the past on a specific

asset class, ignoring their capital maintenance needs in the round and whether those were adequately funded.

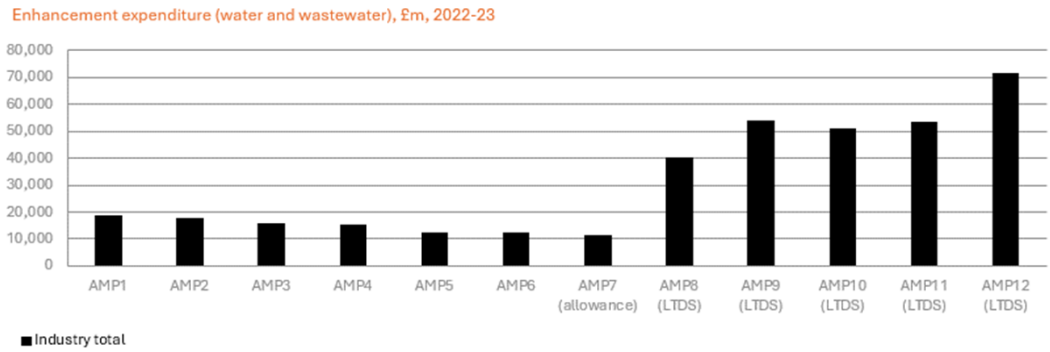
(49) The consequences of underfunding asset health are profound for customers, the environment and resilience. Certain water assets represent single points of failure with potentially significant impacts to communities or to critical national infrastructure [redacted] There is an urgent need identified both by Anglian and the Drinking Water Inspectorate ("**DWI**") to increase maintenance spending on ageing storage points to prevent and repair cracks that can lead to coliform ingress to drinking water. Anglian's [redacted]

(50) Delays in addressing sufficiently early the asset health challenge will further exacerbate the steep price rises for future generations of customers, while leaving companies with unfunded risks. This contributes and exacerbates the equity challenge; noting that the analysis in para. (13) above draws from the LTDS data which Ofwat prescribed to exclude the additional base expenditure needed to address asset health.

(51) A fundamental reset is required for addressing asset health ahead of PR29. Anglian therefore requests that the CMA not only grants Anglian's specific capital maintenance requests on Base, PCDs and ODIs, but also that it reiterates its call for action on asset health.

5.1 Ofwat's FD fails to reflect the risk associated with a significant expansion of its enhancement programme

Figure 7: Environmental expenditure (water and wastewater), £m, 2022-23



(52) PR24 represents a step change in the scale and complexity of capital programmes which Anglian must deliver, with the percentage of totex allowances from enhancement rising from 26% at PR19 to 45% at PR24. The fundamental shift towards a construction-oriented business model increases exposure to delivery uncertainties, while rigid price control mechanisms further constrain financial flexibility to manage implicit risks in programmes of this nature and scale. PR24 is just the start of this permanent change in enhancement delivery.

(53) Whilst Ofwat's FD includes mechanisms to manage uncertainties, these risk mitigations are targeted at piecemeal elements of the enhancement programme, and are insufficient to reflect the fundamental change that the Company and sector are undergoing. The

residual risk can only be resolved through suitably reflecting the riskier nature of the company in the cost of equity.

6 Anglian is underfunded to meet its leakage and pollutions performance commitments and faces certain and significant penalties

(54) A well-calibrated PC and ODI package should ensure that a median or good performer, like Anglian, is able to earn a reasonable return on the PC package through the associated ODIs. However, the FD does not achieve that for Anglian.

(55) KPMG's analysis of the FD for a notional company operating in Anglian's area shows clear risk asymmetry, particularly for the ODI package.[28] This analysis is completed using the same methodology as KPMG's risk analysis for the notional company but using Anglian's PCLs, incentive rates and historical performance for leakage and total pollution incidents.[29] The analysis shows that the ODI package is more severely mis-calibrated and asymmetric for Anglian that it is for a typical WaSC.

Table 1: comparison of ODI risk ranges

	P10	P50	P90
Notional WaSC – ODIs and MeXes	-1.55%	-0.49%	0.51%
Notional company in Anglian's area - ODIs and MeXes	-1.89%	-0.89%	0.08%

Source: *PR24 Final Determinations – risk analysis for a notional company & KPMG analysis, Anglian Water - PR24 Risk and Financial Resilience*

(56) For a notional company, the P50 is expected to be -0.49% of RoRE; however for a company with the notional structure in Anglian's region the P50 is even more asymmetric at -0.89%, roughly £240 million. The PCL and ODI framework is disproportionately punitive to Anglian through miscalibration of key performance commitments.

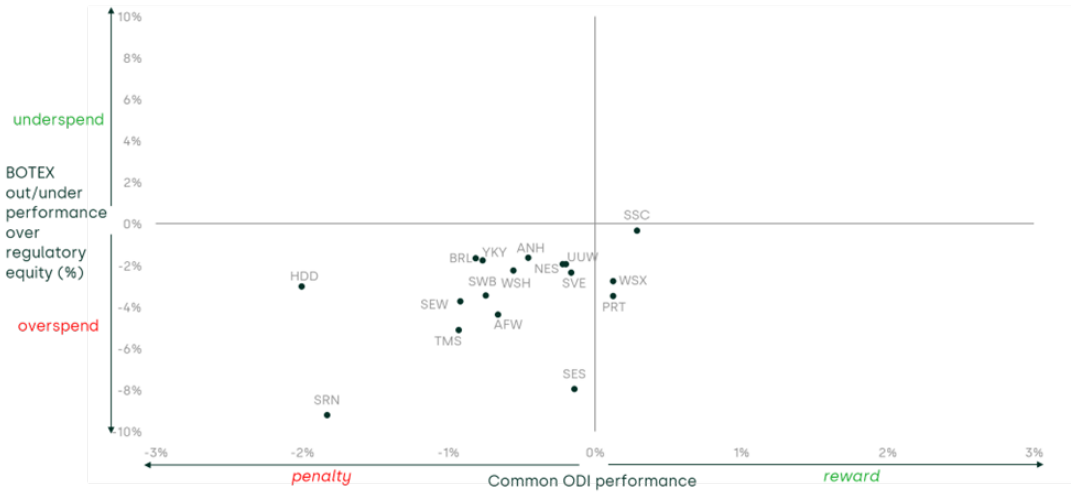
(57) Anglian strongly supports the inclusion of ambitious targets to enhance customer outcomes and is committed to improving its own performance over the course of AMP8. However, achieving these outcomes is only feasible if accompanied by a realistic pathway and sufficient funding.

(58) Anglian agrees that a zero penalty or positive reward should be available only for stretching performance for each PC and recognises that its performance in some areas is not yet at the level it should be. However, some of the targets imposed for Anglian are unachievable for an efficient company considering the pathway and funding levels available to achieve them. This problem is compounded by Ofwat's expectation that performance improvements can be made through base allowances, without additional funding. The figure below shows that the majority of companies, and all WaSCs, have paid significant ODI penalties over the first four years' of AMP7, while also overspending base expenditure allowances. At the PR19 FD, Ofwat forecast that over AMP7, companies would be exposed to ODI RoRE risk of between -3% to 3%, and totex RoRE

[28] Anglian Water, PR24 Risk and Financial Resilience (Annex 004).
[29] KPMG, *PR24 Final Determinations – risk analysis for a notional company* (January 2025), section 5 (Annex 002).

risk of between -2% and +1% (except HDD, which was exposed to greater RoRE risk as a result of its small size). This chart shows that outturn ODI performance has been significantly skewed to the negative end of that range, while more than half of companies' botex performance falls below Ofwat's -2% lower bound for cost underperformance.

Figure 8: Base expenditure over/underspend against ODI rewards/penalties over the first four years of AMP7 (as a % of RoRE, net of cost sharing)



(59) Anglian considers that several of its PCs could have been better calibrated in the FD to provide a more balanced and proportionate package, noting that the overall package is extremely challenging. However, for the purpose of the Redetermination, Anglian has focused its concerns on the following targeted issues which have the most material impact on its FD and where the FD is inconsistent in approach.

(60) For **leakage**, Anglian's concern is that Ofwat has set a baseline (i.e. starting point) for Anglian that is divorced from Anglian's actual outturn performance or the updated WRMP, but rather based on the 2024/25 PCL set at PR19. This significantly increases the stretch for Anglian to reach an already stretching PCL in AMP8, given that that Anglian has not been able to achieve that baseline level during AMP7 (and indeed has not been funded to do so, since it will be returning related funding to customers under the CMA's PR19 clawback mechanism). The result is that Anglian must drive further improvements on its sector-leading performance (which requires Anglian to address costly, complex risks rather than "easy wins") from an unrealistic start-point, while other companies need only catch up using Anglian's best practice. The FD therefore adopts a perverse approach to leakage whereby Anglian is effectively penalised for its strong record, blunting incentives for frontier performance, and contradicting Ofwat's own stated policy objectives.

(61) Adjusting the baseline to Anglian's 2024/25 outturn performance (which is currently forecast to be 184 ML/d in line with the WRMP) would result in a consequential change to Anglian's leakage enhancement allowances in accordance with Ofwat's model. Assuming a baseline of 184 ML/d results in enhancement allowances of **£21.8 million**.

(62) Ofwat's approach to the **total pollutions** PCL is different, in that companies are to deliver on a common level, with softer targets for those firms already close to the target but tougher – in Anglian's case impossible – targets for those that have further to go.

(63) Anglian's performance on this measure is not what it should be, and Anglian's plan aims to reduce total pollutions at the highest rate it considers feasible. Anglian accepts it will

be in penalty on total pollutions and does not seek in this Redetermination to avoid that risk entirely. However, the way that pollution performance is measured (which is inconsistent with the actual risks faced) means the level of penalty exposure is disproportionate.

(64) Accordingly, Anglian has two specific concerns. First, Anglian's relative total pollutions performance is partly driven by normalisation (i.e., measurement) differences, with Anglian required to deliver no more than 13.5% of industry pollutions despite having 18% of sewage treatment works and 20% of network pumping stations. Addressing this measurement issue and adjusting the performance commitment level accordingly would provide Anglian with a more consistent and proportionate PC. Second, the ODI exposes Anglian to the risk of disproportionate penalties at four times the rate that apply for internal sewer flooding, despite over 95% of these incidents being category three, having minimal environmental or customer impact. A more proportionate ODI rate would leave Anglian with equally strong incentives to improve performance, while better reflecting customer valuations. Finally, if the above remain unchanged, then at the very least, Anglian should be funded to be able to meet the PCL.

(65) For **external sewer flooding**, a similar issue arises as for leakage, with Anglian's baseline (i.e., starting point) being set at its 2024/25 PCL rather than its outturn position. The 2024/25 PCL was stretching and based on Anglian's strong performance in AMP6, which Anglian has been unable to replicate that in AMP7 and yet the PCL now forms the basis for the baseline in AMP8. While this issue could be addressed directly by resetting the baseline to 2024/25 outturn performance, Anglian considers there to be a strong case for setting the PCL on a consistent basis with the internal sewer flooding PCL, i.e. at an industry-wide level, with a common glidepath from the median of companies' average 2020-24 performance to the median of 2029/30 industry forecast performance.

(66) Ofwat takes a similar approach in setting the baseline performance for **2024/25** for **water supply interruptions** where it has set a company-specific PCL rather than setting a common PCL based on most recent performance data, creating an unnecessary inconsistency and unreasonable stretch for a notionally efficient company. Following a consistent approach with internal sewer flooding would address this issue.

(67) Finally, as regards the **Outperformance Adjustment Mechanism** ("**OAM**"), while Anglian does not challenge the mechanism *per se*, the Company disagrees with the deadband introduced at FD, noting that the original OAM which was calibrated to provide the median company zero reward or penalty was a better alternative for managing the risk of sector-wide out or under performance. By contrast, the introduction of the deadband means that that median company could still be in penalty or reward despite the targets being fundamentally mis-calibrated in PR24 for the sector as a whole.

(68) In summary, Ofwat has been inconsistent in the way it has set targets and baselines, particularly in the way it treats existing performance. This has resulted in a set of targets for Anglian that would be unreachable even for companies acting efficiently and achieving material performance improvements as against PR19.

(69) The balance of risk and return is skewed against Anglian at present. The CMA has an opportunity to reset the PCLs and/or ODI rates to maintain the strong incentives to improve performance to which Anglian is already responding, without risking the equally important need to attract equity. If the CMA is not minded to make those adjustments,

then further funding could be an alternative way of closing the gap that Ofwat's FD has created between its targets and the funding provided to achieve them.

7 PCDs

(70) While Anglian supports PCDs as a matter of principle (which have been introduced by Ofwat for the first time in PR24 across all enhancement activity and some base activity) certain elements of Ofwat's PCDs are unnecessarily restrictive and introduce unnecessary cost and risk into the FD. In particular:

(71) The PCDs are calibrated in a manner that creates new and material downside asymmetric risk for companies. Non-delivery PCDs (which cover £35-40 billion of totex) are inherently asymmetric, given the absence of opportunity to earn more than the allowed revenue for over-delivery, while late delivery penalties are three times the rate of on-time incentives.

(72) Certain PCDs, including mains renewal and time incentive PCDs, are too prescriptive in terms of precisely what companies must deliver and when. Further, their widespread use throughout the FD (applying to 46% of base water network plus capex allowances and 80% of enhancement allowances) and lack of flexibility exacerbates delivery risks for ODIs, asset health and enhancement, by unnecessarily restricting companies' ability to flex resources to needs and negatively influencing incentives for no clear customer benefit.

(73) Ofwat's assurance and reporting obligations for the PCDs are also unnecessarily complex and burdensome and could be refined, in line with the approach Ofgem takes, to reduce inefficiencies.

8 Anglian is therefore unable to accept its FD and requests a number of adjustments

(74) In combination, the above factors raise the unacceptable risk that Anglian will not be able to attract sufficient equity to finance its plan, to the significant detriment of customers.

(75) For the reasons summarised in this Chapter and explained further in this Statement of Case, Anglian requests that the CMA make the adjustments set out below to the FD.

8.1 For base costs:

(i) **Mains renewal**: recognise the evidence that base allowances can only reflect a renewal rate of no more than 0.2% (as opposed to the FD's 0.3% assumption) and resolve the full expenditure shortfall in Anglian's expenditure requirements to deliver its full PCD (increasing funding by £60 million);

(ii) **Leakage**: adjust Anglian's leakage base allowances by £68 million to account for the increased marginal cost of maintaining leakage levels at the frontier;

(iii) **Boundary boxes**: make a cost allowance of £138 million to account for replacement of failing boundary boxes, subject to a clawback mechanism to protect customers from any differences between forecast vs. actual replacement rates by the end of AMP8;

(iv) **Frontier efficiency**: reduce the frontier efficiency challenge from 1% to a more credible 0.8% (which would result in a £36 million increase to Anglian's base

allowances and £41 million to enhancement allowances, i.e., a £77 million increase to its overall totex allowances - based on the FD);

(v) **Storage points and gravity sewers**: alternatively, if the CMA is not minded to make the adjustments requested above, Anglian requests £150 million funding for storage points and gravity sewers, subject to a use-it-or-lose-it-mechanism to address the asset health risks for these asset classes created by the base cost pressures in the FD;

(vi) **Data updates**: update base and retail models with the most recent available data, and the most recent forecast data for the calculation of business rates.

8.2 For asset health:

(i) call out Ofwat's mains renewal implicit allowance error, where it effectively penalised several companies for less than median historic spend on renewal so that Ofwat does not repeat this error in funding for other asset classes in its Asset Health Roadmap;

(ii) signal once again the need for a step-change in the approach to asset maintenance, and that this must be addressed via timely action.

8.3 For ODIs:

(i) **Leakage**: (i) provide a more proportionate PCL for Anglian by adjusting Anglian's baseline (which is currently based on the PR19 2024/25 PCL) to reflect its outturn performance for 2024/25 (currently forecast to be 180.45 ML/d in line with the WRMP); and (ii) provide the associated leakage enhancement based on Ofwat's models. Specifically, if the CMA aligns the baseline to the WRMP, the associated enhancement allowance to meet the PCL from that baseline would be **£21.8 million**.

(ii) **Total pollution incidents**: (i) accurately reflect Anglian's performance in relation to its asset base by setting a PCL informed either by: (a) relative performance using adjusted sewer length metric which accounts for the number of pumping stations and WRCs each company has relative to its sewer length and the industry median, or (b) relative performance using the weighted average of performance across asset categories. Alternatively, in the event of an unchanged PCL, Anglian would welcome further engagement with the CMA to discuss how much additional base funding would be required to further reduce its total pollutions in line with its PCL; (ii) lower the Total Pollution Incidents rate for underperformance and outperformance payments to £0.605m on a normalised basis (i.e. per incident per 10 km of sewer), to improve proportionality reflecting Ofwat's and Anglian's customer evidence; and (iii) exclude category 4 incidents from the PCL, or provide for the PCL, underperformance rate and funding to be adjusted in the event that the EA changes its categorisation approach.

(iii) **External sewer flooding**: set the PCL on a consistent basis with the internal sewer flooding PCL, i.e. at an industry-wide level, by adjusting: (i) the 2024/25 baseline to reflect the median of companies' average performance over the last four years; and (ii) the PCLs for each year of AMP8 by setting them on a glidepath from the revised 2024/25 baseline to the median of companies' own PCLs for 2029/30.

(iv) **Water supply interruptions**: reflect the latest performance data in setting the PCL by adjusting: (i) the 2024/25 baseline to reflect the median of companies'

performance over the last four years and (ii) the PCLs for each year of AMP8 by setting them on a glidepath from the revised 2024/25 baseline to the median of companies' own PCLs for 2029/30.

(v) **OAM**: remove the deadband on the OAM introduced at FD and restore the original OAM to provide the median company zero outperformance or underperformance payments and therefore with a "fair bet". If the CMA wishes to consider alternative approaches with similar effects, Anglian has proposed a dynamic incentives regime during PR24 and would be happy to present and discuss its ideas.

8.4 For PCDs:

(i) remove annual time limits and time delivery incentives;

(ii) remove overly prescriptive elements including by (i) amending the mains renewal PCD so that it does not relate to conditions grade 4 and 5, but rather targets those mains at a higher risk of failing or higher incidence of bursts; and (ii) simplifying the smart meter PCD to refer to all meters installed rather than specifying the type of customer meter;

(iii) reduce the administrative burden of reporting by introducing more proportionate reporting requirements and ex post assessment for certain PCDs such as the scheme specific ones, in line with Ofgem's approach, to allow for greater flexibility;

(iv) take into account the residual asymmetric risk that is not fully mitigated at source, when setting the cost of capital.

8.5 For Investability / Financeability:

(i) address or mitigate risks in the FD at source where reasonably practicable to do so (as set out above); and

(ii) revise the WACC as set out in **Chapter H.2 (*WACC*)** so that it provides a sufficient return for an investor in the median-performing notional company.

8.6 Estimated impact of adjustments

(76) The cumulative impact of these requests on customer bills over AMP8 is estimated by Anglian to be a 13.06% uplift (2024/25 to 2029/30 before inflation), assuming that all of the requests in this Statement of Case are addressed. The Company considers this uplift necessary for the reasons set out in more detail in this Statement of Case.

(77) Whilst serving nearly 7 million domestic and business customers in a growing area, Anglian has managed to maintain an increase in real terms in customer bills of just over 3% since privatisation prior to PR24 as against an industry average of 23.4%.[30] For PR24, the average bill increase based on the FD is £140 over AMP8 (from AMP7 end), being 29% and on the lower end of the WaSC weighted average increase of £157 (36%). Anglian expects that the Redetermination will keep it below the industry average.

(78) In PR24, Anglian is faced with a radically different investment proposition driven by an investment programme of £11 billion over AMP8 and material additional investment over future AMPs. This requires significant equity injections over the next 5 AMPs, which in turn necessitate a reasonable level of returns to make the notional company attractive to equity investors.

[30] Source: Anglian analysis, Bill change since privatisation (Annex 005).

(79) Anglian, therefore, requests the CMA to consider the transformative value of its capital programme over AMP8 and well beyond. Increased investment levels are a necessary prerequisite for Anglian to be able to invest more in infrastructure and operational performance, which will improve services and increase efficiency, leading to lower bills for customers. Being able to attract the required investment will also stimulate innovation and growth and support the development of environmentally sustainable solutions. This encompasses a 10.62% uplift, reflecting the requested changes to WACC and RCV run-off rates.

(80) As regards Anglian's totex requests, which account for a 2.38% uplift, the requested allowances will also deliver extensive benefits. They will both enable Anglian to relieve its base cost pressure and deliver its FD while managing its capital maintenance needs during AMP8 to avoid asset failures and delivering the critical performance improvements that customers rightly expect. The benefits to customers now and in the future clearly outweigh the short-term bill impact.

(81) Anglian has extensively engaged with customers in preparing its Business Plan, and this Statement of Case is built upon such engagement. [31]

9 Structure of Statement of Case

(82) The remainder of this Statement of Case is structured as follows: **Chapter B** sets out why Anglian is seeking a redetermination, including the wider context of its decision; **Chapter C** provides an overview of the Company; **Chapter D** sets out Ofwat's, and the CMA's, duties in setting the price control; **Chapter E.1** outlines Anglian's concerns regarding base cost allowances and **Chapter E.2** explains the longer-term asset health issues which arise in that context; **Chapter F** provides an overview of Anglian's enhancement programme and explains the increased risks from the size of the capital programmes which the sector will deliver in AMP8; **Chapter G.1** explains Anglian's targeted concerns regarding specific PCs and ODIs and the OAM and **G.2** explains the asymmetric risk implicit in the PCDs and why specific elements of these are problematic and exacerbate other risks in the FD; **Chapter H.1** explains why the imbalance in risk and return means the FD will not attract sufficient investment to finance its functions and achieve PR24's objectives and **Chapter H.2** explains why the CMA should recalibrate the WACC to address these challenges.

[31] This has been in accordance with Anglian, Customer Principles: A synthesis of customer research and an insight to inform Anglian's plans (September 2023 Version) (See here).

Chapter B
Why Anglian is at the CMA

1 Introduction

Anglian's Statement of Case is focused on those aspects of Ofwat's price control which materially restrict Anglian's ability to deliver its AMP8 Business Plan and can be resolved by the CMA within this Redetermination.

However, the issues in dispute are symptomatic of wider and longer-term concerns which have emerged over multiple price controls, including issues which Anglian raised with the CMA in PR19 and have subsequently engaged seeking positive reform. These issues are now becoming increasingly critical for water companies and their investors. Sir Jon Cunliffe has recognised this, noting his Commission is examining "*whether we have the right systems in place at both the regulators and in companies to assess the resilience of companies' infrastructure and to fund replacement at the necessary rate over the long term.*" It is imperative that these issues are recognised and addressed before PR29 if the sector is to achieve a sustainable platform from which to drive transformative change and deliver improved services and resilience for customers in AMP9 and beyond.

Anglian recognises that the CMA may be unable to fully resolve these wider concerns in the Redetermination. However, they provide important context for the narrower issues in dispute and Anglian asks the CMA to make observations and recommendations on these points as part of its Redetermination.

The issues outlined above can be grouped into four central themes and we address each below:

(a) There remains a lack of long-term thinking driving price control outcomes, which is undermining resilience;

(b) Inconsistency in regulatory approaches creates uncertainty and risk;

(c) There remains a lack of evidence-based decision-making; and

(d) Regulation is increasingly reactive and unpredictable.

Overall, the FD's approach to PR24 incentivises short-term thinking, unduly increases uncertainty and does not provide a robust basis for the changes the sector needs.

2 There remains a lack of long-term thinking driving price control outcomes, which is undermining resilience

(83) Ofwat has a duty to **future**, as well as current, consumers, and to secure **long-term** resilience. These duties are complemented by the Government's Strategic Policy Statement[32], providing a 'steer' according to which Ofwat should challenge the sector to plan, invest and operate its services in a way which secures **long term resilience**, protects and enhances the environment and delivers value to customers, the environment and wider society **over the long term**. Ofwat published an account of how it believes its Final Determination supports these objectives[33] but this document, like the FD itself, in many ways fails to demonstrate long term thinking, not least in the absence

[32] UK Government, The Government's strategic priorities for Ofwat (February 2022) (See here).
[33] Ofwat, UK Government priorities and our 2024 price review final determinations (December 2024) (See here), Sections 2-5.

of an appropriate discussion as to how to attract necessary funding for the investment programme envisioned over many AMPs.

(84) Government is clear that these priorities do not mean lower prices in the short term at the expense of future generations, a criticism which Ofwat widely faced in PR19 for prioritising low bills over longer term considerations. Ofwat has accepted the need for material bill increases in PR24 to deliver the huge increase in statutory enhancement schemes. However, a lack of long-term thinking and failure to place appropriate weight on long term considerations still pervades the price control. For example:

(i) Ofwat's prioritisation of low prices has resulted in insufficient funding to replace aging assets and deliver long-term outcomes for the environment and local communities. Increasing base cost pressures over multiple price controls has promoted short-term approaches at the expense of better value, longer-term approaches and at the expense of resilience. As a result, companies are incentivised to "fix on fail" when maintaining their assets, rather than investing in longer term solutions. Similarly, the interaction between the totex and ODI regime incentivises companies to prioritise shorter term interventions that secure immediate service benefits rather than longer term resilience.

(ii) More generally, totex underfunding at PR19, created significant risks which then materialised (for example, energy costs, major infrastructure delivery such as SPA), with a negative impact on performance during the AMP and knock on effects into future AMPs.

(iii) Ofwat introduced a requirement for companies to use LTDS in their Business Plans in PR24, including adaptive planning. However, Ofwat sought only to apply this framework to enhancement expenditure, with no equivalent approach for considering forecast base cost expenditure and long-term maintenance requirements which are significantly higher than the current allowances.

(iv) In practice, Ofwat placed little weight on the LTDS in PR24. Compliance of companies' LTDS plans with Ofwat's guidance formed part of the QAA assessment of Business Plan quality (along with a check on the consistency of data tables) but no real use was made of these plans in formulating expenditure allowances. For example, Ofwat's needs test assessing enhancement proposals makes no reference to the LTDS and investments were disallowed without considering the impact on the LTDS. In contrast, a long-term approach has underpinned Anglian's Business Plans since PR09 given the significant supply and demand challenge in its water-scarce region. Accordingly, the Company devoted significant time and resource to the LTDS for its PR24 Business Plan, activity that in retrospect seems to have had little effect on Ofwat's thinking.

(v) The disconnect with the wider long-term planning frameworks of WRMP and Drainage and Wastewater Management Plans ("**DWMPs**") matter more at PR24 than ever before. For example, Anglian is not funded to deliver the leakage reduction its region needs as part of maintaining the overall supply-demand balance.

(vi) The LTDS expenditure projections show the scale of investments the sector needs to make the long-term implications of price rises to customers and the risk to investors, along with the equity required to fund such investment. Ofwat has ignored this and has not set this first price control of this sustained period of investment in a

manner likely to attract the equity required now and in the longer term. It has therefore created undue uncertainty for all stakeholders about companies' ability to fund the delivery of necessary long-term outcomes.

(vii) Ofwat's lack of consideration for long-term asset maintenance expenditure as part of the LTDS further exacerbates the challenges for future funding and stores up problems for customers and resilience. A more comprehensive framework is required before PR29 which properly reflects the scale of investment required for companies to maintain, and crucially to replace, their ageing assets, This has been recognised by Scotland's WICS, which has made fundamental step-changes in its price review methodologies in recognition of the need to protect resilience and future consumers (see **Chapter E.2 (*Asset health*),** Section 2.

(viii) A more comprehensive framework for asset health is all the more important in the context of climate change. Anglian's PR24 Business Plan proposed to address its climate challenges via a strongly evidenced mains renewal enhancement claim for climate vulnerable mains, subject to a PCD. Anglian subsequently submitted its claim as a CAC, highlighting its asset health need, after Ofwat dismissed its enhancement claim, and that of others (e.g., Northumbrian). That CAC was assessed rather as part of Ofwat's overall sector wide mains renewal specific CAC and PCD.

(85) In light of the long-term challenges facing the sector, with companies needing to invest unprecedented amounts to adapt to a changing climate and maintain their asset bases, consumers' interests will best be served by a regulatory framework that demonstrates how it clearly promotes sustainable, long-term investment decisions and aims to mitigate uncertainty.

3 Changing regulatory priorities increase uncertainty and risk

(86) Anglian recognises the need to amend the regulatory framework to adapt to new duties and emerging sector challenges. However, Ofwat's approach to, or delay in, doing so has at times resulted in extreme shifts, requiring companies to pivot or reprioritise radically in response. This in turn increases risk and uncertainty regarding future changes. For example:

(i) Ofwat has shifted from a "decade of falling bills" at PR14 and PR19 to promoting/endorsing significant investment proposals and bill increases in PR24. This means that companies are now under considerable pressure to transform and rebalance at pace to meet the challenge, adding unnecessary risk for investors in the sector. Anglian alone must deliver an enhancement programme which is over twice the size of that in PR19 and renew 4.18km of mains per week compared to 0.63km per week in AMP7.[34] A more consistent (and forward-looking) approach between price reviews might have enabled this investment to be smoothed over time, thereby allowing long-term outcomes to be delivered more effectively. Ultimately, the prioritisation of bill impacts over resilience investment (whether through the price control or the statutory programmes) continues to have significant implications for long-term resilience.

[34] This relates to the renewal required by the PCD of 1091km expressed on a weekly basis compared to the total length of potable mains renewals reported against table 6C.3 in Anglian's APR's 2021-2024 expressed on a weekly basis.

(ii) Similarly, the sector has witnessed a complex shift from (i) mostly output-based incentives in PR09 to (ii) mostly outcomes-based incentives in PR14 and PR19 to (iii) a combination of outcomes- and outputs-based incentives (with the introduction of prescriptive outputs-based PCDs in base and enhancement) for PR24. As a result, companies must deliver outcomes they can only partially control, whilst having significantly less flexibility in *how* to deliver them.

(iii) Ofwat more frequently focuses on so-called "underspends": whether companies have spent their past requested allowances on implementing the defined solutions identified in their Business Plan. However, what matters is whether companies deliver outcomes, not outputs, so they should be incentivised to deliver those outcomes in the most efficient way. Such references to underspends fail to recognise that customers and companies share the benefit from any efficiencies they have achieved (efficient companies will drive the efficiency frontier, and therefore the future cost challenge for all companies, in any event). Furthermore, there is evidence in AMP7 that driving such efficiencies has enabled companies to protect customers from the impact of other underfunded risks.

(iv) This is indicative of a wider problem with the regime. While Ofwat takes an "in the round" approach to setting base cost allowances, it fails to recognise the need for companies to do the same if they are to live within their base allowances over a five-year period. Expecting companies to spend exactly what they request in their plans on exactly what they expected at that time to spend ignores the realities of running a business, the increasing risks and uncertainties and is inefficient.

(v) Ofwat fails to address the cumulative effect of its policies. Risks associated with PCDs, ODIs and totex incentives cannot be seen in isolation given the compounding and interdependent nature of these mechanisms. Companies recognise multiple ODIs can be impacted by one risk materialising and inflexibility imposed can further limit the necessary mitigation. Companies are expected to accept the FD "in the round" but increasingly they are also facing prescription as to 'how' they deliver (in terms of the financial resources).

(vi) Similarly, constraining companies at a time when innovation and programme-based planning is key to delivering multiple and large-scale programmes effectively and efficiently is counter-productive and increases costs for both sides with little benefit to consumers or the environment.

(vii) The growing unpredictability and lack of stability creates a direct cost for consumers, in the form of higher borrowing costs, as some credit rating agencies have downgraded the "stability and predictability" of Ofwat's regime multiple notches (in the case of Moody's from Aaa to A) across the PR19 and PR24 price reviews.

4 There remains a lack of adequate evidence-based decision-making

(87) Ofwat's decisions must be robustly supported by evidence for Ofwat to determine efficient cost allowances and for companies and investors to have confidence that they are adequately funded and not placed at unnecessary risk.

(88) However, in recent price controls, a marked asymmetry has emerged between, on the one hand, the low evidential threshold which Ofwat relies on to support some of its price control decisions and, on the other, the high evidential standard it applies to companies

to justify any cost claims over and above the base cost models: Of the 64 cost adjustment claims which companies initially submitted in PR24 (amounting to >5 billion in total), Ofwat accepted just eight company specific CACs (in addition to the six industry-wide CACs which it granted to address sector wide issues).

(89) A clear example is Ofwat's expectation of "what base buys" (i.e., the level of performance (improvement) and activity that can be delivered from base expenditure). The expectation is unrealistic, unsupported by robust evidence and has increasingly undermined company and investor confidence as Ofwat expands what it "expects base to buy" with every price control. The risk this creates is significant: companies are underfunded to simultaneously maintain high levels of performance, carry out activities which would be more appropriately funded as enhancement activities (such as aspects of resilience and smart metering enhancement) and maintain and renew a growing asset base. The effects are felt by customers and the environment and resilience is severely compromised.

(90) This places companies at disproportionate risk of breaching their obligations and incurring penalties. By way of illustration, the PR24 FD places c. £500 million of base cost pressure on Anglian relative to its Business Plan, in addition to the significant efficiencies which it had already built into its original Business Plan and the investment it will need to make to improve performance. (See **Chapter E.1 (*Base costs*),** Section 2**)**. It is imperative that, going forward, the regulatory regime allows for a realistic perspective on what base buys so that confidence in base allowances can be restored.

(91) Similarly, Ofwat's approach continues to take the general position that significant performance improvements in future can be achieved at no additional cost based on historic expenditure performance. It assumes it costs no more to deliver frontier performance than it does to deliver poor performance.

(92) A further example of the way in which the cost-service disconnect plays out is in the interplay between different regulators and the price control. For example, where the Environment Agency ("**EA**") determines an expected level of pollution reduction, it is incumbent on the economic regulator to set a price control which provides companies with the means to deliver an appropriate reduction in that context, whether through providing the required funding or through its overall approach to setting the PCL. However, the PR24 FD does not do so for Anglian.

(93) As a result of this cost-service disconnect, Anglian, which has to push the frontier on already world-class levels of leakage, has no funding for leakage, unlike lagging companies who can apply sector learnings to improve performance. This results from an approach which penalises Anglian for its strong performance in reducing leakage in previous years. Ofwat's position is not sustainable if frontier companies are to continue to drive further improvements for the benefit of the sector as a whole, the approach incentivises median rather than frontier performance.

(94) In certain areas, Ofwat draws incorrect conclusions from company data and submissions and uses those to support its decisions. For example:

(i) Ofwat assumes that customers have funded companies to deliver a certain level of capital maintenance activity on a certain asset class, in isolation, based on the median company spend on that asset class over a certain period. However, that approach ignores that companies' ability and incentive to invest in a particular asset class is driven by (i) the amount of base funding each has available for capital

maintenance after investing in improving performance and delivering other statutory obligations and (ii) each company's capital maintenance priorities, taking into account the specific needs of its asset base in each AMP, and the company's assessment of how the health of those assets is forecast to change. In short, companies must balance priorities across all asset classes and performance expectations for a given level of funding, and so any conclusion drawn from such a narrow assessment of a single asset class is flawed.

(ii) Ofwat uses the stretching PCLs, which companies propose in Business Plans based on the costs in those plans, as company "forecasts" of what they can deliver for the allowances they are set in the FD. This is clearly wrong and in no way demonstrates that Ofwat's FD PCLs are achievable for the allowances set.

(iii) Ofwat uses the frontier shift assumptions used by companies in their plans to support its frontier shift decision, without considering the context (e.g., because the company knows the regulator will use this figure rather than because the company considers it realistic or achievable).

(iv) Ofwat sets the baseline (i.e., starting point) for certain performance commitments based on the performance level it had previously *expected* the company to be achieving at the beginning of the next AMP rather than the performance level the company is in fact achieving. This in turn drives unrealistic conclusions as to the degree of stretch in the next AMP for the allowances provided.

(95) Some of these problems derive from the poor information provision that Ofwat incentivised through its QAA mechanism for rating the quality of Business Plans. Anglian remains concerned, as it was in PR19, that the QAA framework places disproportionate weight on stated ambition rather than real quality and realistic assessments of performance. Ofwat's assessment of ambition is based on the extent to which expenditure proposals are consistent with Ofwat's modelled costs.[35] Consequently, companies are heavily incentivised to base their cost estimates on the predicted allowances from Ofwat's costs models, rather than on the company's bottom-up, data-driven knowledge of how much activities actually cost, to avoid being deemed inefficient.

(96) Similarly, companies are heavily incentivised to use Ofwat's WACC assumptions in their financeability assessment, its frontier shift in their cost allowances, and to align with Ofwat's views in their Business Plan performance commitments, regardless of the companies' views on whether those components are appropriate or achievable.

(97) While companies technically have the opportunity to submit cost adjustment claims and their own view on components such as WACC, the reality is that Ofwat's evidential bar for those alternative views is rarely met, and cost adjustment claims can be used against companies as evidence of inefficiency (despite being forward looking to address future costs). When Ofwat refuses a CAC, not only is the CAC not granted, but the CAC remains part of the benchmarked base costs, so the requesting company appears inefficient relative to others. As a base inefficiency score can influence other cost allowances, companies are understandably keen to avoid this even if it causes them to hold back on submitting well-evidenced claims of which Ofwat might disapprove.

(98) Companies' submissions are then misrepresented as forecasts rather than aspirations in Ofwat's decisions at FD. The result is that Ofwat's analysis is not always based on

[35] Ofwat, 'QAA webinar' (17 July 2024) (See here), Pages 7-8.

realistic forecasts, the consequences of which include the wide-ranging requests for Redetermination presently before the CMA.

5 Regulation is increasingly reactive and unpredictable

(99) Ofwat has made material interventions outside the price control framework in recent years which interplay with the price control and magnify the level of overall risk for companies in the event that the price control is mis-calibrated. This reduces the predictability of the regulatory framework during the course of the AMP. For example, Ofwat's focus on financial resilience has led to licence changes in AMP7 which compound the risks of poor performance under the price control regime, including restrictions on the payment of dividends.

(100) The price control process itself is increasingly unpredictable and reactive. Even within PR24, there have been significant changes in approach between the final methodology, DD and FD stages. Over the course of PR24, Ofwat abandoned company research on customer valuations to inform ODI rates, favouring a sector-wide approach, then failed to deliver its own research, opting instead for top-down incentive rates. This produced an arbitrary and unachievable result at DD, with Ofwat responding to sector-wide concerns by significantly recalibrating the package. Ofwat also introduced the ASM and OAM into the ODI package late in the price control process, in part as a way of dealing with the problems of the DD. The OAM in particular is a significant change to be introduced at such a late stage and the FD implements a version which differs significantly from the version consulted on.

(101) As noted above, the lack of predictability in Ofwat's regulation has contributed to downgrades by some credit rating agencies, which could have a direct cost for future consumers as higher borrowing costs feed into future charges. A key driver of volatility and unpredictability is the interplay between the price control framework and the evolving requirements of the quality regulators, the DWI and EA. This drives material changes to the shape of companies' plans between Business Plan submission and FDs, with shifting WINEP obligations and high uncertainty on the levels of investment required. A recent example is the change to PFAS obligations *since* the FD, which means companies now require an uplift in allowances if they are to meet the new standard.

(102) Water regulation is also becoming ever more complex. Through its various mechanisms and PCDs, Ofwat has hamstrung the ability of companies to respond to incentives efficiently to the benefit of customers. It is perhaps for the Cunliffe Review to take the step back required for a more fundamental reset but Anglian requests that the CMA bear in mind in all of its decisions in this Redetermination that, to be effective, incentives should be simple and clear, based on good evidence and companies should have the flexibility to respond to them effectively.

Conclusion:

(103) Anglian's approach in PR24 has been informed by the lessons it learned in PR19. Having submitted a plan which it considered to be the right plan for its region in PR19, with outstanding customer engagement supporting it, and having been found to be inefficient as a result, Anglian responded to the regulatory incentives in PR24 and matched Ofwat's models for its Business Plan allowances. This resulted in an extremely ambitious plan which built in significant efficiencies. However, that ambition has not been rewarded in Ofwat's FD.

(104) The package that Ofwat has ultimately set at FD requires Anglian to deliver more within its base envelope, and on a more restrictive basis, than Anglian had envisaged when it submitted its costs in its Business Plan and DD Reps and materially increases the base cost pressure on the Company. Moreover, the FD also imposes unrealistic PCLs on Anglian and others through poorly calibrated ODIs. It unduly hampers Anglian's flexibility to respond to these challenges in the most efficient way possible through restrictive PCDs. It is difficult to see how Ofwat's approach aligns with a proportionate balancing of its duties; rather, it appears to repeat the errors of PR19 and promote a short-term lowest cost approach.

(105) In brief, the current regulatory approach does not set the right incentives to encourage companies to propose plans that reflect the true needs of customers and the environment. Ofwat deprives itself of a robust evidence base through this framework and its arbitrary approach to determining rewards and penalties increases risk for no benefit.

Chapter C
About Anglian

1 Introduction

Anglian is the largest water and wastewater company in England and Wales by geographic area. Anglian serves one of the driest regions in England and Wales, with heavily drained, flat landscape and long, narrow watercourses. It has low rainfall (71% of the UK national average) and high evaporation losses. A quarter of Anglian's region lies below sea level. The region is particularly susceptible to the impacts of climate change.

Anglian serves 7 million people across the East of England and Hartlepool. It operates and maintains 39,248km of water mains which laid end to end is further than a trip to Sydney and back, 77,3000km of sewers which is almost twice around the earth's circumference, and the largest number of WRCs of all the WaSCs (1,122 in 2024). Anglian's customer base is predominantly residential.

Anglian is a purpose-led business rooted in long term sustainable ambitions. Building on its SDS first developed in 2007, confirmed in 2017, Anglian committed to a number of long-term ambitions to 2050 in its LTDS, including:

(a) making the east of England resilient to the risks of drought and flooding;

(b) enabling sustainable economic and housing growth;

(c) becoming a carbon-neutral business; and

(d) working with others to achieve significant improvement in ecological quality across Anglian's catchments.

In 2019, Anglian became the first UK water and sewerage company to change its articles of association in order to enshrine a commitment to conduct its business and operations for the benefit of members as a whole while delivering long-term value for its customers, the region and the communities that it serves and seeking positive outcomes for the environment and society.

Anglian is a pioneer on demand management given the need to manage resources to meet the supply demand balance in its region: Thanks to its high meter penetration (91%), frontier position on leakage and promotion of water efficiency, Anglian supplies the same volume of water today as it did 35 years ago, despite supplying an extra 700,000 properties.

A growing population, drawn by expanding cities and proximity to London, is placing further pressure on housing, infrastructure and water resources. Eastern England's total population is projected to rise by 8% over the next 20 years and is home to three of the fastest-growing cities.

Anglian has had the lowest increase in bills of any company since privatisation: before inflation its average bills have gone up by just 3.4% between 1989 and 2025 against an industry average of 23.4%.

(106) The remainder of this Chapter provides an explanation of the industry and technological structure for the supply of services, and is structured as follows: Anglian's purpose and values, challenges and opportunities, operating region, corporate structure, customer engagement, track record on delivery, performance and Anglian's plan and how it was built.

2 About Anglian

2.1 Anglian's purpose and values

(107) Anglian's purpose is "*to bring environmental and social prosperity to the region [it] serve[s] through [its] commitment to Love Every Drop*".[36] Anglian's purpose is underpinned by three core values, namely: (i) "*Do the Right Thing*"; (ii) "*Build Trust*"; and (iii) "*Always Exploring*", against which it holds itself accountable.[37]

(108) As a provider of a service which is fundamental to society, Anglian is conscious of the weight of responsibility it bears to deliver safe, clean water and recycle it effectively and to protect and enhance its environment and enrich its communities. That responsibility drove Anglian in July 2019, to become the first water company to make fundamental changes to its articles of association, legally enshrining public interest within the constitutional make-up of its business.[38] As part of its commitment, Anglian publishes non-financial reporting statements assessing its performance against environmental and social matters, including respect for human rights. It has taken this approach even further by leading, with the British Standards Institution (BSi), the development of a new Publicly Available Specification (PAS) for embedding purpose in organisations (PAS:808 2022[39]). The new PAS has been sponsored by the UK Government.

(109) Anglian's corporate purpose, "*to conduct its business and operations for the benefit of members as a whole while delivering long term value for its customers, the region and the communities it serves and seeking positive outcomes for the environment and society*",[40] evidences Anglian's long-term commitment to delivering services to a high standard, while taking into account wider socio-environmental objectives. Anglian's directors have a duty to act in the way that they consider, in good faith, most likely to promote this purpose, having regard (among other things) to "*the likely consequences of any decision in the long term*" and "*the impact of the company's operations on the community and the environment"*.[41] Put simply, public interest now sits alongside Anglian's need to deliver fair returns to its shareholders.

(110) These changes in its articles of association are also consistent with its commitment to a long-term approach. Built around Ofwat's guiding principles and governance framework, Anglian's SDS was first developed in 2007 to provide a clear framework for planning for the following 25 years. The recognition of these challenges includes the first company-wide climate change risk assessment in 2005 and Water Resources Management Plan in 2009 that first included UKCP02 climate projections.

(111) Anglian's SDS was refreshed in 2017, following extensive consultation with customers and its Customer Engagement Forum, where it co-created four ambitions. In 2021, Anglian's Board concluded that the SDS remained fit for purpose to deliver long-term benefits for its business, customers, and the social, economic and environmental ambitions of the region.

(112) Anglian recognises that delivering for the long term in a sustainable way requires an adaptable, multi-layered plan. Anglian's 25-year SDS states what the Company wants to

[36] Anglian, Our purpose (See here).
[37] Anglian, Our values (See here).
[38] Anglian's Articles of Association (See here).
[39] BSI, PAS 808:2022 – Purpose Driven Organizations for Delivering Sustainability (See here).
[40] Anglian's Articles of Association, Purpose and Nature of the Company (A), page 3 (See here).
[41] Anglian's Articles of Association, Article 84(A) (See here).

achieve in terms of outcomes for the region, and guides Anglian's LTDS[42] which determines how it will achieve the SDS ambitions through a "core pathway":

(i) make the east of England resilient to the risks of drought and flooding;

(ii) enable sustainable economic and housing growth;

(iii) be a carbon-neutral business; and

(iv) work with others to achieve significant improvement in ecological quality across Anglian's catchments.

(113) Anglian has built its PR24 Plan around these priorities, which are aligned with the statutory duties to which Ofwat must have regard, as set out in **Chapter D (*Ofwat's duties*).**

2.2 Anglian's Challenges and opportunities

(114) Anglian's AMP8 plan for PR24 is highly ambitious, designed to meet the challenges its region faces, today and into the future, alongside the growing expectations of our customers, wider stakeholders and our regulators.

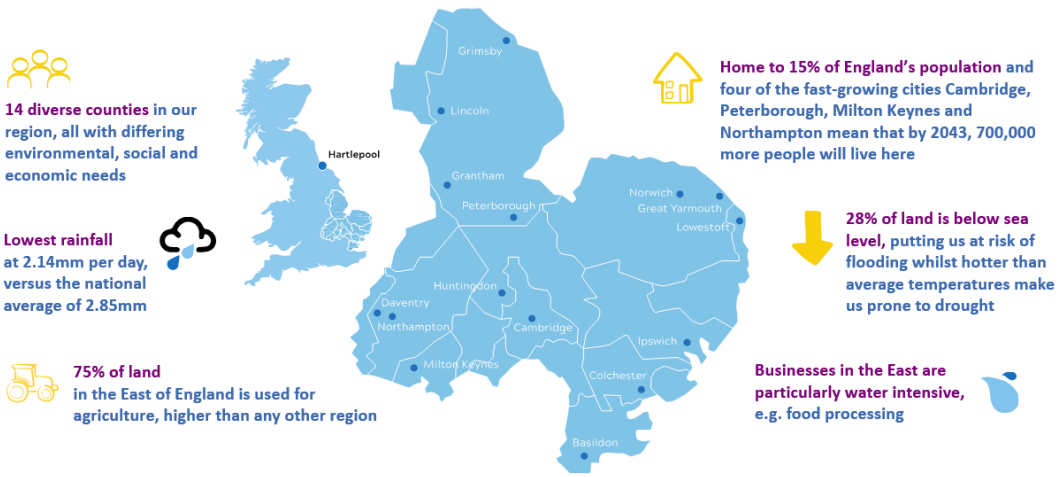
(115) Anglian supplies its services in the Eastern England. This region will see significant changes in the coming years, many of which are already being felt today:

(i) Anglian serves a flat, low-lying region with 28% of land below sea-level making it prone to flooding and, due to lower-than-average rainfall, drought;

(ii) The increasingly volatile climate is placing pressure on homes and businesses. Climate change also contributes to shrinking and swelling of the soils in the region, which is known to have a significant impact on certain underground assets; and

(iii) A growing population, drawn by expanding cities and proximity to London, is placing further pressure on housing, infrastructure and water resources. Eastern England's total population is projected to rise by 8% over the next 20 years and is home to four of the fastest-growing cities.

Figure 9: Anglian's regional conditions



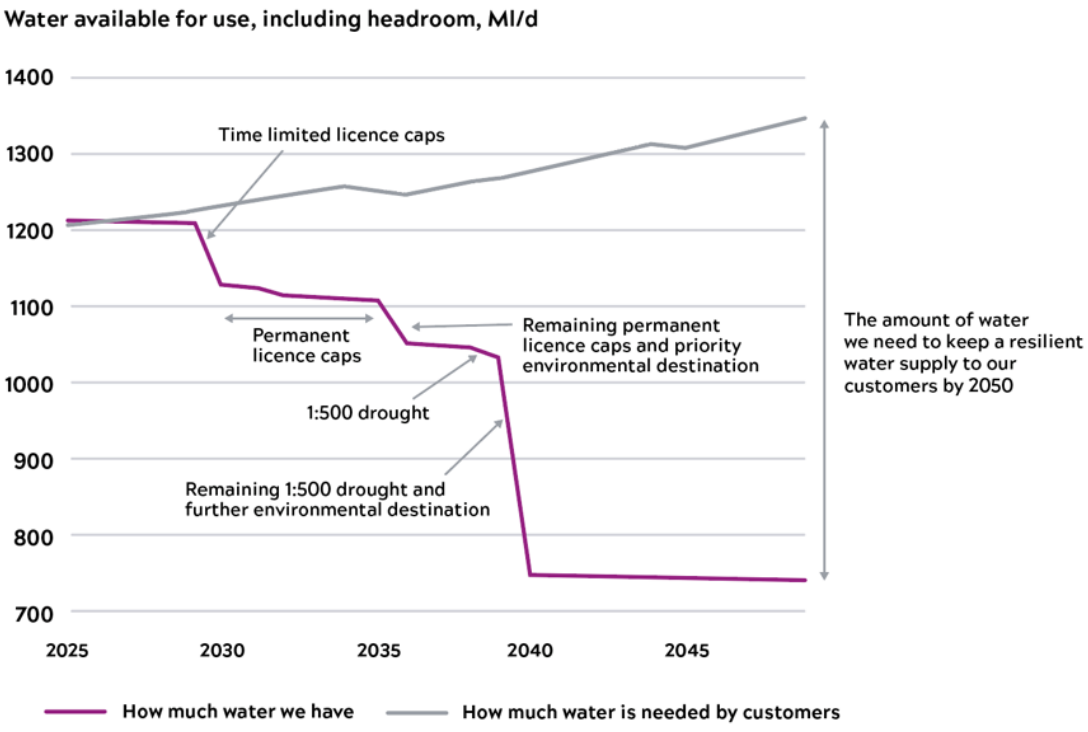
[42] Anglian, Long Term Delivery Strategy (October 2023) (See here).

(116) The Anglian region already experiences the lowest rainfall in England. In England and Wales, the wettest places are in the Lake District which receive an average of over 3,000mm of rain a year, whilst in the western Scottish mountains, averages of over 4,000mm occur. Much of Eastern England receives less than 700mm per year and includes some of the driest areas in the country, such as Cambridge. Furthermore, temperature projections for the same period indicate that this region will be hotter than the national average, at 11.4 degrees compared to 11 degrees across the rest of the country.

(117) In 2022, the Met Office recorded the hottest day on record (40.3 degrees) in Coningsby, Lincolnshire, while the drought created operational challenges in other parts of the UK. Rising sea levels and more intense rainfall mean that at the opposite end of the spectrum, Anglian's region is also at risk of flooding. Over the Christmas and New Year period in 2020/21, significant flooding affected large parts of Norfolk, with disastrous consequences for local communities. Anglian's analysis shows that the risks and impact of climate change varies greatly across its region.

(118) **Figure 10** shows the scale of Anglian's region's new water needs by 2050. Without any action, customers will experience a shortfall of 593 megalitres of water a day by 2050. That's equivalent to approximately half the amount of the water Anglian puts into its network currently.

Figure 10: Water available for use, including headroom, ML/d



2.3 Anglian's operating region

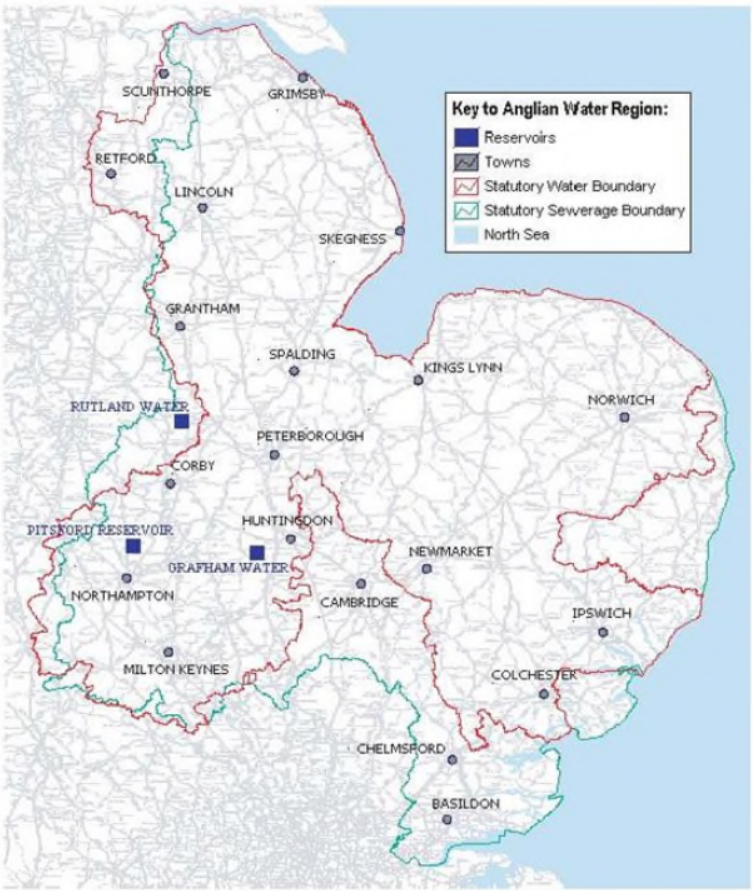
(119) Anglian is the largest water and wastewater company in England and Wales by geographic area. Its main region stretches from the Humber estuary, north of Grimsby, to the Thames estuary, and from Buckinghamshire to Lowestoft on the east coast. Its coastline is around 1,257 kilometres long. Its region also includes the town of Hartlepool on the north-east coast. Within this region Anglian has 112,833 kilometres of water and

sewer pipes, which supply and transport water across some 27,500 square kilometres. Anglian employs approximately 6,000 people and supplies water and water recycling services to more than 7 million customers in Eastern England and water services to around 90,000 customers in Hartlepool.

(120) As at May 2024, Anglian was the fourth largest of the 11 regulated water supply and water recycling companies in England and Wales in terms of its regulatory capital value ('RCV'). During the year ended 31 March 2024, Anglian delivered (i) an average of 1,000.41 Ml of treated water per day (8% of the total for England and Wales) to approximately 2.1 million billed properties (9 %) in its licence area; and (ii) 50.22 Ml of partially treated water per day (28% of the total for England and Wales) from its non-potable works. In the same period, Anglian installed approximately 16,530 new water connections (approximately 14% of the total for England and Wales).[43]

(121) **Figure 11** illustrates Anglian's water supply and water recycling licence areas as at the time of privatisation in 1989.

Figure 11: Anglian's water supply and water recycling licence areas in 1989



Source: *Anglian*

(122) The bills of domestic customers are determined according to either (i) the rateable value of the relevant property or (ii) by reference to the measured water consumption at the

[43] Data collated from industry Annual Performance Reports. The data is sourced from the following APR lines:
Treated water per day: line 6B.5 'Water delivered (potable)'
Number of billed properties: 4R.10 'Residential properties billed'
Partially treated water: 6B.4 'Water delivered (non potable)'
New water connections: 4Q.3 'Total new connections served by incumbent (Water)'

property. Having been an early adopter of metering, compared to the industry average, Anglian has a high proportion of meters, with water consumption in more than four in every five households billed on a metered (or measured) basis.[44]

(123) The characteristics of the Anglian region have a significant impact on the investment required to improve the environment. Anglian's region includes many slow-flowing lowland rivers and chalk streams which are particularly susceptible to eutrophication and algal growth when nutrients such as phosphorus are present and remain in river courses for longer.

(124) Over 75% of the region's land is used for agriculture which contributes to nutrient runoff into watercourses, increasing the need for tighter nutrient consents at Anglian's Water Recycling Centres. In addition, businesses in the region are water intensive, with 15% of all water taken from the environment used for non-household supply.

(125) The highly rural nature of the region means that Anglian has proportionately more small Water Recycling Centres serving villages and small towns, and fewer serving larger cities compared to other parts of the UK. This means that Anglian has disproportionately more individual environmental obligations requiring investment.

(126) Anglian has the largest number of WRCs of all the WaSCs (1,122 in 2024), a large number of which are small works (the average size of Anglian's WRCs is only 63% of the industry average). Moreover, given the lack of any large metropolitan centres within Anglian's appointed area, Anglian has a disproportionately small share of its load treated at the very largest works (its largest works, Great Billing in Northampton, is only 10% of the size of the largest WRC in the country, Becton in London).

(127) Collectively, these factors mean that Anglian has more and tighter WINEP obligations that would typically be expected for a company of Anglian's size. Anglian has 19% of WINEP obligations, whilst serving 10% of customers[45]

(128) Anglian's customer base is predominantly residential. Anglian's region has historically seen an above average rate of growth. In fact, its housing growth rate in the 2001-2018 period was higher than London. The region is home to 15% of England's population and three of the fastest-growing cities in the past decade; Cambridge, Peterborough and Milton Keynes.

3 Anglian's corporate structure

(129) Anglian Water Services Limited is the company that is regulated by Ofwat. Anglian Water Services Limited trades as "Anglian Water".[46]

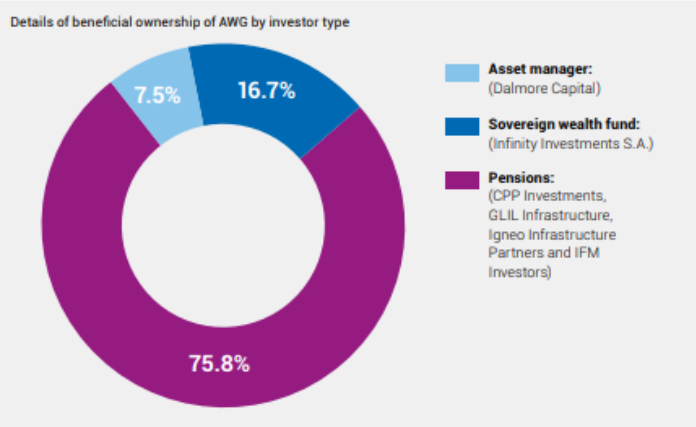
[44] In 2024 it had a 91.0% meter penetration. See Table 4R of the Anglian Annual Performance Report for full break down of meter penetration. Anglian, Annual Performance Report 2024 (July 2024) (See here).

[45] Anglian has 3,519 of 18,598 WINEP lines (See here). Anglian serves 5.1m out of a 62.8m population of water customers, and 6.6m out of a population of 60.2m wastewater customers (Anglian, Annual Performance Report (July 2024), page 226 (Table 4R Row 42) (See here).

[46] Anglian website (See here).

(130) The ultimate beneficiaries of Anglian's investors are predominantly pension funds.

Figure 12: Details of AWG beneficial ownership



(131) The ultimate holding company of Anglian Water Services Limited is Anglian Water Group Limited ("**AWGL**"). AWGL is owned by a consortium of investors comprising:

(i) Canada Pension Plan Investment Board (CPP Investments) is a professional investment management organisation that manages the fund in the best interest of the more than 20 million contributors and beneficiaries of the Canada Pension Plan (32.9%);

(ii) IFM Global Infrastructure Fund is a fund advised by IFM Investors. IFM Investors is a global institutional fund manager, owned by a number of profit-to-member Australian pension funds specialising in infrastructure, private equity, debt and equity investments. IFM invests on behalf of approximately 120 million pensioners from around the world, who invest in Anglian Water Group via the IFM Global Infrastructure Fund (19.8%);

(iii) Igneo Infrastructure Partners is an unlisted infrastructure asset management business and is part of the First Sentier Investors Group (FSIG), a global asset management business. FSIG has £124.7 billion in assets under management (as at 31 March 2024), on behalf of institutional investors, pension funds, wholesale distributors, investment platforms, financial advisors and their clients worldwide (15.6%);

(iv) Infinity Investments S.A. is an investment vehicle of the Abu Dhabi Investment Authority, the sovereign wealth fund of the United Arab Emirates (16.7%);

(v) Camulodunum Investments Ltd is a joint investment vehicle for Dalmore Capital and GLIL Infrastructure LLP. Dalmore Capital is an independent fund manager, which has more than 1.3 million pension holders invested directly in AWG. GLIL Infrastructure LLP is run by the pension funds of Greater Manchester, Merseyside, West Yorkshire and Local Pension Partnership Investments. GLIL serves over 13 million scheme members (15%).

3.1 Corporate Governance

3.1.1 The Board of Anglian

(132) As at 31 March 2025, Anglian's Board comprised: (i) an Independent Chair, Ros Rivaz; (ii) two Executive Directors (the Chief Executive Officer, Mark Thurston, and the Chief

Financial Officer, Michael Bradley CB); (iii) four Independent Non-Executive Directors (Kath Durrant, Ian Funnell, Zarin Patel and Alistair Phillips-Davies); and (iv) four Non-Executive Directors who represent the investors in AWGL (John Barry, Alex Nassuphis, Batiste Ogier and Albena Vassileva). As shown above, Independent Non-Executive Directors (including the Chair) are the largest single group on the Board.

3.1.2 Principles of Corporate Governance

(133) In 2014, Ofwat published a set of minimum standards that it expected water companies to meet for Board leadership, transparency and governance (the "**BLTG Principles**"). In response to these principles, Anglian devised the Anglian Water Services 2014 Corporate Governance Code, which was an amalgam of Ofwat's BLTG Principles and those elements of the UK Corporate Governance Code that could sensibly be applied to a company in private ownership.

(134) In January 2019, Ofwat issued a revised set of BLTG Principles ("**Revised BLTG Principles**")[47] which consist of four broad objectives and a series of supporting provisions. The four objectives were incorporated into Anglian's licence with effect from 1 August 2019. In 2019 Anglian produced a revised code (the "**2019 Code**") which incorporated Ofwat's Revised BLTG Principles together with most of the provisions of the 2018 UK Corporate Governance Code.[48] The 2019 Code was further updated in 2020 to ensure alignment with the company's Articles of Association and Ofwat's requirements on Board composition. In 2024, the Anglian Board considered the changes required to implement the Financial Reporting Council's 2024 Corporate Governance Code and steps are underway to update Anglian's Corporate Governance Code to reflect these changes.

(135) Anglian's most recent Annual Integrated Report was published in July 2024 (the "**2024 AIR**")[49] and details compliance with the 2020 Code together with an explanation of Anglian's compliance with the four BLTG objectives. The 2024 AIR confirms that Anglian has complied with the 2020 Code throughout the 2023/24 financial year, with the two minor exceptions both of which were notified to Ofwat in advance and in respect of which no concerns were raised.

3.1.3 Anglian's Customer Engagement

(136) Anglian's plan responds to what is important to Anglian's customers. Anglian's customers repeatedly tell it that they want Anglian to prioritise safe, clean water, to secure resources for the future in the face of climate change, to take care of the environment and to support the most vulnerable in society

(137) Anglian's PR19 customer engagement programme was awarded an 'A' rating by Ofwat. For PR24, it refined its approach carrying out almost 35,000 in-depth engagements with household customers and over 2,500 engagements with non-household customers, specifically on its AMP8 plans.

(138) To ensure Anglian is delivering on customer expectations, it regularly engages with its customers and key stakeholders. Anglian's Independent Challenge Group ("**ICG**") is a group of independent experts and regulators, with an independent Chair, Craig Bennett, Chief Executive of the Wildlife Trust. The ICG challenges Anglian to ensure it is delivering

[47] Ofwat, Board leadership, transparency and governance – principles (January 2019) (See here).
[48] Anglian omitted only those parts of the 2018 UK Corporate Governance Code which cannot be sensibly applied to a company in private ownership.
[49] Anglian, Anchored by purpose: Building a resilient future (2024), page 128 (See here).

on customer priorities. The ICG was central to challenging the ambition of its plan to reflect customers' views. They provided robust challenge across a number of areas throughout the development of the plan.

(139) In 2022, Anglian re-established its Customer Board, where the company facilitates an open, two-way discussion between customers and Anglian's Management Board.

3.1.4 Anglian's track record on delivery

(140) The sheer scale and ambition of Anglian's investment programme inherently creates a delivery challenge.

(141) Anglian has worked closely with its alliance of delivery partners and external consultants like KPMG and Stantec to build extensive delivery risk mitigation strategies into its plan from the outset.

(142) Taking a step-by-step approach, Anglian looked extensively at the scale of its AMP8 plan and considered risks in the round. This resulted in seven core delivery strategies, built using robust insight and evidence, to enable successful delivery of its AMP8 plan; at the point of submitting its Business Plan it already had 85% of the work under contract and therefore were able to give assurance of the ability to deliver.

(143) However, Ofwat's decision to overload in successive price-controls the scope of activities, obligations and performance to be delivered from base without commensurate adjustments to allowances, which have proven to be mis-calibrated at AMP7 (see **Chapter G.1 (*ODIs*)**, Section 2). Together, this leaves important deliverables unfunded at PR24, to the detriment of customer, environmental and resilience outcomes. The consequences are profound and troubling for asset health (See **Chapter E.2 (*Asset health*)** and ODIs (see **Chapter G.1 (*ODIs*)**).

3.2 Anglian's Performance

(144) The Company has a strong long-term record of performance and remains a strong industry performer in absolute terms, (see **Chapter A (*Executive Summary*)**, Section 3).

(145) Anglian recognises that its performance in some areas, such as pollutions, requires continued improvement, and accepts that it will need to make underperformance payments in those areas until performance improves, even though in other areas such as leakage it continues its industry-leading performance.

(146) However, much of the gap between the PCLs and existing performance is unrelated to efficiency but instead to mis-specified PCLs and inadequate funding. Even with efficient spending and double-digit performance improvements, Anglian expects to still be in net underperformance payments of circa **-£240m** by the end of AMP8 in current planning scenarios, with risk of underperformance payments of over **-£500m**. See **Chapter G.1 (*ODIs*),** Section 3.

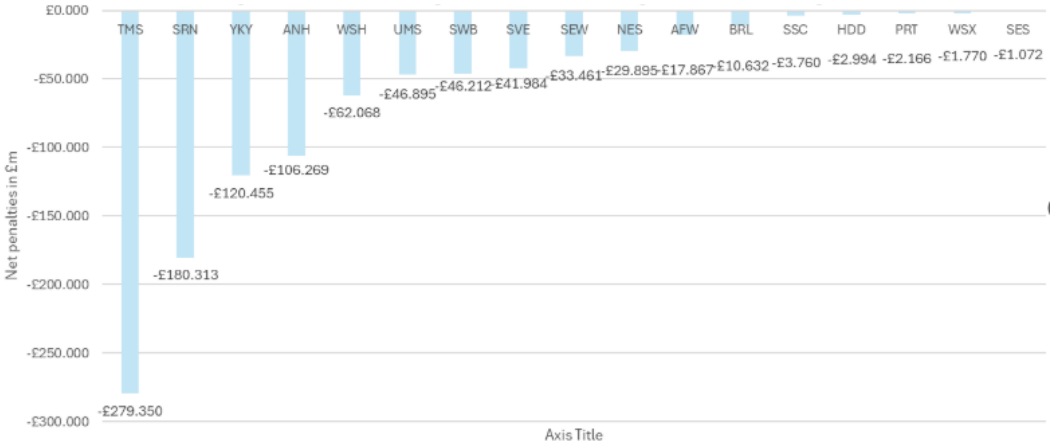
3.3 AMP7 Regulatory performance assessment

(147) At PR19, regulatory measures of company performance defined by Ofwat for AMP7 were the PCs, and the standards of performance were fixed as PCLs. Anglian's determination included 17 PCs that were common to all WaSCs and 29 that were bespoke to itself.

(148) Ofwat required the sector to deliver overly ambitious PCLs out of an insufficient base allowance, as evidenced by the fact that of the 12 PCLs Ofwat reports in the WCPR, in

2023-24, only two WaSCs, HDD and WSX, were meeting more than half of these, even though almost all companies overspent against their base allowances (by £8,567 million[50]). Across the industry (including both WaSCs and WOCs), the expected cumulative underperformance payments on common PCs for AMP7 stands at a net figure of £987.2 million[51].

Figure 13: AMP7 Common PCs Net Penalties (£m)



(149) During AMP7 Ofwat has used the performance of companies against a subset of their common PCs to categorise companies in its annual Water Company Performance Report (WCPR). The boundaries between its categories are not defined but appear to be thin – for example, in the 23/24 WCPR WaSCs such as Anglian that had missed seven PCLs were classified as "lagging", while those who had missed only six were classified as "average". On the basis of this simplistic approach, Anglian was classified as "Sector leading" on 2020/21, "Average" in 2021/22 and "Lagging behind" in 2022/23 and 2023/24. No companies were categorised as "Leading" in 2022/23 or 2023/24.

(150) The EA adopts a similar approach to categorise water companies' environmental performance in its annual Environmental Performance Assessment ("**EPA**")[52]. For each company it assigns a RAG assessment for each of seven different measures (six in 2021) according to their performance against a set of pre-determination thresholds. The sum of reds, ambers and greens is converted into an overall rating between 1 and 4 stars. Anglian was scored as 'red' for the serious pollution incidents measure for 2021, 2022 and 2023, which was sufficient for it to be classified as only 2 star. On the basis of its performance on serious pollutions and total pollutions in 2024 it will also be classified as 2 star for 2024.

(151) It is the same performance shortfall on pollutions that determines Anglian's categorisation as 'lagging' by Ofwat and two star by the EA. Anglian has acknowledged its need to improve significantly in this area and funded a substantial programme of action to do so, as set out above.

(152) While Anglian's lagging assessment shows that, like most other companies, it has failed to meet several of its AMP7 PCLs, this is not to say that its performance has not improved during AMP7. For thirteen of the common PCs sufficiently reliable data exist to allow us

[50] 2017/18 FYA CPIH-deflated price base.
[51] Includes all WaSCs and WoCs. Excludes C-MeX and D-MeX from Y5 projection. Uses PCC figures with Covid adjustment.
[52] Note the Environment Agency is currently consulting on changes to the EPA methodology for 2026-30. The EA plans to release its conclusions and the revised methodology in Spring 2025 (date to be confirmed).

to compare the company's average performance across the first four years of AMP7 with its average performance in AMP6. This shows that Anglian has improved in eight of those PCs, recorded the same performance in one and deteriorated in four. Besides pollutions, those four include mains repairs, where performance was badly affected by the extraordinary hot / dry spell of 2022 and the harsh winter of 2022/23.

(153) A glance at Ofwat's performance reports for AMP7 would suggest that the performance of the whole industry has been mediocre during the period. Anglian contends that this impression is misleading as the assessments have been made against PCLs set at PR19 that were incompatible with the funding that was allowed to deliver them. Anglian contends that rather than being an outlier with declining performance, its performance has generally improved.

3.4 Reaching beyond regulatory compliance and performance targets

(154) Anglian's strong performance goes beyond regulatory compliance and performance targets.

(155) Anglian seeks to seize opportunities for its customers and performance to benefit from innovation and development, wherever there are opportunities to do so in the context of the assets and operations of the water sector. To drive innovative culture, Anglian co-created the Explorer Index® (EI). This unique tool incorporates cutting-edge behavioural science principles, such as nudges and habit stacking, to guide individuals and teams in creating environments which promote exploration and innovation. For Anglian, the Explorer Index® presents a significant opportunity to systematically foster a culture of innovation internally, strengthening the organisation's capacity to tackle industry challenges and deliver forward-thinking solutions.

(156) To support Anglian's research ambitions, Anglian has sought diverse funding opportunities through UKRI Research Councils. Over the past 4 years, Anglian has secured approximately £200k in match funding to support Anglian's PhDs students and is working on securing additional £1.3 million to strengthen long term academic partnerships. This funding is looking to support Anglian's research programme focused on new treatment works associated with desalination and new reservoirs. In addition, Anglian is working on leveraging European Funding through the European Institute of Innovation and Technology (EIT) Knowledge and Innovation Community (KIC) in Water.

(157) Anglian has secured £25m to date for 8 projects from the Ofwat Innovation fund and has further supported the wider fund by providing subject matter expert knowledge on 22 projects and financial support for 2 more. Anglian has also deployed an Innovation PMO to manage and assure these projects as well as providing leadership and support to the Innovation fund via best practice close down report examples and strategic themed based project proposals with multiple water companies which has been included in the AMP8 fund design.

(158) Anglian also works with its supply chain to support its innovation culture and has assessed 180+ technologies and solutions in the last 12 months through various engagement routes, including its independent portal, the Water Innovation Network. Anglian continues to be avid supporters of UKWIR and Spring, helping to remove duplication wherever possible in the UK Water Sector, as well as supporting industry-wide knowledge dissemination through the creation of Anglian's AW Innovation Hub.

3.5 Beyond PCL performance

(159) The safety and wellbeing of Anglian's employees is of paramount importance. Anglian implemented ISO 45003 in May 2023 to ensure that Wellbeing is culturally embedded across the business, aligning with and complementing ISO 45001 Health & Safety. In 2023 Anglian was awarded The Royal Society for the Prevention of Accidents Gold Medal Award for its health and safety performance, its eighth consecutive gold and 18th consecutive year of recognition.

(160) Anglian has been making strides to increase diversity and inclusion throughout the business and to extend this support to communities in its region. In 2023, its Strength in Diversity project (aimed at breaking down barriers to work faced by marginalised groups across the region) was named Diversity and Inclusion Initiative of the Year at the Water Industry Awards 2023.

(161) Anglian's work to make its business more inclusive has resulted in external recognition:

(i) Ranked number one utility for senior female representation in the FTSE Women Leaders Review 2025;

(ii) Water Industry Awards Diversity and Inclusion Initiative of the Year 2023;

(iii) Institute of Water award for Commitment to Inclusion and Diversity 2023;

(iv) Disability Confident Employer 2023;

(v) Ranked number five on the 'Top 10 Best Performing Private Companies' in the FTSE Women Leaders Review;

(vi) Times Top 50 Employer for Gender Equality 2023.

(162) Anglian has consistently complied with relevant legislation, regulations and other needs, including requirements and commitments of standards, assessment schemes and specifications:

(i) ISO 45001 & ISO 45003 Health, Safety and Wellbeing;

(ii) ISO 9001 Quality;

(iii) ISO 14001 Environment;

(iv) ISO 55001 Asset Management;

(v) ISO 22458 & BSI Kitemark - Inclusive Service and Customer Vulnerability;

(vi) ISO 22301 Business Continuity;

(vii) PAS 808 Purpose Driven Organisations;

(viii) PAS 2080 Carbon Management; and

(ix) ISO 17024 Competence Management.

(163) Anglian was the first utility to have fully embraced the business continuity recommendations of the 2008 Pitt Review and to be certified by the International Organization for Standardization to the Business Continuity Management Systems standard, ISO 22301. This international standard recognises that the Company has the plans and systems in place to keep its business running and its customers can rely on the Company to be a resilient business.

3.6 Anglian's Plan and how it was built

(164) Anglian's PR24 Business Plan was developed through a comprehensive process that built in learning from the PR19 process, incorporated customer views, and had robust board oversight.

(165) Anglian's plan reflects what is important to customers who repeatedly highlight the importance of prioritising safe, clean water, securing resources for the future, taking care of the environment and supporting the most vulnerable. Anglian built on its A-rated PR19 customer engagement at PR24. Its plan was built and refined through in-depth engagements with 35,000 household customers and 2,500 non-household customers alongside extensive engagement with the region's stakeholders. This engagement has been subject to rigorous scrutiny from Anglian's ICG and Customer Board.

(166) Overall, Anglian's plan is informed by the four ambitions set out in its SDS and LTDS. These ambitions were developed in consultation with Anglian's customers when the SDS was refreshed in 2017 and reviewed in 2021. The LTDS sets out the pathway for achieving each of these four ambitions and Anglian's enhancement strategies set out the details of how investments will be delivered against each of these four ambitions at PR24.

(167) Each of Anglian's enhancement investments supports the delivery of these ambitions. The allowances in the FD to deliver each of these ambitions are set out below:

Figure 14: Final Determination enhancement allowances for each of Anglian's SDS ambitions

Source: *Anglian*[53]

(168) Anglian recognised the feedback from both Ofwat and the CMA on the relative efficiency of its plan at PR19. This led Anglian to significantly increase its efforts to ensure the efficiency of its PR24 investment plan. This is even more important than ever given the scale of Anglian's investment programme in AMP8.

3.7 Anglian's collaboration with Ofwat to improve base cost assessments

(169) On base costs, Anglian used Ofwat's model outputs to challenge its own costs, removing costs where they appeared inefficient. It only requested additional efficient costs beyond this where there was a clear need that met the criteria for a cost adjustment claim.

(170) Over the last ten years, Anglian has taken an active role in working collaboratively with Ofwat to improve the quality of base cost assessments. In particular Anglian would point to:

[53] Figures are to two significant figures. Figures are enhancement allowances after the application of frontier shift and RPE. Figures exclude allowances for enhancement activity reflected in base costs (e.g. network reinforcement, sludge quality improvements and enhancements to reduce the risk of flooding at properties).

(i) Work on restarting the process of annual industry data collection during PR19 after the cancellation of the June Return process left the industry – and Ofwat – without up-to-date data for PR14 and with the prospect of a repeat at PR19 if no action were taken;

(ii) Work on improving data quality of key cost drivers during PR24, in particular for Average Pumping Head ("**APH**"). Given the broad consensus that APH represents the best measure of topography, both for cost modelling and for the purpose of internal energy efficiency optimisation, Anglian were very pleased to help bring about an improvement in data quality as well as a homogenisation of approaches to data generation;

(iii) Active involvement in the Ofwat convened Cost Assessment Working Groups during both PR19 and PR24;

(iv) Work Anglian shared with Ofwat on Anglian's approach to addressing the impact of energy price movements in early AMP7 and the extent to which those movements were not (and could not be) reflected in the Ofwat cost assessment models. This approach formed the basis for the approach followed by Ofwat at the PR24 Draft and Final Determinations.

(171) Anglian has also actively engaged with Ofwat on a number of other matters and in particular on asset health, as explained further in **Chapter E.2 (*Asset health*)**.

3.8 Anglian's approach to enhancement cost efficiency

(172) Anglian applied a rigorous 'double-lock' approach to its enhancement cost benchmarking to ensure that the investments included in the Business Plan are cost efficient. This methodology included:

(i) Bottom-up cost benchmarking of the individual scheme components using outturn costs from schemes previously delivered; and

(ii) Top-down external benchmarks of costs to cross-check the bottom up build-up of cost against the external environment, including Ofwat's own cost models where available.

3.8.1 Double lock step 1: Bottom-up cost development

(173) Anglian developed a rigorous approach to cost estimation which follows a consistent approach across all projects allowing a transparent presentation of the unit rates used and their supporting assumptions. This system contains over 250,000 data points from over 32,000 projects and facilitates the production of over 4,300 cost models and the analysis of cost efficiencies and uncertainties materialised.

(174) Anglian uses an alliancing approach to deliver investment which incentivises delivery teams to work efficiently, taking advantage of the latest innovations in technology and thinking to reduce cost and carbon whilst maximising value. Capturing these costs means that as efficiencies are achieved in delivery they feed updates to the models used to estimate future projects. This ensures that customers receive the benefit of efficient delivery in future prices.

3.8.2 Double lock step 2: Top-down cost benchmarking

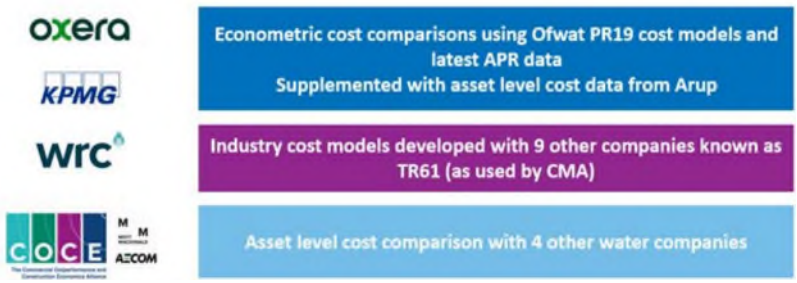
(175) In response to the feedback on the cost efficiency of its PR19 Business Plan, Anglian has significantly increased its focus on enhancement cost efficiency in developing its

PR24 Business Plan. A key part of this focus included seeking external benchmarking evidence where possible to provide a valuable cross-check and challenge to the bottom-up costs developed in Double lock step 1.

(176) In some instances, this benchmarking approach highlighted investment areas where the costs developed under step 1 appeared to be either significantly more, or significantly less efficient than the external benchmark. This prompted Anglian to further investigate costs and adjust its plan accordingly. In the example below on First Time Sewerage, Anglian's requested allowance posed a significant challenge to expected costs based on external benchmarking.

(177) Anglian engaged with a range of external partners to provide this insight using different approaches to achieve maximum coverage of the programme.

Figure 15: Anglian external partners



3.8.3 Enhancement benchmarking of First time Sewerage schemes

Anglian's plan includes investment to serve 17 rural villages currently using private sewerage systems such as septic tanks with mains sewerage. Anglian has a long history of bringing mains sewerage systems to customers to reduce the environmental impact of private systems. At PR19 Ofwat used an enhancement model to benchmark the costs of first time sewerage systems across the industry, inferring an efficient cost per property served. This led to Anglian's cost allowance being reduced by £4.7 million (from £23.9 million to £19.2 million). Since that time costs have increased with an expected actual cost by the end of the AMP of c. £30 million.

For PR24 Anglian completed detailed options assessment and feasibility work and its engineering teams advise that the estimated cost of this programme is £107.1 million capex. However, Anglian listened to Ofwat's challenge on efficiency in this area and used the PR19 enhancement model to derive an efficient allowance for this portfolio, in the same way that it constrained its base costs to the allowance from the econometric models. As a result, Anglian removed £49 million from its requested enhancement totex. Whilst Anglian will challenge itself to hit this level of efficiency, it acknowledges that it is unlikely that this single portfolio will achieve this in isolation.

(178) The external benchmarking of costs typically fell under the following categories:

(i) Scheme outturn costs

(ii) Ofwat cost data and models

(iii) Industry models from TR61 data set

(iv) Asset level cost comparison with other companies

(v) Market testing of costs

(179) Through this process, Anglian undertook external benchmarking on over 80 percent of its PR24 enhancement programme. Representing a significant step change in the scale and nature of challenge applied to its enhancement cases as part of its PR24 submission.

(180) Anglian updated this cost benchmarking approach during the price review. This included reflecting on the strength of Ofwat's enhancement cost models – using up-to-date data from across the industry and building these costs into its enhancement cost efficiency double-lock approach.

(181) To ensure the deliverability of its PR24 Business Plan, Anglian leverages its collaborative @one alliance partnership. This collaborative alliance brings together specialist expertise to efficiently execute the delivery of capital projects.

(182) Anglian's Board and Management Board plays a central role in the development of the PR24 plan and LTDS. Multiple deep-dive sessions were held with Board members, management and external advisors in a process which enabled the board to challenge the plan's development effectively and understand the underlying choices and assumptions. This supported the Board assurance and aligned with the companies' strategic objectives.

(183) The Board were actively involved in the evolving shape of the Business Plan, including in scrutinising deliverability. The Company took a three-step approach to assessing deliverability: (i) Dynamic Risk Assessment; (ii) Supplier market landscape review; and (iii) Deliverability risk assessment. Seven core mitigation strategies emerged from those steps. On the basis of this approach, the Board assured that it was satisfied that the Business Plan and its expenditure proposals were deliverable, conditional upon several factors, including the scope and scale of Anglian's proposed final PR24 plan submitted on 2 October 2023 being accepted in full by Ofwat, noting "*the company needs to manage the wide range of projects within the Plan as a whole. Assurance on the deliverability of our Plan is therefore conditional on the final determination enabling us to retain the ability to manage the diversity of risks across the plan. Further if new obligations arise from regulators then deliverability would have to be re-assessed*".[54]

[54] PR24 and Long Term Delivery Strategy: Board Assurance Statement October 2023, page 37 (See here).

Chapter D
Ofwat's duties

1 Introduction

Ofwat has a range of primary and secondary duties which it must balance when setting price controls. PR24 is the first price review to be conducted since the introduction of the new growth duty and a new environmental duty. Ofwat's PR24 FD claims alignment with its statutory duties as well as the UK government's strategic priorities and objectives. However, Anglian cannot reconcile its own FD with a reasonable and proportionate application of these duties and strategic priorities or with the principles of best regulatory practice.

Ofwat has failed to apply "equal weight" to its primary duties in PR24. It has placed too much weight on a narrow construction of the consumer duty, to "protect the interests of [existing] consumers" and too little weight on its resilience, financeability and growth duties, taking into account the scale of the challenges facing the sector and the weight of change in investment and risk required to meet it, as well as its duty to protect the interests of future consumers. The FD fails, in particular, to set an allowed return that will attract sufficient investment to address the challenges faced by the sector.

Ofwat's approach, compounded by its continued failure to take timely action to assess asset health, has a knock-on impact on Anglian's asset health and resilience plans. This failure also impacts Ofwat's resilience duty, its secondary sustainability duty, and its environment duty and the SPS, by failing to empower companies to take the action required to maintain and improve assets to build a resilient and sustainable long-term asset base.

Ofwat also undermines its growth duty, by delivering a package that risks being unable to attract the level of investment Ofwat requires the sector to secure in PR24 and beyond and which undermines the long-term resilience of this vital sector; and undermines its efficiency duty by disincentivising frontier performance and innovation: Ofwat has set a leakage PC and ODI from which Anglian is unable to earn rewards despite its frontier performance, and rejected capital maintenance funding for boundary boxes, which arise as a result of early meter roll-out.

Finally, Ofwat fails to live up to the principles under which regulatory activities should be transparent, consistent, proportionate and targeted. The PR24 FD marks a significant shift from previous AMPs, by endorsing an ambitious large-scale investment programme which will transform the sector. This is, however, entirely inconsistent with the FD's approach to funding that programme. The FD's aggressive penalty regime, which materially penalises even ambitious and significant improvements in performance, an overly restrictive PCD regime and associated reporting framework in AMP8, which undermines deliverability, are also at odds with the principle of proportionality.

Request to the CMA

The CMA is asked to consider the full range of duties to which is Ofwat is subject (including, but not limited to the Financeability, Growth, and Resilience Duties) in the round and to apply equal weight to these duties.

(184) The remainder of this chapter is structured as follows: Section II sets out the duties that Ofwat, and in turn the CMA, must apply in making the determination; and Section III

outlines why the FD is inconsistent with a reasonable and proportionate application of the Duties. Section IV summarizes.

2 Statutory Framework

(185) The CMA must make its Redetermination of PR24 for Anglian in accordance with the same statutory provisions and duties that applied to Ofwat when it made the disputed determination.[55]

(186) Those general statutory duties are set out in Sections 2 and 2A of the Water Industry Act 1991 ("**WIA91**") and Section 108 of the Deregulation Act 2015 ("**DIA15**") are as follows.

2.1 Primary and Secondary Duties

(187) Ofwat, and in turn the CMA must set price controls under the WIA91 in a manner which it considers best calculated to: (i) further the consumer objective ("**Consumer Duty**"); (ii) secure that the company's functions under the WIA91 are properly carried out ("**Functions Duty**"); (iii) secure that the company is able (in particular, by securing reasonable returns on its capital) to finance the proper carrying out of its functions ("**Financeability Duty**"); (iv) secure that licensees properly carry out their activities and functions; and (v) further the resilience objective (the "**Resilience Duty**").

(188) Subject to these primary duties, Ofwat and the CMA must also set the price control in the manner best calculated to, among other things: (i) promote economy and efficiency on the part of licensees ("**Efficiency Duty**"); and (ii) contribute to the achievement of sustainable development ("**Sustainability Duty**").[56] Ofwat, and in turn the CMA, must also have regard to the principles of best regulatory practice, (including the principles under which regulatory activities shall be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed).[57]

(189) Under the DIA15, Ofwat and the CMA is now also under a duty to promote economic growth (in particular, by considering the importance for the promotion of economic growth of exercising their regulatory function in a way that ensures that regulatory action is only taken when needed and any action taken is proportionate) ("**Growth Duty**").[58]

2.2 Government's Strategic Priorities and Objectives Statement ("SPS")[59]

(190) The Water Act 2014 introduced an additional duty for Ofwat, and in turn the CMA, to carry out the determination in accordance with Defra's SPS.[60] The current SPS came into force in March 2022 and identified four strategic priorities (with a series of underlying objectives), intended to complement Ofwat's other duties:[61]

(i) Protect and enhance the environment: Ofwat should work with other regulators and the Government to challenge water companies to improve their day-to-day environmental performance to enhance the quality of the water environment, and

[55] Section 12(3)(b) WIA91.
[56] Section 2(3) WIA91.
[57] Section 2(4) WIA91.
[58] Section 108(1)-(2) DIA15.
[59] Section 2A(2) and (9) WIA91.
[60] Section 2A(2) WIA91. See also: Water References: Competition and Markets Authority Guide, CMA205 (10 December 2024), para. 3.4 (See here).
[61] Department for Environment, Food and Rural Affairs, The government's strategic priorities for Ofwat (February 2022) (See here).

drive water companies to be more ambitious in taking action to protect and enhance the environment, particularly by taking appropriate action to improve water quality.

(ii) Deliver a resilient water sector: Ofwat should challenge the water industry to plan, invest in, and operate its water and wastewater services to secure the needs of current and future customers in a way that delivers value to customers, the environment and wider society in the long-term.

(iii) Serve and protect customers: Ofwat should push water companies to improve customer services and complaints handling to provide a better and fairer water service for all, which should include Ofwat challenging water companies to meet the needs of vulnerable customers.

(iv) Use markets to deliver for customers: where appropriate, Ofwat should consider how promoting competition in markets can drive long-term sustainable investment.

(191) The SPS requires Ofwat to clearly explain how major decisions, such as final determinations for price reviews, support the achievement of strategic priorities.[62] These priorities and objectives are closely aligned with Anglian's own strategic priorities, which were devised in consultation with customers, and constituted the key drivers for Anglian's Business Plan.[63]

2.3 Duty to have regard to need to contribute to environmental targets ("Climate Change Duty")

(192) The Water (Special Measures) Act 2025 also introduces a new requirement for Ofwat to have regard to the need to contribute towards achieving compliance by the Secretary of State with the relevant environmental target duties, where Ofwat considers that exercise or performance to be relevant to the making of such a contribution.

(193) The Climate Change Duty specifically requires Ofwat to have regard to the long term targets that will be set by the Secretary of State in relation to water and the net zero target; elements which are at the heart of Anglian's Business Plan for PR24.[64]

3 Interpretation of the duties in PR24

(194) Ofwat's duties must be balanced and applied in the round: the CMA has previously held that the duties are *"intended to complement, not conflict with, each other, and the principal duties should each be given equal weight"*. Individual duties need to be applied *"in the round"* in accordance with their *"statutory wording"* and not *"in isolation"*.[65] The CMA Water References Guide also states that the "*legislation does not set out any hierarchy of the primary duties, nor that they should affect any other obligation of the Authority to comply with any other duty, such as the Growth Duty*".[66]

(195) The WIA91, Regulatory Decisions and Governmental Guidance has clarified the interpretation of a number of the duties, in particular the following:

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62 Department for Environment, Food and Rural Affairs. The government's strategic priorities for Ofwat (February 2022) (See here).
63 Anglian Strategic Direction Statement 2020-2045 (See here).
64 The coming into effect of the relevant provision of the Water (Special Measures) Act 2025 is subject to regulations to be issued by the Secretary of State.
65 CMA, Bristol Water plc: A reference under section 12(3)(a) of the Water Industry Act 1991 (2015), paras. 3.3 and 3.4 (See here).
66 CMA, Water References: Competition and Markets Authority Guide, CMA205 (10 December 2024), para. 3.4 (See here).

(i) **The Consumer Duty** requires the price control to "protect the interests of [existing and future] consumers … ".[67] The consumer objective is "the interests of consumers through the lens **not only of short-term bills but also** … **long-term resilience** (such as the ability of infrastructure to cope with increasing demand and a changing climate)" and weight should be placed on "the consumers' interests not just in price levels but also in the **stability and quality of future services** which requires the ... [companies] to be able to meet their financial obligations and … **invest in water infrastructure**".[68]

(ii) **The Financeability Duty** requires that the Company is able (in particular, by securing reasonable returns on its capital) to finance the proper carrying out of its functions. This requires that an efficient water company should be able to earn a reasonable return (i.e., both debt and equity investors will earn sufficient returns to cover the costs of financing both existing and new investment) to finance its functions.[69] For returns on capital to be 'reasonable', the allowed return on capital should be at least equal to the cost of capital. The CC has previously noted that '*[a] return below the cost of capital would not be consistent with [the Financeability Duty]*'.[70]

(iii) **The Resilience Duty** requires the price control to: (i) secure the long-term resilience of water undertakers' supply systems and sewerage undertakers' sewerage systems … as regards environmental pressures, population growth and changes in consumer behaviour, and (ii) secure that undertakers take steps … to meet, in the long-term, the need for the supply of water and the provision of sewerage services to consumers, including by promoting (a) *appropriate long-term planning and investment by companies, and* (b) "*the taking by them of a range of measures to manage water resources in sustainable ways and to increase efficiency in the use of water and reduce demand for water so as to reduce pressure on water resources"*.[71]

(iv) The Resilience Duty was introduced "*to provide "long-term solutions … rather than moving from price review period to price review period*" and a "stronger focus on longer-term planning and investment".[72] This is reflected in the SPS which states, in particular*, "that a system that works in the enduring interests of consumers does not simply mean lower prices in the short-term at the expense of future generations. Ofwat should promote efficient investment, ensuring it is made in a way that secures long-term resilience and protects and enhances the environment, whilst delivering value for money … over the long-term"*.

(v) **The Growth Duty** requires Ofwat and the CMA to have regard to the desirability of promoting economic growth. In doing so, it must, in particular, consider the importance of ensuring that regulatory action is taken only when needed and is proportionate. The Growth Duty is complemented by statutory guidance ("**Growth Guidance**").[73] This sets out key drivers of growth, including innovation, infrastructure and investment, efficiency and productivity, and environmental sustainability. The Growth Duty is complemented by the Strategic Steer to the CMA, which specifically

67 Section 2(2A) WIA91.
68 CMA, PR19 Final Report (17 March 2021), para. 7 (See here).
69 CMA, PR19 Final Report (17 March 2021), para. 6 (See here).
70 Competition Commission, Determination on a reference under section 12(3)(a) if the Water Industry Act 1991: Bristol Water plc (4 August 2010), Appendix N, para. 2 (See here).
71 Section 2DA, WIA91.
72 Owen Paterson, House of Commons (November 2013).
73 Department for Business & Trade, Growth Duty: Statutory Guidance (21 May 2024) (See here).

requires the CMA to give appropriate consideration to prioritising pro-investment and pro-growth interventions.

(vi) **The Efficiency Duty** requires Ofwat and the CMA to exercise and perform their powers under the WIA91 in a manner that they consider is best calculated to promote economy and efficiency on the part of the **Company** in the carrying out of its functions.

(vii) **Climate Change Duty** requires Ofwat and the CMA to have regard to the need to contribute towards achieving **compliance** by the Secretary of State with the relevant environmental target duties, where Ofwat considers that exercise or performance to be relevant to the making of such a contribution.

(viii) **Best regulatory practice** requires, in particular, that economic regulation provide: "*a stable and objective environment enabling all those affected to anticipate the context for future decisions and to make long-term investment decisions with confidence'; and 'should not unreasonably unravel past decisions and should allow efficient and necessary investments to receive a reasonable return, subject to the normal risks inherent in markets*."[74] In *Bristol Water (2010)*, the CC found that significant changes to the regulatory framework or approach require greater justification, observing that *"differences that arise due to change in approach need to be particularly well justified, as there are benefits to a stable and well understood regulatory framework"*[75]

4 Application of the Duties

(196) The FD is inconsistent with a sound balancing of the duties outlined above. The FD not only fails to address sector challenges, but also (i) does not strike a fair balance between risk and return capable of attracting the level of investment the sector needs; (ii) fails to adequately address asset health risks, by missing, yet again, the chance to adopt forward-looking approaches despite the CMA's recommendations at PR19; and (iii) introduces a punitive ODI framework.

(197) The following chapters set out how the FD has failed to correctly balance the duties and how to ensure the correct balance.

[74] Department for Business Innovation and Skills, Principles for Economic Regulation (2011), page 5 (See here).
[75] Competition Commission, Determination on a reference under section 12(3)(a) if the Water Industry Act 1991: Bristol Water plc (4 August 2010), para. 9.21 (See here).

Chapter E.1
Base Costs

1 Introduction to Anglian's base cost requirements

Base cost allowances are stretched implausibly thin in the FD and are insufficient to finance Anglian's required activities in PR24.

Anglian included rigorously efficient costs in its PR24 Business Plan. The company applied the lessons learnt in PR19, aligning with Ofwat's econometric benchmarking models in full and rising to the efficiency challenge of basing its plan on the efficient costs determined by those models. This resulted in Anglian imposing a significant efficiency challenge for AMP8 versus its bottom-up assessment of its base AMP8 needs.

Anglian also submitted targeted, well-evidenced CACs in specific areas not accounted for in Ofwat's base models. This included CACs for its climate vulnerable mains, the higher costs of maintaining its frontier leakage levels and the replacement of failing boundary boxes following its early post-privatisation roll-out of meters to support demand management in the region. Each CAC aims to improve asset conditions / help manage water demand in the driest region in the UK.

The FD leaves Anglian with a nominal £286 million (5%) shortfall against its proposals, together with significant additional pressure on base costs. This is because Ofwat has:

(a) made poorly evidenced and inaccurate assumptions as to what base buys, including critically the level of implicit allowance for mains renewal. The FD has thereby underfunded the sector as a whole and Anglian to meet mains renewal PCDs (amounting to **£60m** of insufficient expenditure allowances for Anglian alone);

(b) departed from the principle accepted by the CMA at PR19 by not recognising the higher cost of maintaining frontier leakage levels, thereby underfunding Anglian by **£68 million** as well as more broadly across sector targets;

(c) misunderstood the distinct drivers for Anglian's requirement to replace failing boundary boxes resulting from its early roll out of meters, and therefore refused to grant the **£138 million** of funding required to address this important specific asset health risk;

(d) imposed an unsupported and unrealistic frontier shift challenge of 1% versus a stretching but more credible 0.8% challenge, thereby underfunding Anglian by a further **£36 million** at base (and **£77m** across overall totex allowances); and

(e) by combining the insufficient funding impact of each of the above with the effect of strict PCDs (which apply to 46% of base capex allowances for water networks plus), the FD removes the sufficiency and flexibility Anglian needs to manage capital maintenance risks generally, with specific risks for storage points and gravity sewers, creating a need for additional allowances for these assets if the FD stands.

These errors are exacerbated by Ofwat's decision to overload in successive price-controls the scope of activities, obligations and performance to be delivered from base (specifically significant service improvements – which have proven to be miscalibrated at AMP7 - and specific investment to maintain resilience) without commensurate adjustments to allowances (see **Chapter G.1 (*ODIs*)**).

Together, this leaves important deliverables unfunded at PR24, to the detriment of customer, environmental and resilience outcomes. The consequences are profound and troubling for:

(a) **Asset health**, where in successive price controls, the FD does not allow the forward-looking expenditure required to materially change delivery and investment to keep up with

asset deterioration and deliver the resilient network customers, businesses and the environment need. See **Chapter E.2 (*Asset health*).**

(b) **Resilience**, where Ofwat at DD classified all of Anglian's enhancement resilience investments as covered by base allowances, including proposed investments to address single points of failure in water supply, and provided an arbitrary resilience uplift allowance from base costs irrespective of an actual resilience needs assessment.[76]

(c) **ODIs,** where certain performance targets are simply impossible to meet as they are set based on unrealistic and unevidenced expectations of what "base buys". The result is that the sector faces the inevitability of penalties, not because of inefficient delivery, but because the ODIs are built on the unviable foundation of an over-stretched base. See **Chapter G.2 (*ODIs*)**.

These are not new issues. Concerns on asset health, wider resilience and the calibration of ODIs were raised in PR19. Their continuation at PR24 continues to create risks not only for performance and asset health, but also the future profile of customer prices which will need to rise significantly to address future needs, and the need to attract significant equity at a reasonable return. Combined, they highlight that the FD does not take appropriate and transparent action to drive the step-change required in these critical areas in PR24.

Anglian therefore requests that the CMA:

(a) recognise the evidence that base allowances can only reflect a renewal rate of no more than 0.2% (as opposed to the FD's 0.3% assumption) and resolve the full expenditure shortfall in Anglian's expenditure requirements to deliver its full PCD (increasing funding by **£60m**);

(b) adjusts Anglian's leakage base allowances by **£68 million** to account for the increased marginal cost of maintaining leakage levels at the frontier;

(c) makes a cost allowance of **£138 million** to account for replacement of failing boundary boxes. Anglian propose this be subject to a clawback mechanism to protect customers from any uncertainty between forecast vs. actual replacement rates by the end of AMP8;

(d) reduces the frontier efficiency challenge from 1% per annum to a more credible 0.8% per annum (which would result in a **£36 million** increase to Anglian's base allowances – and a **£77 million** increase to its overall totex allowances – based on the FD);

(e) alternatively, if the CMA is not minded to make the adjustments requested above, Anglian requests **£150 million** funding for storage points and gravity sewers, subject to a use-it-or-lose-it-mechanism to address the asset health risks for these asset classes created by the base cost pressures in the FD; and

(f) update base and retail models with the most recent available data, and the most recent forecast data for the calculation of business rates.

(198) The rest of the Chapter is structured as followed: (i) Overview of base shortfall; (ii) Mains renewal; (iii) Leakage; (iv) Boundary boxes; (v) Frontier shift; (vi) Gravity sewers and storage points; (vii) Utilising updated data; (viii) the significant impact of the FD and implications for Ofwat's duties; and (ix) Anglian's requests to the CMA. In support of its submissions, Anglian submits new reports by Oxera on Leakage, and by Economic Insight on Frontier Shift, and provides updated data / current forecasts regarding mains

[76] Ofwat, DD water resilience enhancement model - 'ANH SPOF' tab (2024), cell C13 (See here).

renewal rates, leakage and on boundary box / metering hours, gravity storage and sewerage spend forecasts, and anticipated AMP8 penalties.

2 Overview of shortfall in Base in the FD verses Anglian's Request

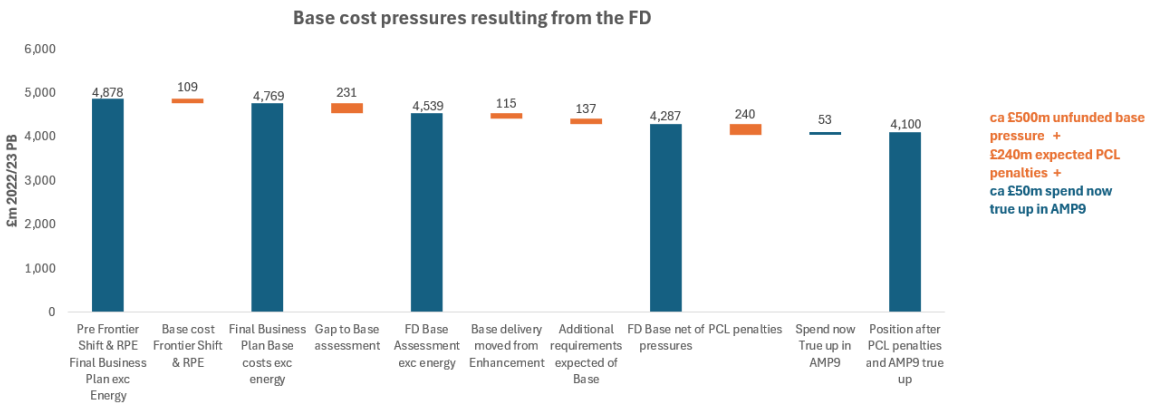
(199) Anglian was granted £5,996 million in base allowances at FD (post frontier shift and real price effects ("**RPEs**")). This results in a £286 million / 5% nominal funding gap as against. Anglian's proposals. However, as set our below, this masks the true scale of the bast cost pressure the industry, and Anglian, is once again facing.

(200) First, as base allowances mostly concern uncontrollable or non-discretionary costs (eg. business rates, EA permit and Ofwat licence fees and energy costs) this amounts in practice to an even larger funding gap for Anglian's controllable costs, which includes capital maintenance spend. Anglian therefore faces a 20% funding gap when excluding just business rates, EA fees, Ofwat licence fee and energy costs, and a 28% funding gap when adding industry-wide CACs (given Anglian loses CAC funds that are not spent accordingly). Costs like capital maintenance will therefore suffer most from the base shortfall (despite being vital for resilience).

(201) Second, Anglian's original base cost requests were the result of rigorous internal efficiency-testing and Anglian's plan was both efficient (utilising Ofwat's models as above) and ambitious. Anglian therefore cannot deliver its PR24 requirements with such a funding gap.

(202) Third, the funding gap flows from Ofwat's decision (even part-way through the PR24 process) to pile increasing targets, resilience demands and performance requirements into base without providing commensurate funding, and making unjustified assumptions as to what Base buys. This is illustrated by **Figure 16** below:

Figure 16: Base cost pressures resulting from the FD



Source: *Anglian analysis*[77]

(203) **Figure 16** shows that (excluding energy costs): (i) Anglian's base allowances were artificially reduced by £109 million due to the impact of RPEs and the overly-stretched 1% p.a. Frontier Shift (ii) Anglian was not awarded £231 million of costs requested in its final Business Plan; (iii) is required to deliver £115 million of Anglian's requested enhancement funding via base (*relating to flooding mitigation, network reinforcement and sludge growth, together with smart metering costs moved from enhancement to base at*

[77] Anglian, Base pressures stretch graph workbook (2025) (Annex 006).

FD); (iv) must bear £137 million of additional requirements not anticipated at Business Plan via base (*namely the additional funds needed to deliver Ofwat's wrongly assumed implicit allowance for mains renewals and the additional charges for rates*); (v) must spend an additional £53 million on base activities (*energy*) without recovering that cost until AMP9 (*applying additional pressure on equity on top of the significant investment programme already required at AMP8*); and (vi) anticipates £240 million in AMP8 penalties against overly-stretching ODI targets that must be funded from base spend. This in practice leaves Anglian underfunded by c. £500 million (including a £36 million delta between the FD's Frontier Shift and Anglian's original business plan) even before the anticipated penalties. This is on top of the efficiencies already baked into Anglian's Business Plan.

(204) This outcome is rendered even more challenging by: (i) the introduction, for the first time at PR24, of PCDs, which were only extended to base allowances at DD (despite the PR24 Final Methodology only envisaging PCDs for enhancement spend) (see **Chapter G.2 (*PCDs*)**);[78] and (ii) that this marks a continuation (and exacerbation) of Ofwat's approach of overstretching both allowances and performance commitments at PR19 (which are shown to have been mis-calibrated by the comparison between base overspend and performance penalties, see **Chapter G.1 (*ODIs*).** Moreover, the energy true-up at the start of AMP9 will apply further pressure in terms of equity on top of Anglian's extensive enhancement programme while, to the extent there is any true-up from wages, this pressure will be further exacerbated given the long delay in finalising the data on which that true-up is based.

(205) While Anglian's allowances are higher than relative to PR19 (where it was awarded £5,141 million when adjusted for 2022-23 prices[79]), this is a natural consequence of the fundamental step-change in investment, combined with population growth, asset base growth and the significant increase in certain unavoidable expenditure items, such as rates, energy and EA permit fees. The ultimate outcome at PR24 is that base is stretched beyond what is evidenced or realistic – in stark contrast to the high evidential bar for successful CACs. The impacts of this approach on confidence in the regulatory framework are detailed in **Chapter B (*Why Anglian is at the CMA*)**.

3 The FD underfunds base allowances

(206) The FD concludes that its "*expenditure allowance is sufficient for all companies to meet their statutory and regulatory requirements and deliver their performance commitments over the 2025-30 period, if operating efficiently*"[80] and that Ofwat "*have provided sufficient base expenditure allowances to maintain and improve asset health*".[81] For the reasons cited above and the ODI position set out in **Chapter G.1 (*ODI*s)**, this assertion is not supported by credible evidence.

(207) For the purposes of this Redetermination, Anglian has limited its specific base challenges to: mains renewal, leakage, boundary boxes, frontier shift and base-stretch implications for storage points and gravity sewers. Anglian further requests the CMA to adopt the most recent data and information on business rates in its Redetermination.

[78] Please see, for example, Ofwat, Our final methodology for PR24 (December 2022), pages 90 and 142 (See here).
[79] Ofwat, PR24 final determinations, Expenditure Allowances (February 2025), page 382 (See here).
[80] Ofwat, PR24 final determinations, Expenditure Allowances (February 2025), page 1 (See here).
[81] Ofwat, PR24 final determinations, Expenditure Allowances (February 2025), page 18 (See here).

3.1 Mains renewal

(208) Ofwat makes incorrect and unevidenced assumptions as to what base buys for mains renewal, driven by the rate Ofwat considers companies *should* achieve, while incorrectly dismissing evidence of what is attainable with this funding level.

3.1.1 Anglian's request for mains renewals funding

(209) Anglian submitted a mains renewal CAC for climate vulnerable mains in Anglian's region.

(210) In its CAC, Anglian proposed an average renewal rate of 0.54% over AMP8, with 0.2% to be delivered within base allowances, and 0.34% from the CAC. Anglian's proposed CAC was valued at £198.1m with a supporting delivery PCD.

(211) This claim has been informed by Anglian's previous long-standing work to understand the climate impact on its assets and the implications for customer over the longer term. The work on the vulnerability of its asset base to climate change was shared previously with the CMA as part of the PR19 redetermination, subject to third-party submissions, and shaped Anglian's LTDS.[82]

(212) For the CMA's awareness, Anglian originally proposed to address these climate challenges via a strongly evidenced mains renewal enhancement claim subject to a PCD.[83] Anglian subsequently submitted its claim as a CAC, highlighting its asset health need, after Ofwat dismissed its enhancement claim, and that of others (eg. Northumbrian).

3.1.2 The mains renewals allowance at FD

(213) At FD, Ofwat set out conditions for a sector-wide CAC for base mains renewal allowances.[84]

(214) However, Ofwat took the view that sector base costs already funded a 0.3% mains renewal rate, rather than the 0.2% Anglian submitted. It also decided that the poor performance of certain companies (not Anglian) meant that they must deliver more than a 0.3% renewal rate from base (without adjusting their allowances to do so). These companies were identified on the basis of: (i) asset condition deterioration between PR09 and PR24; and (ii) a renewal rate lower than the sector average.[85]

(215) Ofwat agreed that Anglian's CAC met Ofwat's strict need and efficiency criteria. This resulted in Anglian receiving an additional £144.4 million to fund a 0.54% renewals rate. Anglian was one of nine companies that Ofwat assessed as having below average asset condition and who received adjusted allowances to address this.[86] However, Ofwat only partially granted Anglian's claim given its (erroneous) position that base allowances already reflected the expenditure associated with a 0.3% rather than a 0.2% renewals rate.

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[82] See, for example, Professor Tim Farewell's submissions to the CMA for the PR19 redetermination (See here and here).

[83] Anglian Water, Our PR24 Business Plan (October 2023), page 8 (See here).

[84] Without adjusting the allowances of the affected companies to do so, Ofwat applied a higher renewal rate for certain companies due to a deterioration in asset conditions between PR09 and PR24 and relatively low mains renewals rates historically, so that customers do not pay twice. Ofwat did not apply such an unfunded increase to the renewal rates for Anglian (beyond 0.3%). The FD's approach is wrong for the reasons set out in **Chapter E.1 (*Base costs*)**.

[85] Ofwat, PR24 final determinations: Expenditure Allowances (February 2025), pages 34-35 (See here).

[86] Ofwat, PR24 final determinations: Expenditure Allowances (February 2025), page 38 (See here). Ofwat agreed there was compelling evidence of why Anglian's network may be worse than others, and its region's combination of the highest proportion of: (i) asbestos cement ("AC") mains (which have higher burst rates regardless of pressure management) and: (ii) class 6 shrinkable soils made it more likely that trends of increasing AC mains bursts continue. See Ofwat, PR24 Final Determinations – Mains Renewal cost adjustment model, Tab ANH (See here).

(216) Ofwat, at FD, also attached a PCD to all PR24 mains renewal activities, subject to non-delivery and time incentives (discussed in **Chapter G.2 (*PCDs*)**).

3.1.3 The FD's conclusion on what base buys is incorrect and poorly evidenced

(217) The FD's assertion that base funds a 0.3% per year renewals rate is incorrect and poorly evidenced, and leaves the sector materially underfunded for at least one-third of the sector standard mains renewal PCD. This has implications both for the level of mains renewal achievable and significant consequences for the wider base expenditure allowances.

(218) To derive the assumed rate of 0.3%, Ofwat uses an unweighted average of mains renewal rates between 2011–12 and 2022-23.[87] The FD's approach is incorrect as:

(i) Not weighting data points leads to undue reliance on small, unrepresentative networks. Portsmouth Water has a high rate of mains renewal but an insignificant portion of mains in England and Wales (1%). Its performance therefore carries a weighting of nearly 6% (as one of 17 companies) rather than the 1% that it should (in proportion to its length of network).

(ii) Ofwat excludes the most recent year of data (2023-24) in its final determination, justifying this on the grounds that "*We chose not to include 2023-24 outturn data based on a further deterioration in renewal rates, with over half of the sector delivering at a rate that is at or below 0.1%. We do not consider this reflective of what base allowances deliver, and have therefore excluded this year from our calculation*".[88] Ofwat does not explain why the most recent year's costs can be appropriate to inform cost modelling and the catch-up benchmark (in which 2023-24 has a weighting of 20%), but not the level of mains renewal funded from base.

(iii) A twelve-year average dilutes the most relevant evidence on renewals (which have significantly decreased since the earlier years in Ofwat's models). This produces a skew that is inconsistent with Ofwat's approach to the catch-up efficiency challenge, where five years of data is used so as to also "*put more weight on more recent data to reflect the recent efficient levels and cost pressures faced by the sector*".[89] While each year over the 2011-12-23-24 period is assigned an equal weighting in Ofwat's econometric base cost models (1/13, i.e. approximately 7.7%), the actual influence of the last five years on companies' base allowances is substantially amplified by their direct impact on the calculated catch-up benchmark, which Ofwat ultimately uses to adjust (reduce) the base cost allowances for the industry.

(iv) Ofwat does not reflect the greater weight that is placed on the costs of companies assessed to be in the upper quartile of cost efficiency, when assessing the level of mains renewal funded through base. The companies that form the cost benchmark had an average rate of mains replacement of 0.18% over the last five years. If the 0.3% assumption was justified, which it is not, it would invalidate the catch-up efficiency adjustment, as the benchmark is based on companies' with lower replacement rates. If the benchmark companies had replaced mains at a minimum rate of 0.3% over that period, their cost base would have been significantly higher,

[87] Ofwat, PR24 final determinations: Expenditure Allowances (February 2025), page 37 (See here).
[88] Ofwat, PR24 final determinations, Expenditure Allowances (February 2025), page 34 (See here).
[89] Ofwat, PR24 final determinations, Expenditure Allowances (February 2025), page 26 (See here).

and their cost-efficiency would have been commensurately lower—resulting in a less stringent catch-up benchmark.

(219) These flaws are evidenced by the gap between Ofwat's modelled assessment (which should produce an implicit allowance that broadly equates to actual renewal rates) and practical realities. Indeed, applying Ofwat's rate to the 2012-2023 period implies a much higher renewal rate (12,373km) than has in fact occurred in practice (9,951km).[90]

(220) To accurately understand the historic average renewal rate to calculate implicit base funding, Ofwat should have weighted data according to scale and/or utilised the most recent data to align with the benchmark period used by Ofwat to determine the base catch-up efficiency challenge (2019/20-23/24). Anglian presented a range of weighted and unweighted models over a 5-12 year period in its Mains Renewals CAC.[91] All produced an average renewals rate closer to 0.2% either across the industry as a whole or for WaSCs only.[92] Indeed, weighted models from 2011-2023 show 0.24% for all companies and 0.21% for WaSCs, while a 0.20%-0.21% range is produced for the unweighted upper quartile companies over five year periods. Collectively, these models are superior to Ofwat's assumption of 0.3% which is demonstrated to have overestimated the level of activity funded from the base expenditure provided in the FD.

(221) In addition, the non-modelled evidence Ofwat cites to justify a 0.3% renewal rate is not relevant.

(222) First, Ofwat states that eight companies "*forecast*" a 0.3% rate, whilst another eight "*did not share a common view*" on what base buys.[93] This does not prove that 0.3% is or was considered to be adequately funded (noting, for example, that (i) Dŵr Cymru, cited by Ofwat as utilising 0.3%, explicitly disagreed that allowances were sufficient for this level; and (ii) noting also that Ofwat states that 11 of 16 companies disagreed with Ofwat's view at DD that base buys 0.3%).[94]

(223) Second, Ofwat states that current renewal rates are too slow, and 0.3% will ensure sector movement towards a more sustainable rate.

(224) Anglian agrees with Ofwat (and the NIC, who have identified material concerns in this space)[95] that mains renewal rates need to increase. Indeed, Anglian has itself committed to a 0.54% rate at PR24, noting that a 0.3% rate will still result in c. 6,450 bursts per year by 2050,[96] and addressing climate vulnerable mains is an important part of Anglian's LTDS. 0.54% will support Anglian in building towards a c. 0.8-0.9% rate at AMP9 that can keep pace with asset deterioration.[97]

(225) However, this need for increased renewals is a different (and irrelevant) consideration to what renewal rate is achievable with the allowances provided driven by an approach to setting base allowances derived by econometric models utilising historic data. If Ofwat wishes companies to achieve a 0.3% base renewal rate in future, it must fund them to do so. It has not.

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90 Anglian, Mains Renewal CAC (PR24 Draft Determination Representations) (August 2024), page 13 (See here).
91 Anglian, Mains Renewal CAC (PR24 Draft Determination Representations) (August 2024), page 15 (See here).
92 Anglian, Mains Renewal CAC (PR24 Draft Determination Representations) (August 2024), page 15 (See here).
93 Ofwat, PR24 Final Determinations: Expenditure Allowances (December 2024), page 26 (See here).
94 Ofwat, PR24 Final Determinations: Expenditure Allowances (December 2024), page 33 (See here).
95 In a letter from James Heath, CEO of the NIC, to David Black (Ofwat CEO) in May 2023, the NIC noted that asset replacement rates in the water sector 'need to be significantly higher' than 0.4%. NIC, Letter to Ofwat on asset management (18 May 2023) (See here).
96 See Anglian, Mains Renewal CAC (PR24 Draft Determination Representations) (August 2024), page 7 (See here).
97 See Anglian, Mains Renewal CAC (PR24 Draft Determination Representations) (August 2024), page 7 (See here).

(226) It is noted that this underfunding is compounded by the FD's mains renewal PCD, which is not in customers' interests, as it requires Anglian to focus efforts on categories of mains that poorly correlate to burst history. This should be amended, per **Chapter G.2. (*PCDs*)**.

3.1.4 Mains renewal funding must increase to enable sustainable renewals

(227) Ofwat's aim was "*to move the sector towards a more sustainable mains renewal rate and to improve asset health over the 2025-30 period*".[98] Erroneously inflating the implicit base allowance means companies are not funded to achieve this.

(228) Even if Anglian ring-fences additional funding for mains renewals from within its insufficient base allowances, a similar approach for other asset classes will quickly result in more than Anglian's total allowance being ringfenced to one asset or another, a process further complicated by the pressures of PCDs across a significant proportion of base allowances that materially restricts companies' ability to manage their portfolio of risks (see **Chapter G.2** (***PCDs***)) and the need for asset renewals across many areas (see **Chapter E.1 (*Asset health*)**).

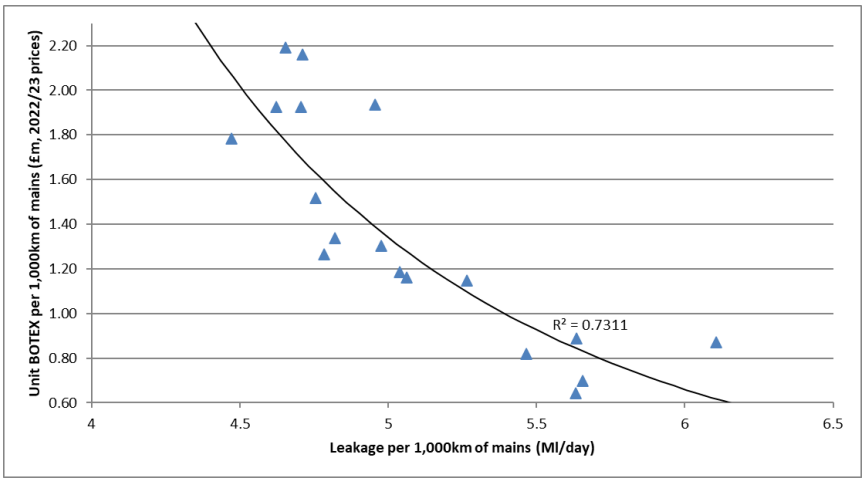
(229) The implicit allowance should therefore be acknowledged to cover a 0.2% renewal rate, rather than 0.3%. Based on Ofwat's FD approach, this would result in Anglian being awarded an additional £60m to achieve a 0.54% renewal rate and would also have implications for other companies' allowances.

3.2 Leakage

(230) The PR24 FD repeats previous shortcomings by failing to recognise that industry base leakage funding is insufficient for frontier performers, given higher increased marginal cost of maintaining lower levels of leakage reductions, as explained throughout this section and to the CMA at PR19.

(231) The figure below presents updated Anglian marginal costs of leakage reduction from 2006/07 to 2023/24. This shows the higher marginal cost of leakage as leakage performance improves.

Figure 17: Marginal cost of Anglian leakage reduction (2006/07-2023/24)



Source: *Oxera analysis*

[98] Ofwat, PR24 Final Determinations: Expenditure Allowances (February 2025), page 31 (See here).

(232) PR19 concluded (with support from the CMA's engineering advisor), that there was a link between current performance on leakage and the costs to maintain it, and that frontier companies are likely to be incurring greater costs.[99]

3.2.1 Anglian's request for leakage funding

(233) Anglian is a leading company for leakage levels (being one of only two companies that have normalised leakage levels below the upper quartile level both per property and per km).[100]

(234) Leakage control is critical to Anglian as the driest region in the UK, necessitating the minimisation of water-wastage for sustainability and resilience. Anglian therefore has a particularly strong need relative to others to maintain low levels, and this is a top priority for its customers.[101] Anglian also helps to advise and guide other water-companies in the industry on leakage planning, and actively participates in industry research through UKWIR, the Ofwat innovation fund, the Water UK leakage network and other forums to ensure that Anglian always applies industry leading techniques.

(235) Following the CMA's 2020 redetermination, Anglian received a PR19 leakage allowance of £91.9 million (after clawbacks through the Tier 1 incentive rate)[102] to maintain and improve its frontier position, split between a base uplift of £50.3 million and an enhancement allowance of £41.7 million.[103] Economic consultants Oxera estimate that Anglian receives an AMP7 implicit allowance of c. £275 million[104] through the base econometric models for maintaining leakage levels[105]. Over the first four years of AMP7, Anglian spent c. £310 million to maintain leakage levels: around 20% above its PR19 base funding to date. [106] With a current estimate of £83 million for 2024/25, the total AMP7 expenditure for maintaining leakage levels is expected to reach c. £390 million – still around 20% above its PR19 base funding, corresponding to a c. £68 million shortfall. Without the £50.3 million base uplift granted by the CMA - a similar uplift having been entirely rejected on principle by Ofwat for PR24 - Anglian's PR19 funding gap would have increased to around 40%, corresponding to a c. £118 million shortfall.

(236) In its PR24 Business Plan, Anglian submitted a CAC of £67.6 million for the higher costs incurred to maintain its frontier position. The need for this CAC (which was submitted pre-

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99 CMA, PR19 Final Report (March 2021) (See here). At para 8.82, the CMA stated that "*At a high level, Anglian, Bristol and Yorkshire all argued that maintaining lower leakage levels was more expensive than maintaining higher leakage levels. Our* engineering *adviser was of a similar view. To maintain a lower level of leakage, a company needs to spend more money on both capex… and opex..*". The CMA went on, at para 8.59 to state that "*Since we conclude that there is a link between current performance on leakage and the costs to achieve that level of leakage, then those companies currently performing better than upper quartile are likely to be incurring more cost than will be reflected in the base cost models. In order to maintain their current level of performance, these high performing companies would be expected to incur costs that exceed the implicit allowance for leakage costs that is included in the base cost allowance*."

100 Anglian, PR24: Anglian Water's Business Plan for AMP8 (2025-2030) Draft Determination Representations, figure 12, page 44 (See here).

101 Anglian, Leakage Cost Adjustment Claim PR24 Draft Determination Representations (August 2024), page 13 (See here).

102 The CMA included a clawback mechanism (through a Tier 1 penalty rate) to ensure that any leakage reduction that Anglian expected to deliver through enhancement allowances during AMP7, but did not, would be returned to customers (see **Chapter G.2 (*ODIs*)**).

103 These figures apply the 2022/23 price base to the original allowances awarded by the CMA at PR19.

104 Due to the lack of leakage expenditure data before 2017/18, this figure has been estimated using the additional four or five years of data (depending on whether the PR19 FD or the CMA redeterminations are taken as reference) considered in the PR24 modelling suite compared to the PR19 modelling suite. However, the main drawback of this approach is that the implicit allowance may be artificially inflated due to the uncaptured increase in companies' leakage expenditure costs between AMP5/AMP6 and AMP7, as the (higher) leakage costs from 2017/18-23/24 are used as a proxy for those incurred over the entire modelling period used at PR19 (2011/12-18/19 or 2011/12-19/20). This could particularly overestimate AMP5 leakage expenditure, as the ODI regime had not yet been introduced at that time.

105 This estimate can be found in the datapack provided by Economic consultants Oxera. See Oxera, Supporting analysis files for assessing the efficient costs to maintain frontier leakage performance (March 2025) (Annex 007).

106 This is calculated as 310/((275+50.3)*4/5) to remove the year-5 base allowance.

DD) was conditional on Ofwat not already accounting for the higher leakage costs associated with maintaining frontier performance.[107] Anglian's expectation was that Ofwat's DD would account for higher leakage costs if it were to continue to set a more challenging PCL for frontier leakage performers than for companies that have higher levels of leakage - consistent with Ofwat's and the CMA's position at PR19.

(237) The CAC was based on either adding leakage per km of mains to the relevant base cost models or developing separate models of leakage and non-leakage treated water distribution costs – estimating an average claim (net of any implicit allowance) of c. £67.6 million. These modelling approaches differed from the CMA's PR19 Leakage model, which would have implied an adjustment of c. £81 million based on preliminary forecasts for AMP8.[108] Even though following the CMA's PR19 models would have resulted in larger funds for Anglian, Anglian informed Ofwat that it was pursuing the more conservative figure from its modelling data,[109] consistent with Anglian's rigorously efficient approach to its base claims.

(238) Responding to concerns on statistical significance raised by Ofwat at the DD stage, Anglian submitted a supporting paper by Oxera. This used data collected by Ofwat on total leakage costs, and identified a statistically significant relationship between total leakage costs and activity to (i) maintain lower leakage levels; and (ii) to reduce leakage. Anglian's historical spend was consistent with the modelled cost prediction from this model over the historical period, and Oxera's modelling suggested the cost net of any implicit allowance required to meet Ofwat's DD PCLs would need an uplift to Anglian's AMP8 leakage allowance of £100–£195 million. Nonetheless, Anglian maintained the lower CAC claim of c. £68 million it had submitted at the Business Plan stage.

3.2.2 The FD on leakage funding

(239) At PR19, both Ofwat (£18.8 million) and the CMA (£50.3 million)[110] provided Anglian with additional funding to reflect the higher costs of maintaining lower leakage levels. However, in the PR24 FD, Ofwat reversed away from this principle. Ofwat however, did not seek to develop its own approach to ensuring that companies that faced a more challenging leakage PCL were adequately funded to maintain existing levels of funding. This is despite Ofwat acknowledging that "*the level of expenditure allowances is inextricably linked to the service levels a company can be expected to achieve*".[111]

(240) Instead, Ofwat assumes that any costs associated with maintaining a higher level of performance are implicitly included within the base models, despite that the relevant cost models for Treated Water Distribution ("**TWD**") structurally underpredict costs for frontier companies such as Anglian, as shown in **Figure 18** below. Ofwat rejected Anglian's CAC on the basis that the base models provide sufficient funding even for frontier companies.[112]

3.2.3 The FD underfunds Anglian for leakage

(241) The FD significantly underfunds Anglian's essential leakage activities.

[107] Anglian, BP Cost Adjustment Claims, page 4. (See here)
[108] Replicating the CMA's PR19 approach using Anglian and the industry's latest forecasts results in a base adjustment of c. £90m.
[109] Anglian, PR24 Business Plan (2023), page 27 (See here).
[110] These figures utilise the 2022/23 price base.
[111] Ofwat, PR24 Introductory Submission to the CMA (2025), page 3 (See here).
[112] Ofwat, PR24 Base Cost Adjuster Feeder Model (2024), Tab CAC2, Column D (See here).

How does Anglian detect and fix leaks?

Anglian's adopts a data-led approach to maintaining leakage levels that integrates advanced technologies, smart meters and industry expertise.

Anglian's proactive leakage team utilise integrated leakage and pressure management system to detect and address potential issues systematically. The network is monitored using a mixture of fixed hydrophone network, enabling precise location of leaks on plastic pipes, high-speed pressure loggers that swiftly identify pressure drops associated with large leaks, and lift-and-shift accelerometers that detect leaks without extensive nighttime work requirements. Satellite imagery is also deployed specifically for rural areas.

Further, Anglian's intensive leak detection process targets harder to locate leaks using tools like thermal imaging drones, which spot soil temperature variations, detection dogs that locate leaks in rural terrain, and temporary metering to segment larger areas for precise leak identification. Skilled network technicians also diligently investigate customer-reported leaks. Anglian has a repair team, consisting of approximately 100 teams, that effectively resolve issues using minimal excavation techniques to expedite repairs and reduce disruption.

Anglian further ensures water pressures are optimised and managed via a network of pressure reducing valves, variable speed pump controls and pressure transient monitoring equipment, and installs smart-meters to help identify continuous flow into properties. Controlling leaks is therefore a combination of labour (e.g. technicians), technology (e.g. noise loggers) and industry expertise.

(242) PR19 concluded (with support from the CMA's engineering advisor), that there was a link between current performance on leakage and the costs to maintain it, and that frontier companies are likely to be incurring greater costs.[113]

(243) This remains the case. As a matter of operational reality, maintaining the same leakage reduction level is significantly more challenging in a low than high leakage environment:

(i) As leakage reduces, it becomes harder to locate leaks (as the average size of the leaks becomes smaller). This requires more sophisticated (and more expensive) technology to detect and monitor systems.

(ii) Frontier companies will also not have the same range of choices available to maintain leakage reduction as other companies who may not yet have deployed certain options, such as pressure management and transient logger installations, which will often be one-off investments rather than ongoing activities.

(iii) As larger leakage reduces, more repairs are needed to address smaller leaks identified, and the leakage stopped per repair is smaller – so that more fixes are required to achieve the volumes of leakage saved previously. This means that more site-visits and more employees are necessary.

[113] CMA, PR19 Final Report (March 2021), (See here). At para 8.82, the CMA stated that "*At a high level, Anglian, Bristol and Yorkshire all argued that maintaining lower leakage levels was more expensive than maintaining higher leakage levels. Our engineering adviser was of a similar view. To maintain a lower level of leakage, a company needs to spend more money on both capex… and opex*". The CMA went on, at para 8.59 to state that "*Since we conclude that there is a link between current performance on leakage and the costs to achieve that level of leakage, then those companies currently performing better than upper quartile are likely to be incurring more cost than will be reflected in the base cost models. In order to maintain their current level of performance, these high performing companies would be expected to incur costs that exceed the implicit allowance for leakage costs that is included in the base cost allowance*."

(iv) Some leakages are more accessible than others, but frontier companies cannot maintain their levels by focusing on easy-win locations. Anglian has a complex supply-demand balance given the dry nature of its region. A more volatile climate exacerbates maintaining existing levels of leakage. To maintain its leakage rate, Anglian must target areas (such as Anglian's Colchester region) where water shortages are higher risk. The higher demand pressures of water stressed areas and need for robust, durable solutions often make interventions more complex and costly - but nevertheless necessary to tackle, not only because this is critical to maintaining the required demand and supply balance, but also because it must do so to maintain its leakage levels, where other less complex areas have already been addressed.

(244) As Ofwat's ODI regime for PR24 sets different leakage PCLs for companies, depending on their historical level of leakage performance (and in Anglian's case erroneously assumes a lower level of leakage in 24/25 that negates to reflect that leakage reductions from the frontier are intuitively lower than improving from a median position – see **Chapter G.1 (*ODIs*)**), companies facing the higher costs associated with operating at the frontier do not benefit from ODI reward payments to fund the costs of sustaining such performance. This differs from other ODIs, such as supply interruptions, for which companies face a common target, and artificially penalises frontier companies if they fail to repeat performance.

(245) Therefore, the only funding avenue for frontier companies, such as Anglian, to recover the costs associated with maintaining leakage performance is through a cost allowance that is calibrated to fund the higher costs of doing so. The combined effect of Ofwat's approach to setting the PCL for leakage, and its approach to setting base cost allowances is to underfund Anglian to ensure leakage remains at the level required to manage the water supply-demand balance in its region.

(246) The arguments put forward by Ofwat that it does not underfund frontier leakage performers,[114] are not borne out by the evidence Anglian has submitted in PR24, and the further modelling developed in response to the FD. This analysis maintains that the costs associated with maintaining leakage levels increase with leakage performance (i.e. as leakage levels fall). This is shown in Oxera's Leakage Report (attached as Annex 007).

(247) First, Ofwat highlights that some companies with low leakage performance (i.e. high levels of leakage) also report high leakage costs. On this basis, it concludes that there is insufficient evidence that modelled allowances are insufficient to meet the costs to maintain leading leakage levels. This is erroneous for the following reasons.

(i) The four companies with the highest level of leakage performance (i.e., the lowest levels of leakage) (Anglian, Bristol, SES and Wessex) are ranked as the four 'least efficient' in the relevant (treated water distribution) suite of cost efficiency models—i.e. have spent the most relative to Ofwat's model (see **Figure 18** below).

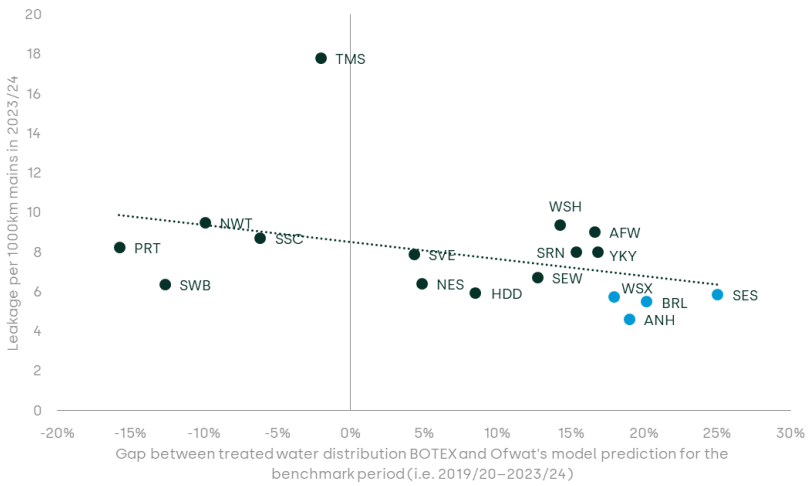
(ii) The implicit allowance from running the base cost models without leakage costs predicts a *lower* level of funding than Anglian spent on maintaining leakage costs in recent years, see para. (235) contrary to Ofwat's claim that the implicit allowance for leakage in its model is greater than Anglian's historical leakage expenditure.

[114] Ofwat, PR24 Base Cost Adjuster Feeder Model Anglian (2024), Tab CAC2, Column D (See here).

(iii) Companies that report high leakage costs and low leakage performance (ie. high levels of leakage) are delivering a different (lower) level of service from these base allowances, relative to frontier companies such as Anglian.

(iv) Companies with low (i.e., poorer) leakage performance face less demanding PCLs than Anglian and therefore receive additional funding through this avenue—for example Severn Trent and United Utilities have received ODI rewards over the first four years of AMP7, while Anglian expects to pay around £30m in ODI penalties, despite maintaining a significantly higher level of leakage performance over the AMP.

Figure 18: Leakage performance in relation to Ofwat's assessment of companies' cost efficiency in TWD activities



Source: *Oxera analysis*

(248) Second, Ofwat highlights that it has provided enhancement allowances for companies that are proposing to deliver leakage improvements beyond a 'baseline leakage level'. As the 'baseline' used to determine this funding is based on company-specific performance, it cannot provide any funding for companies already at the frontier to maintain that level—frontier companies instead simply face a higher threshold for enhancement costs.

(249) Third, Ofwat claims that, as it cannot use leakage as an explanatory variable in its PR24 FD base models, any additional costs required to maintain leading leakage performance must already be funded and/or captured by other drivers of expenditure. The cost base in the relevant set of models (Ofwat's treated water distribution models) covers c. 58% of wholesale water modelled base expenditure costs (over the period 2019/20 to 23/24). That such models have insufficient resolution to isolate a statistically significant relationship between leakage levels and activities to maintain a low level of leakage (when this comprises only 18% of the expenditure within the wholesale water models, and 30% within the treated water distribution models) does not mean that there are no incremental costs associated with delivering frontier leakage performance. This is likely exacerbated by frontier leakage costs only being faced by a subset of the industry—a subset that are structurally underfunded by Ofwat's base models in the relevant cost area. Ofwat cannot combine setting different leakage targets for companies while rejecting the CAC needed to redress the imbalance caused by its performance framework on the basis that Ofwat's own models are insufficiently granular to isolate the relationship between frontier leakage performance and the associated incremental costs.

(250) Anglian note that Ofwat has not shared the details of analysis it uses to justify its position with the sector. This has denied companies a reasonable challenge opportunity for key evidence that reverses established precedent.

(251) The analysis carried out by Oxera at DDR and subsequently updated in Oxera's Leakage Report is instead based on the leakage costs dataset collected by Ofwat. It uses this data to isolates the relationship between leakage costs and leakage levels. Oxera's analysis reiterates that maintenance costs rise as leakage levels fall. As shown in Oxera's Leakage Report (attached as **Annex 007**):

(i) all upper quartile leakage companies' leakage spend rises as their leakage levels fall (Figure 2.1 of the Leakage Report);

(ii) modelling on a per mains and per property basis shows that controlling for unit leakage costs is statistically significant, evidencing that maintaining a lower level of leakage is associated with increased costs (Table 2.2 of the Leakage Report).

(252) Applying the models above leads Oxera to conclude that Anglian's proposed CAC is significantly lower than the incremental expenditure its modelling indicates is required to maintain its frontier position on leakage. Oxera finds that cost to be potentially significantly higher (£65- £160 million) than Anglian's CAC (£67.6 million), based on the costs associated with leakage reduction from its model and subtracting the implicit allowance implied by estimating the cost the model predicts for a company with levels of leakage equivalent to that of the companies that influence the cost benchmark (excluding Thames). Oxera cross-checked this implicit allowance by calculating the difference between base cost allowances including and excluding leakage expenditure. Both methodologies are fully consistent with Ofwat's guidelines in its final methodology document for calculating an implicit allowance.[115]

(253) Fourth and finally, Ofwat claims that any modelling to estimate the costs associated with leakage performance must include Thames Water to produce a valid estimate of the uplift required for frontier companies. Ofwat justifies this view on the basis that Thames influences the base cost allowance set by Ofwat for the industry.

(254) As summarised above, economic consultants Oxera used two conceptual approaches to estimate the implicit allowance for maintaining leakage performance. One approach uses the leakage models directly (therefore excluding Thames Water) while the second approach calculates the difference between base cost allowances with and without leakage expenditure (using all companies, including Thames Water). Both approaches consistently estimate an implicit base allowance of approximately £300 million, ranging between £289 million and £309 million, which further demonstrates the robustness of the quantified implicit allowance.[116] That two different approaches (one with and one without Thames Water) yield similar estimates suggests that excluding Thames Water from the leakage cost models does not materially under- or over-state the leakage funding available through the base cost models.

(255) Moreover, Thames Water is assessed as the fifth most efficient company in both treated water distribution and aggregated wholesale water costs, solely determining the upper-quartile benchmark efficiency target for the sector. If removed from the base cost

[115] Ofwat, PR24 final methodology: Appendix 9 Setting expenditure allowances (December 2022), pages 30-31 (See here).
[116] Ofwat states that "*Implicit allowances can be estimated using various approaches. There is no single correct approach. It may be appropriate to use a range of approaches to come to a robust estimate of the implicit allowance*". See Ofwat, PR24 final methodology: Appendix 9 Setting expenditure allowances (December 2022), page 30 (See here).

modelling, Oxera find that the AMP8 cost allowance increases by £259 million for the rest of the industry and by £28 million for Anglian,[117] mainly due to a softening of the stringency of the upper-quartile level. Thames Water's inclusion in the base cost modelling intensifies the underfunding of frontier leakage companies due to the disconnect between its assessed cost efficiency in treated water distribution activities and its actual leakage performance.

(256) At PR19, Ofwat applied a differentiated treatment to Thames Water in determining a base leakage cost adjustment for the industry. In its alternative model specifications for leakage, it used a dummy for Thames Water "*given the outlier performance of the company*".[118]

(257) We also note that Ofwat makes differential adjustments for specific companies in isolation in other areas of base expenditure, which is inconsistent with the position it adopts with respect to leakage that any models applied to one company must be based on data from all others. For example, Ofwat's diverges from its standard Mains Renewals model, by applying a mains renewal unit rate cost that is more than three times higher for Thames than for the wider industry for its work in central London.[119] Ofwat also excludes companies from assessing cost and performance in other areas, for example it excludes outlier schemes from its enhancement model and it excludes Thames Water from its determination of the median industry value in 2032/33 for external sewer flooding.[120]

3.2.4 The CMA should grant Anglian's CAC to enable it to maintain its important and industry leading low leakage levels

(258) As above, Anglian takes maintaining its frontier leakage position extremely seriously. This includes helping to advise and guide other water-sector companies on leakage planning and investing in industry leading acoustic detection technology to more precisely identify leakage issues. Even when those detection methods reveal that addressing the root-cause is not within its power, Anglian still takes proactive action wherever it can (e.g. informing customers of leaks within customer control).

(259) Not accounting for the higher marginal costs of maintaining lower leakage creates perverse incentives for frontier performance by restricting Anglian's ability to meet its stretching AMP8 target and unfairly penalises the company for its industry leading position (compounded by the FD's approach to leakage ODI incentives, which again punishes frontier performers – see **Chapter G.1, (*ODIs)***. This is ultimately to the detriment of customers and long term resilience, particularly when accounting for the distinct climate challenges of Anglian's region.

(260) Accordingly, Anglian requests that the CMA follow its approach in PR19 and grant Anglian an additional £68 million to cover the costs of maintaining its industry-leading leakage position. Anglian notes that, in light of Oxera's analysis, this is a conservative approach to the funding Anglian may require to maintain its leakage levels. However, as it is broadly aligned with the lower end of Oxera's range, and consistent with Anglian's

[117] These two figures can be found in the datapack provided by Economic consultants Oxera. See Oxera, Supporting analysis files for assessing the efficient costs to maintain frontier leakage performance (March 2025), (Annex 007).
[118] Ofwat, PR19 final determinations: Securing cost efficiency technical appendix (December 2019), page 37 (See here).
[119] Ofwat, PR24 Final Determinations: Expenditure Allowances (February 2025), page 36 (See here).
[120] Ofwat, PR24 final determinations: Expenditure allowances – enhancement cost modelling appendix (December 2024), pages 19-23 (See here) and Ofwat, PR24 final determinations: Delivering outcomes for customers and the environment (February 2025), page 71 (See here).

approach of seeking conservative values only, Anglian maintains the value of its original claim.

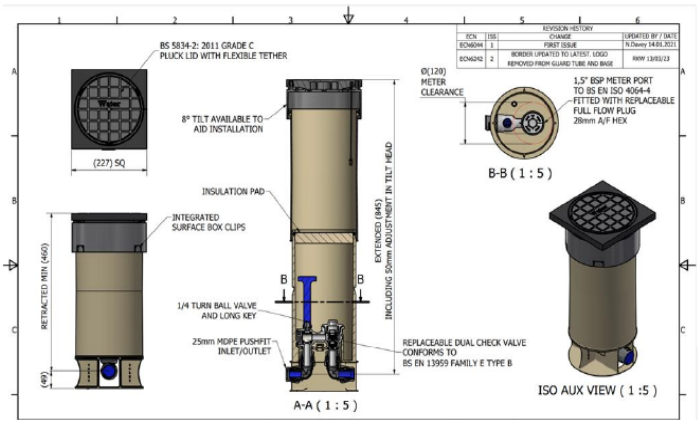
3.3 Boundary boxes

(261) Boundary box failures can materially impact customers. Ofwat has underfunded Anglian's maintenance of these assets, which is a distinct feature for Anglian given its post-privatisation investment in water demand management. The replacement expenditure associated with these ageing assets is significant for Anglian and is not reflected in Ofwat's base cost models or any wider CAC claim.

3.3.1 Anglian's request for boundary box funding

(262) A boundary box is a container housing water meters. Most boundary boxes in Anglian's area are below-ground. **Figure 19** below illustrates a standard Anglian boundary box.

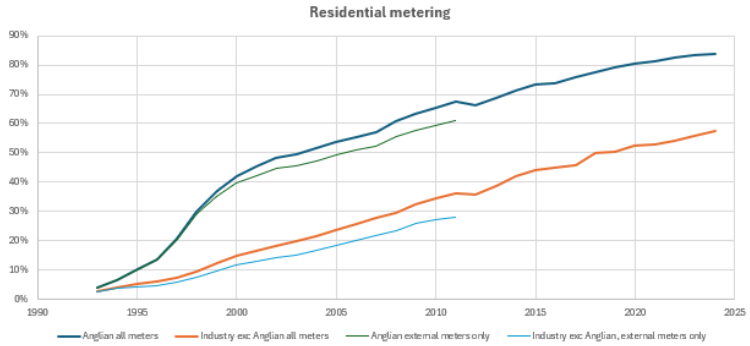
Figure 19: Boundary box illustration



(263) The issue of boundary box failure is distinct to Anglian and arises because it rolled out meters at a much earlier date than others in the industry. This was motivated by the need to address water scarcity in Anglian's climate vulnerable region. This was strongly encouraged by Ofwat, and there is now a responsibility for Anglian to provide and Ofwat to fund the consequential maintenance of these assets

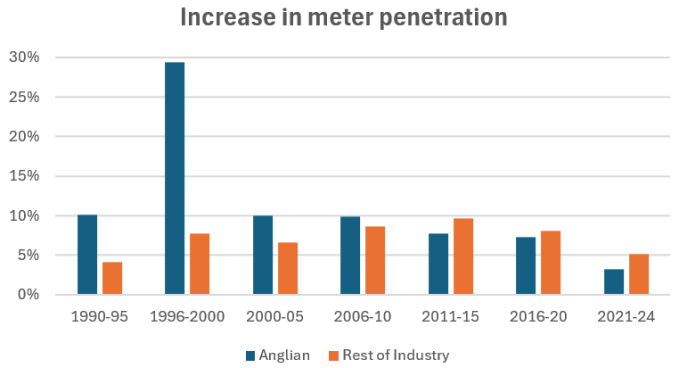
(264) Anglian's early roll out is illustrated by **Figure 20** and **Figure 21** below, which show meter penetration in Anglian's region vs. the industry as a whole.

Figure 20: Percentage of households metered 1993-2024 in England and Wales



Source: *Anglian Analysis*[121]

Figure 21: Increase in meter penetration in England and Wales, 1990-2024



Source: *Anglian Analysis*

(265) External meters (unlike internal meters) require boundary boxes. **Figure 20** therefore splits data between external and internal meters for all years for which data is available (Ofwat having stopped collecting data on external vs. internal meters in 2011).

(266) Anglian reached a 42% meter penetration rate by 2000, with the next highest rate being 23%, and the industry average excluding Anglian at 15%. As boundary boxes have an expected asset life of 25-30 years, the boxes associated with those early meters are reaching end of life and now failing and Anglian anticipates significant additional expenditure to replace them over AMP8. As **Figure 21** shows, the vast majority of meters Anglian had rolled out by 2000 were external meters that required a boundary box.

(267) As base models rely on industry-wide historically incurred costs, they do not reflect this challenge that is (yet) to be experienced by the industry, and is now being faced by Anglian. Anglian therefore submitted a CAC (£138 million) for replacement of failing boundary boxes. This included a deduction (£17.4 million) from Anglian's anticipated costs (£155.4 million) as a proxy estimate for the implicit base allowance for this work.

[121] The data supporting these Figures is included in Anglian, Metering Graphs and Statistics Since Privatisation (2025) (Annex 008).

3.3.2 The FD's approach to boundary box funding

(268) Ofwat entirely rejected Anglian's CAC for boundary boxes. For the CMA's awareness, prior to making its CAC, Anglian had initially proposed Boundary Box expenditure be subject to an Uncertainty Mechanism. This was also rejected by Ofwat.[122]

3.3.3 The FD underfunds Anglian for boundary boxes

(269) Ofwat rejected the CAC based on flawed assumptions as to how Boundary Boxes can be delivered, and incorrect assumptions that funding has been / is already being provided. In particular, Ofwat has wrongly conflated boundary box replacements with metering work.

(270) Water meters can be accessed to be read or replaced by simply opening the lid / door to the boundary box. Boundary boxes must mostly be excavated from the ground to be replaced. This is illustrated by **Figure 22** and **Figure 23** below.

Figure 22: Typical boundary box replacement (Before, Excavate, During Resurfacing)

Figure 23: Typical meter replacement (Before, Remove, Replace)

(271) Ofwat deems that PR24 smart meter funding can cover these activities because Ofwat's meter replacement CAC uses a higher unit rate than Anglian's standard meter work requires, and by considering that boundary box work can be combined with meter work.

(272) First, boundary box and meter work cannot be efficiently combined in any meaningful way.

(273) As illustrated above, meter and boundary box replacements are very distinct activities. Boundary boxes mostly need to be excavated to be replaced, and so demand significantly different time, skills, equipment, cost and customer disruption relative to

[122] Ofwat, PR24 Draft Determinations, Expenditure Allowances (2024), page 190 (See here).

meters. They also potentially necessitate seeking permissions and consents if digging-up roads and pavements and subsequent resurfacing is needed. By way of illustration:

(i) Anglian replaced on average c. 216,000 **meters** per year from 2020/21 to 2024-25 (even accounting for COVID-19 and microprocessor shortages reducing roll-out rates, and with 310,054 replaced so far in 2024/25).[123] Typical jobs require one employee implementing a screw-out / screw-in replacement mechanism. Anglian is currently averaging c. 28 replacements per day per employee (c. 18 minutes each). Ofwat has estimated the unit cost of replacing a basic meter with a smart meter as being £150.77, using industry data.[124]

(ii) By contrast, Anglian replaced an average of 24,278 **boundary boxes** per year in the same period. Given excavation and resurfacing needs, typical jobs require multiple employees and multiple property visits.[125] Anglian finds its current work to require c. 126 minutes on-site per replacement in practice. Anglian estimated a unit cost for boundary box replacements in its CAC of £649.45, accounting for economies of scale.[126]

(274) While smart-meters are subject to a planned roll-out, boundary box work is reactive, being driven by assets Anglian knows to have failed, e.g. from a customer contact, a leak, or an incidental discovery during work on the meter within it. Anglian tries to perform multiple boundary box replacements on the same street together if possible, but the need to respond quickly to identified failures means this is only reasonable where Anglian happens to have been able to identify multiple boundary box failings in close proximity.

(275) Allocating the additional resource needed for boundary boxes to meter replacement work on a just-in-case basis would therefore be hugely inefficient, noting that Anglian has forecast that boundary box replacements would only be expected to be required in c. 1.7% of its proposed meter upgrade population.[127] Likewise, a wider proactive roll-out of boundary boxes in tandem with meter-work would need much larger funds than requested; significantly slow-down Anglian' meter roll-out speed (which is subject to a PCD); allocate resources away from more at-risk boundary boxes assets, and entail Anglian replacing boundary boxes that were still serviceable. While it is of course possible that a boundary box failure is identified at a site due a new meter, enabling parallel works, these would be coincidental events that cannot form the basis of a meaningful works plan. Anglian respectfully submits that Ofwat has conflated boundary boxes with metering and misunderstood the practical realities of these distinct works.

(276) Second, Anglian's ask is not covered in the round by wider PR24 base funding.

(277) Given base models rely on historical industry expenditure, and no company has previously experienced failures at the rate anticipated by Anglian due to its early-roll out and boundary box asset life, Ofwat's base models cannot account for this scale of spend.

[123] Data in this paragraph is as at 3 and 4 March 2025 for boundary boxes and meters respectively.
[124] Ofwat, PR24 FD, CA32, Water Metering Enhancement Expenditure Model, Meter Renewals Analysis Tab, Cell G25 (See here).
[125] In particular, boundary box repairs would usually require an initial visit to assess the issue that has been reported (noting that this assessment may also occur where an Anglian technician has proactively identified an issue as part of e.g. leak detection work); a second visit to carry out the excavation and repair (which most commonly involves a two-person team), and a third visit by a separate reinstatement team (again commonly a two-person team) to resurface (unless the repair team has been able to reinstate in their repair visit on account of the boundary box being in unmade ground).
[126] Anglian, Boundary Box Cost Adjustment Claim (August 2024),page 12, (See here).
[127] Anglian, Response to Ofwat Query OFW-OBQ-ANH-055, pages 3 and 4 (Annex 009).

(278) Ofwat asserts that some replacements in Anglian's CAC should already have occurred and that the implicit base allowance for replacements is higher than Anglian assumes, given its historic delivery rates. This is incorrect. The scale of the anticipated costs at AMP8 have not been captured in base models. Past replacements have instead been funded via Anglian reallocating funding within its totex envelope (noting that past spend is immaterial compared to Anglian's anticipated AMP8 needs). Despite the absence of material failure rates from base models, Anglian estimated an implicit base allowance using average meter installation replacement rates; an efficient and highly reasonable approach, noting that every pound of base spent on boundary box replacements that have not been captured in the model will be a pound less spent on the wider capital maintenance needs.

(279) Ofwat also asserts that the PR24 sector-wide smart meter CAC (which provides funding for the like-for-like replacement of meters themselves rather than the boxes in which they are encased) has sufficient headroom for Anglian's boundary box replacements. It does not. Anglian's boundary box need (£138 million) is over 60% of the total value of the combination of Anglian's Metering CAC and smart metering enhancement allowance (£226m) and Anglian must use these funds to deliver c. 1,000 meter replacements a day at AMP8. Further, Anglian has forecast that only 18,289 out of c. 240,000 boundary boxes it forecasts to replace at PR24 will relate to meter replacements.[128] Smart meter allowances do not cover this delta.

(280) Finally, Anglian's CAC is efficient. As was detailed to Ofwat, Anglian has excluded costs that *might* be implicit in base; limited its claims to replacement rather than repairs; assessed the optimal asset material (balancing asset life, cost of installation and adaptability) including working with suppliers to improve asset quality;[129] identified potential economies of scale via bulk purchasing and is implementing multi-street repairs where possible.

(281) Anglian further benchmarked its costs by undertaking supplier market-testing, and based its claim on the lowest unit rate estimate suppliers provided, while volume forecasts were based on statistical analysis of anticipated replacements by independent consultants Aecom. [130]

3.3.4 The CMA should grant Anglian's CAC for this essential maintenance

(282) Failed boundary boxes can disrupt customers and are therefore rarely ignorable. They also directly contribute to the overall water balance and the ability to support economic growth in the region by avoiding preventable losses. Underfunding this spend will require Anglian to redirect funds from other asset classes, at a time where base allowances are already significantly overstretched, thereby undermining Anglian's ability to manage the assets and scarce resource of its region.

(283) Anglian has a clear and distinct need for this efficient funding in AMP8 which flows naturally from its proactive meter rollout. Anglian therefore requests that the CMA grants it £138m CAC. To ensure that customers are protected from any divergence from forecast replacement levels, Anglian proposes that the CAC be subject to a clawback mechanism.

[128] Anglian, Response to Ofwat Query OFW-OBQ-ANH-055, page 4 (Annex 009).
[129] Anglian, Boundary Box Cost Adjustment Claim (August 2024),page 8 (See here).
[130] Anglian, Boundary Box Cost Adjustment Claim (August 2024), page 17 (See here).

3.4 Frontier shift

(284) The FD frontier shift is intended to capture the rate of efficiency improvements that even the most efficient companies in the industry can achieve from improvements in working practices and new technology.

(285) Its effect is to reduce base allowances that have been assessed as required under Ofwat's base models, CAC claims, and after the application of the catch-up efficiency challenge, as well as reducing enhancement allowances. The concerns identified below apply equally to base and enhancement.

3.4.1 The FD applies the wrong Frontier Shift

(286) In its initial Business Plan and at DD, Anglian proposed a stretching frontier efficiency challenge of 0.8%. This was above the top end of the 'plausible range' estimated by independent consultants Economic Insight.[131]

(287) Despite representations from Anglian, Economic Insight and other water companies, Ofwat set a 1% frontier efficiency challenge in the FD, informed by CEPA and Europe Economics' assessment. Anglian contests this unjustifiably high, poorly evidenced figure which should be reduced across all expenditure allowances for the reasons explained in an updated report by Economic Insight submitted with Anglian's Statement of Case (together with accompanying summary sheet).[132]

(288) First, **UK productivity growth is significantly below 1%.** UK-wide productivity growth has been at near-zero for the last 17 years across most industries,[133] and a frontier shift of 1% is therefore materially above current growth levels.

(289) Second, **evidence does not indicate that this will materially increase.** Recent Bank of England and ONS analysis indicates that productivity growth, TFP and labour productivity growth are expected to remain weak, with ONS labour productivity analysis even suggesting that the UK's productivity performance may be deteriorating further. Likewise, recent evidence on GDP growth indicates weak performance in the second half of 2024, with low growth continuing in the near-term, and any upside forecasts are relatively low, providing little indication that the 17 year long productivity slowdown will unwind. Additionally, early-2024 GDP growth "*proved to be short lived*", and, therefore, does not justify the FD's frontier challenge.[134]

(290) Third, the FD's 1% frontier challenge therefore suggests it expects the water sector to significantly outperform the wider economy and most other sectors on productivity. However, **there is no evidence that outcomes will materially differ for the water sector**. The root causes of low/no UK growth are economy-wide. The only root cause of low/no UK growth that regulation in *principle* has the *potential* to mitigate is underinvestment (although EI / does not consider this to be the case to a material degree) and that the other root cause factors adversely impact water sector productivity growth.[135] In reality, past water sector investment has remained critically low, and has generally been lower than the wider UK economy, and significantly below the targets in recent

[131] Economic Insight, Productivity and Frontier Shift at PR24 (5 April 2023), page 13 (See here). Economic Insight produced subsequent reports in August 2024 (Economic Insight, The Importance of a Balanced Approach to Frontier Shift (20 August 2024) (See here)) and March 2025 (Economic Insight, Frontier Shift at PR24: Evidence for the CMA (20 March 2025) (Annex 010)).
[132] Economic Insight, Frontier Shift at PR24: Evidence for the CMA (20 March 2025) (Annex 010) together with Economic Insight, Summary Sheet: Evidence for the CMA (18 March 2025) (Annex 011).
[133] Economic Insight, Frontier Shift at PR24: Evidence for the CMA (20 March 2025), page 11, 24 (Annex 010)
[134] Economic Insight, Frontier Shift at PR24: Evidence for the CMA (20 March 2025), pages 15-18 (Annex 010).
[135] Economic Insight, Frontier Shift at PR24: Evidence for the CMA (20 March 2025), page 26-27 (Annex 010).

Ofwat price controls,[136] while investment at PR24 faces very significant challenges as explained in **Chapter H.1 *(Investability & Financeability)***.[137] The water sector is not intrinsically high-tech relative to other sectors, and water-sector innovations and technologies cannot therefore reasonably be expected to result in the water sector materially outgrowing productivity in other UK industries.[138]

(291) Fourth, outside the Economic Insight report, the appropriate frontier shift should also be considered in the context of an FD that already requires the industry to deliver substantially more outputs and significant service quality improvements from its expenditure allowances.

(292) At DD, some companies raised concerns that expecting companies to deliver a step change in performance alongside a 1% p.a. frontier shift double counted expected productivity improvements (and therefore was overly stretching). In response,[139] Ofwat cited a paper by Europe Economics, which suggested there was no double-count of productivity improvements.[140] The arguments put forward by Economic Economics' are flawed.

(293) Europe Economics' core argument is that, because the ONS data does not fully adjust for output quality in sectors informing the TFP target for the water sector (manufacturing, chemicals, transport & storage and construction), this target can be applied as a frontier shift challenge without any concerns of double-counting. In other words, because the ONS's estimate of TFP is primarily (although as they concede not entirely) based on cost and outputs, it can be an appropriate productivity challenge to costs without any regard to the rest of the price control—including the stretch imposed by ODIs.

(294) The arguments in Europe Economics' March 2023 paper are agnostic to the actual PR24 quality targets (with its paper preceding Ofwat's FD and DD), and instead solely concern technical questions on how the ONS derives TFP estimates. Europe Economics appear to assume that the total costs associated with the PR24 ODI regime and other sources of base stretch are £13m p.a. across the sector—less than £1 million p.a. per company. This is unrecognisable relative to true base stretch; where Anglian alone faces c. £500 million unfunded base pressures and £240 million in anticipated ODI penalties (see para. (203) above).

(295) Their argument completely relies on the assumption that the unmeasured quality improvements in sectors Ofwat uses to derive its productivity challenge are *at least* as demanding as in water. If the PR24 service quality improvements expected of water companies are greater than in the comparator sectors, then Europe Economics' paper demonstrates there *will* be a double-count of required cost and service improvements.

(296) Not only does Europe Economics' paper not account for the actual costs associated with the stretch at PR24, but it justifies its position that comparator sectors face comparable levels of unmeasured cost pressures from quality improvements based on anecdotal evidence from government impact assessments of introducing new regulation. Moreover, Europe Economics itself concedes that it "*did not find regulatory impact assessments for all of the tighter environmental regulations faced by the water sector*", and that these are

[136] Economic Insight, Frontier Shift at PR24: Evidence for the CMA (20 March 2025), pages 12, 14 (Annex 010). Economic Insight, The Importance of a Balanced Approach To Frontier Shift (20 August 2024), page 6 (See here).
[137] Economic Insight, Frontier Shift at PR24: Evidence for the CMA (20 March 2025), page 13, 27-28 (Annex 010).
[138] Economic Insight, Frontier Shift at PR24: Evidence for the CMA (20 March 2025), page 31-39 (Annex 010).
[139] Ofwat, PR24 final determinations: Delivering outcomes for customers and the environment (February 2025) (See here).
[140] Europe Economics, Frontier Shift and Outcomes Stretch at PR24 (17 March 2023) (See here).

therefore not included in its comparison. It is also noted that many of the examples of regulatory cost that Europe Economics cite are from after 2019, and therefore would not have been included in the TFP figures used to set the frontier shift target.

(297) The outputs and performance that are actually required at PR24 are profound and create significant base over-stretch at PR24 before application of the frontier efficiency challenge. The additional 1% stretch should be adjusted downward to reflect this.

3.4.2 A lower stretching target would limit unevidenced base over-stretch

(298) The FD frontier shift materially reduces allowances (£77m across totex) when base funding is already overstretched (see above) and investability concerns are significant (see **Chapter H.1 (*Investability and Financeability*)**). The CMA should therefore adopt a lower, but still stretching frontier shift, such as 0.8%.

(299) Ofwat states that the frontier shift is "*intended to replicate the forces of competition which would incentivise companies to continually drive out efficiencies over time by reducing costs*".[141] However, the FD's frontier shift (1%) would ultimately outperform the productivity growth that the UK water industry (including unregulated firms) has been able to achieve at any point in the last 20 years, at a time of broader UK economic concern.[142]

3.5 Storage points and gravity sewers

(300) By the decisions described above, the FD creates asset health risk for Anglian's storage points and gravity sewers. Anglian did not submit CACs for maintenance of those assets in PR24, as they did not meet the CAC criteria, and the Company had intended to manage those risks within its base cost envelope.

(301) However, Anglian warned Ofwat that both asset classes (amongst others) would require additional funding in AMP9 due to anticipated increases in failure rates or collapses and pollution incidents as relevant in AMP8 and beyond, such that there would be a need for increasing rates of replacement.[143] More broadly, Anglian advocated for (but was not granted) a broader uplift to base allowances at DD with flexibility to deploy it against the asset classes companies perceived most at risk on a use-it-or-lose-it basis.[144]

(302) Anglian notes that company feedback in the Asset Health Roadmap workstream has identified storage points as the joint-highest priority assets, with half of the respondent companies also prioritising pipelines/sewers. Among the criteria for prioritisation are that the asset class is deemed critical and is seen to directly impact performance and has known/indicated challenges relating to current performance / health.[145]

(303) However, the FD means that additional funding is now required for these assets:

(i) **Storage Points**: Anglian has the second largest number of potable water storage points (reservoirs and towers) in the industry, with 37% of water towers in England and Wales, and with 781 individual tanks. Most are older assets constructed before 1970 (c. 425), with the oldest still in service from 1872, and an average age of 50

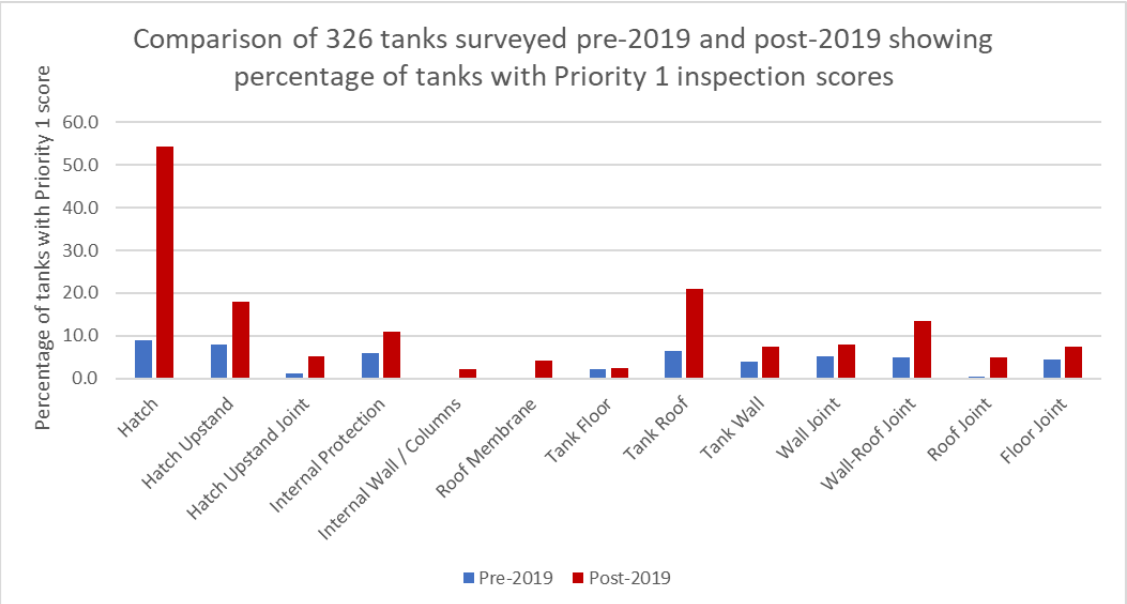
[141] Ofwat, PR24 Final Determinations: Expenditure Allowances (February 2025), page 260 (See here).
[142] Economic Insight, Productivity and Frontier Shift at PR24: A report on behalf of a consortium of water companies (05 April 2023), page 21 (See here); Economic Insight, The Importance of a Balance Approach to Frontier Shift, Further Evidence for Final Determinations (20 August 2024), page 53 (See here); Economic Insight and Economic Insight, Frontier Shift at PR24, Evidence for the CMA (18 March 2025), pages 15-16 (Annex 010).
[143] Anglian PR24 Asset System Resilience Appraisal (October 2023), page 35 and 48 (See here).
[144] Anglian, Draft Determination Representations (2024), page 35 (See here).
[145] Ofwat, Roadmap for enhancing asset health understanding in the water sector workshop 2: priority assets (March 2025), pages 7, 10, 36 (Annex 012).

years. The Drinking Water Inspectorate have highlighted storage points as a public health risk repeatedly in their Chief Inspector's reports.[146] Their asset health is significantly deteriorating, necessitating higher spend on maintaining these assets at PR19 (£36 million) vs. prior AMPs (where spend rate has been around £25 million for c. 60 reservoirs per year). This elevated need required Anglian to both overspend its normal run-rate and make use of cost-effective but shorter-term interventions, such as joint overbanding and resealing hatches in PR19, noting that the number of service reservoirs is not a driver in the base models.

(ii) The scale of refurbishment required is becoming more significant as these short-term repair strategies have been exhausted, with Anglian identifying a number of storage point assets requiring a substantial refurbishment or replacement this AMP to reduce the risk of further failures. Further information since its Asset Systems Resilience Appraisal ("**ASRAP**") has resulted in Anglian identifying the need for an additional £60m of funding to improve water quality and reduce the risk of supply restrictions to c. 305,000 properties and has made this request to Ofwat as part of the Asset Health Roadmap workstream.[147]

(iii) Condition deterioration is illustrated by **Figure 24** below, which shows analysis of defects found during inspection of our storage points, comparing the defects found in pre-2019 inspections with those found since. Defects are graded as priority 1-3, with Priority 1 = Intervene before tank returned to service, Priority 2 = Intervene before next inspection, Priority 3 = Monitor at next inspection. **This shows a marked increase in the rate of priority 1 defects across all components of the assets:**

Figure 24: Comparison of defects in storage points pre and post 2019



Source: *Anglian Analysis*[148]

(iv) **Gravity sewers**: Anglian has 77,000km of sewers in its network, the failure of which can result in 'loss of toilet' (i.e. not draining), flooding and pollution. Given a quarter

[146] Drinking Water Inspectorate, Drinking Water 2023 – Summary of the Chief Inspector's report for drinking water in England, page 23 (See here) and Drinking Water Inspectorate, Drinking Water 2022 – Summary of the Chief Inspector's report for drinking water in England, page 23 (See here).
[147] Anglian, Asset Health Investment Focus (2025), page 1 (Annex 013).
[148] Anglian. Data on storage point defects (Annex 014).

of Anglian's region is below sea level, it experiences large areas of high groundwater levels and consequent risks associated with flow entering the assets. Anglian spends c. £40 million per year on gravity sewer capital maintenance, and its approach has become increasingly reactive, with no headroom within existing allowances to cover the proactive replacement work required. Anglian's ASRAP forecasts a need to significantly increase renewal rates to avoid worsening collapse rates and infiltration. In AMP8, as a step towards this, Anglian has identified a need, and made a request to Ofwat as part of the Asset Health Roadmap exercise, for a targeted increase in maintenance of assets in high groundwater areas of around £90 million to cover inspection of critical sections, relining of around 110km and replacement of around 18km. This is in addition to Anglian's current base allowances.

(304) Therefore, Anglian is now seeking additional allowances of £60m for storage points and £90m for gravity sewers to maintain those assets as part of this Redetermination if each of the broader base claims Anglian requests in this Chapter are rejected (noting that companies can have no confidence in the receipt of timely and necessary allowances via the Asset Health Roadmap workstream, as explained in **Chapter E.1 (*Asset health*)**). This could be awarded through the UIOLI mechanism which Anglian proposed at DD Reps as part of efforts to make a broader uplift to base allowances, with flexibility to deliver against those asset classes perceived most at need of investment.[149] Anglian recognises that this is an imperfect mechanism, however considers it proportionate as a transitional measure until a more developed regulatory framework is in place at PR29 in light of the material need to prioritise these assets for maintenance spend.

3.6 Updated data on models and rates

(305) Anglian submits that, in keeping with PR19, the CMA should use the most up-to-date and accurate data to ensure that outcomes better reflect past performance and future capabilities.

3.6.1 Base cost models

(306) The wholesale models used by Ofwat at FD use data from 2011-12 to 2023-24.

(307) Anglian requests that the CMA incorporate data from 2024/25 in the calculation of base cost models, following the precedent set by the CMA in the PR19 Final Report. In the PR19 Final Report, the CMA identified several advantages to using the latest (i.e., 2019/20) data in calculating base cost models, noting that using the latest data:

(i) increases the number of model observations, increasing precision of estimates;

(ii) allows the models to cover the entire AMP period;

(iii) mitigates impacts of 'lumpy costs items', such as capital maintenance;

(iv) accounts for the most recent information available; and

(v) avoids a source of potential downward bias.[150]

(308) The CMA considered therefore that the benefits of this approach outweighed any downsides that might arise (from the possibility that investment could have been brought forward in the last two years of the current AMP).[151]

[149] Anglian, Draft Determination Representations, pages 34-35 (See here).
[150] CMA, PR19 Final Report (March 2021), para. 4.40 (See here).
[151] CMA, PR19 Final Report (March 2021), para. 4.41, 4.43-44 (See here).

(309) Anglian does not see any reason to deviate from this approach in PR24. Therefore, the CMA should add data from 2024/25 to the base cost models in the PR24 redetermination.

3.6.2 Retail models

(310) The residential retail models used by Ofwat at FD use average bill size variable.[152]

(311) Anglian requests that the CMA use updated retail revenues to derive the average bill data used by Ofwat for its Retail forecasts to generate its AMP8 retail cost assessments, to ensure that the models account for the most accurate information available.

3.6.3 Setting business rates

(312) While base models are the starting point for the FD, it also separately assesses certain "Unmodelled costs" as they are largely outside company control or are only incurred by a subset of companies.[153] This includes business rates (i.e. rates on offices, factories, land and building), which comprise significant components of water companies' base costs for both water and wastewater.

(313) During PR24, Ofwat acknowledged that business rates were due to be revalued in 2026 and 2029, and acknowledged the benefits in reflecting those changes, which "*reduces the cashflow burden for companies in period and protects customers from larger adjustments at the end of the period*".[154] In recognition of the uncertainty regarding the outcome of these revaluations and the limited ability of water companies to control the level of rates, Ofwat assigned a sharing rate of 10:10 to these costs, such that 90% of underspend will be returned to customers, and 90% of overspend will be recovered from customers.

(314) In its FD, Ofwat made ex-ante rates allowances that incorporated its forecasts. Post-FD, Anglian has received initial valuations as part of the 2026 revaluation from the Valuation Office (VO) that relate to the Cumulo rates for the water network, and Anglian expects to receive further VO information in due course that will enable a more accurate forecast than Ofwat included in the FD. By way of illustrative example, the initial valuations data received to date suggests that an additional c. £76 million cost pressure will be placed onto base allowances in AMP8 as a result of rate changes.[155]

(315) Therefore, in the interests of providing funding that accounts for the most recent information available, better matches companies' expenditure and reduces the scale of cost sharing adjustments required, Anglian requests that the CMA incorporate the latest and most accurate information when considering the allowance for rates at PR24.

[152] This is an input into the following model: Ofwat, PR24 FD, CA11 Base Cost Residential Retail Model 2 (December 2024) (See here).

[153] This concerned business rates, abstraction and discharge charges (water and wastewater), costs associated with Traffic Management Act and lane rental schemes, wastewater Industrial Emissions Directive operating costs, third-party service costs; developer services and diversions (Excluding network reinforcement) non-household retail (Water mains replacement), pension deficit recovery payments, equity issuance costs. This produces expenditure allowances of £8.8bn.

[154] Ofwat, PR24 Final Determinations, Expenditure Allowances (February 2025), page 65 (See here).

[155] Valuation Office Agency letter to John Cormie (4 February 2025) (Annex 015), together with Valuation Office Agency, Trial 2026 Valuation Anglian Water (4 February 2025) (Annex 016). A calculation showing the impact on Anglian is included at Anglian, Water Networks Rates Revaluation Calculation (2025) (Annex 017).

4 Anglian's base funding gap has a significant negative impact

(316) Combined, the FD places c. £500 million additional base cost pressure on top of the stretching efficiency challenge that Anglian set itself by using Ofwat's models to determine its spending needs.

(317) This is a material shortfall in Anglian's allowances for its controllable base costs at PR24, particularly capital maintenance spend. Anglian will therefore face greater asset health risk, and unwarranted and counterproductive ODI penalties. In particular:

(i) Anglian's region is highly vulnerable to climate change impacts that exacerbate ground movements and increase mains failures. Failure to fund mains renewal programmes adequately will reduce the rate at which climate vulnerable mains can be removed and replaced, inhibiting the transition to the sustainable rate the FD states it seeks and increasing the risk of asset failure.

(ii) Underfunding Anglian's leakage frontier performance risks that it will not be able to meet its targets, and will create frontier disincentives by penalising its leading performance.

(iii) Boundary box failures cause customer disruption and underfunding Anglian's replacements will therefore divert resources away from other asset needs, and will again create frontier disincentives by effectively penalising and failing to support long term the proactive roll-outs of environmental and resilience programmes.

(iv) A 1% frontier shift that is unsupported by reality will in practice materially reduce already overstretched base funding, with consequent detrimental impacts for consumers, the environment and asset resilience.

(v) Overstretched base allowances means that storage points and gravity sewers will not be replaced at the rates required. This will increase the risk of drinking water non-compliance and pollution incidents, to the detriment of consumers and the environment.

(318) Combined, these risks contribute to the challenge of raising the required levels of equity to fund investment needs during the AMP.

(319) The result is that Anglian's ability to maintain a resilient network in the long term is undermined at PR24. Ofwat is in breach of its Resilience Duty and Financeability Duty, as underfunding will result in continued asset deterioration, reducing resiliency and the attractiveness of water companies for investment. Further, the short-term negative impacts of continued asset decline will result in breaches of Ofwat's Consumer Duty and the SPS duty to protect and enhance the environment; as assets deteriorate, leakage and pollution incidents will increase, harming consumers and the environment. While the FD's approach may, in the short-term, lead to somewhat lower bills, Anglian calculates that each of the above changes will alone lead to a less than 1% impact on bills, with an aggregate bill impact of 2.38%[156], without which assets will continue to decline. This will ultimately lead to higher long term customer costs, where more material action is required to remedy increased asset decline.

[156] This disaggregates as Mains renewal (0.27%), Leakage (0.8%), Boundary boxes (0.62%) and Frontier (across both base and enhancement, 0.56%). For completeness, the impact of the funding increases envisaged in para 30 above for Storage Points and Gravity sewers is 0.27% and 0.36% respectively.

(320) Ofwat have also not acted transparently, by not providing important leakage analysis that reverses PR19 precedent, or proportionately by loading several companies with additional mains renewal delivery requirements without commensurate funding on the basis of their below median maintenance levels.

5 Request to the CMA

(321) Anglian therefore requests that the CMA:

(i) recognise the evidence that base allowances can only reflect a renewal rate of no more than 0.2% (as opposed to the FD's 0.3% assumption) and resolve the full expenditure shortfall in Anglian's expenditure requirements to deliver its full PCD (increasing funding by **£60 million**);

(ii) adjusts Anglian's leakage base allowances by **£68 million** to account for the increased marginal cost of maintaining leakage levels at the frontier;

(iii) makes a cost allowance of **£138 million** to account for replacement of failing boundary boxes, subject to a clawback mechanism to protect customers from any differences between forecast vs. actual replacement rates by the end of AMP8;

(iv) reduces the frontier efficiency challenge from 1% to a more credible 0.8% (which would result in a **£36 million** increase to Anglian's base allowances – and a **£77 million** increase to its overall totex allowances - based on the FD);

(v) alternatively, if the CMA is not minded to make the adjustments requested above, Anglian requests **£150 million** funding for storage points and gravity sewers, subject to a use-it-or-lose-it-mechanism to address the asset health risks for these asset classes created by the base cost pressures in the FD;

(vi) update base and retail models with the most recent available data, and the most recent forecast data for the calculation of business rates.

Chapter E.2
Longer Term Asset Health

1 Introduction

Long-term asset health is vital to water resilience and to Anglian achieving its purpose of social and environmental prosperity for future generations, not least given the amplified risks created by its unique regional conditions. Failing to effectively maintain long-term infrastructure will expose customers and the wider environment to the increased impact of deteriorating assets, high remediation costs, steep price rises for future generations and a weak system that cannot rise to the challenges of climate change, population and business growth, nor attract the investment needed to guard against scarcity of vital water resources.

There has been growing concern among key stakeholders, including water companies, Defra, the EA and the NIC with how the price review effectively deals with asset health and capital maintenance concerns for several AMPs. The CMA at PR19 identified the potential need for regulatory change to enhance assessments with forward-looking elements, and Scotland's and Northern Ireland's water regulators (WICS and the Northern Ireland Authority for Utility Regulation, respectively), have notably reformed their approaches to address asset health concerns. Indeed, WICS' new price review methodology continues to make significant moves against status-quo assessment metrics due to the imperative of protecting future customers.

This has not been the case for Ofwat. The run-up to PR24 has seen the potential for opportunities to deliver focused actions (such as building on companies Asset Management Maturity Assessment ("**AMMA**") assessments of the maturity of their assets) go untaken, with significant concerns that current pathways will leave companies unable to maintain and, critically, to replace their assets. As detailed assessments by Reckon have identified, there are vital questions as to whether Ofwat's current framework is likely to create the conditions that lead to the best asset management approaches for customers and the environment over the longer-term.

Anglian itself has long recognised the need for a step-change. Anglian's focus predated PR19, and its work has expanded for PR24 in line with Anglian's deepening concerns on these issues. This has ranged from developing detailed understandings of its asset base (via engaging with Ofwat's AMMA, proactively developing its own ASRAP and collaborating with experts like Professor Tim Farewell to understand its climate vulnerability) to proactively seeking ways for industry reform (by advocating for the LTDS to fully embrace long-term base cost developments, and for regulatory reform pathways via Water UK).

Certain Ofwat actions indicate a recognition that its current approach is insufficient, and Anglian will continue to fully cooperate with Ofwat on any initiatives. However, the PR24 FD is inadequate and (once again) fails to address the urgency of the issue:

(a) PR24 contains few mechanisms that focus on asset health. The FD continues to focus on historic cost benchmarking, outcomes and totex. This incentivises companies to adopt solutions promoting short-term cost-efficiencies over long-term resilience, with Ofwat having ceased its separate capital maintenance assessment at PR14.

(b) Mechanisms that are included are underfunded. Ofwat: (i) rejected the vast majority of capital maintenance CACs; (ii) provided an underfunded mains

renewal CAC, both for the sector as a whole and by wrongly assuming that certain companies have already received the required funding; and (iii) has underfunded / wrongly calibrated certain asset health performance commitments.

(c) Other mechanisms that are included are under-utilised. For example: (i) company-asset assessments (particularly the AMMA and ASRAP) have not translated into tangible impacts in Ofwat's PR24 FD; (ii) company calls to elevate base within the LTDS framework were rejected; and (iii) Ofwat's introduction of a plan ("**Asset Health Roadmap**") to gain greater understanding of wider asset conditions ahead of PR29 is too late to assess if PR24 base funds are sufficient (despite the CMA's recommendation that Ofwat develop a forward-looking approach) and risks carrying across Ofwat's mains renewal mistakes to wider asset classes.

(d) Expenditure that could be used for asset health needs at PR24 is also constrained by the combination of an over-stretched base package, poorly-calibrated ODIs and unnecessarily restrictive PCDs applied to Anglian's base (such as for mains renewal and network reinforcement) which risks incentivising short-term strategies to avoid penalties, over more costly capital maintenance.

The impact and risk to the sector's assets cannot be ignored, and it is essential that the level of asset replacement increase.

Customers, Anglian and investor interests are aligned on asset health as a critical risk.

(a) For **customers**, by delaying addressing sufficiently early the asset health challenge, Ofwat's approach continues to prioritise short-term bill impacts at the cost of increasing risks from asset failure, such as supply interruptions, sewer flooding and pollutions, which will importantly exacerbate the steepness of price rises for future customers.

(b) For **investors**, leaving companies without funding to maintain significantly expanding capex bases produces disproportionate, unfunded risks that contributes to the equity challenge facing the sector and Anglian. Failure to acknowledge this challenge and its magnitude brings further risks and uncertainty to customers and investors.

Anglian recognises that the CMA is unlikely to be able to fully solve asset health concerns within this Redetermination. However, as a minimum, Anglian asks the CMA to address the following, most material concerns to help to mitigate asset health risks in AMP8:

(a) First, remedying the specific issues Anglian raises in other Chapters on base costs, ODIs and PCDs that would help Anglian to address immediate asset health needs in AMP8 identified in Anglian's ASRAP. This includes granting Anglian's request for additional gravity sewer and storage points funding should each of its base claims not be granted, given the critical need to fund these priority assets.

(b) Second, remedying the FD's mains renewal implicit allowance, where it effectively penalised several companies for lower than average replacement activity (in kilometre outputs).

(c) Third, Anglian asks the CMA to signal once again the need for a step-change in the approach to forward looking asset maintenance, and consider whether it is prudent to continue to revert this issue to future price reviews.

More generally, its clear that to safeguard resilience and future customers, the regulatory framework needs a fundamental re-set and a longer-term solution if asset health is to be properly addressed by PR29. Anglian welcomes any CMA calls for action or observations on this regulatory imperative. Anglian notes that in terms of information since the FD, this

Chapter includes further information on WICS' approach to SRC27, and further information on Anglian's forecast asset needs in light of the FD.

2 The regulatory framework continues to deliver insufficient funding for capital maintenance

(322) Over successive price-control periods, Ofwat has relied on backwards-looking models, assuming the resultant expenditure can fund both increasing base pressures and the capital maintenance requirements of an ageing asset base. This carries the inevitable consequence that companies cannot maintain and, critically, replace their assets at the end of their economic life.

2.1 Ofwat's framework is inadequate and is a poor comparator to others' approaches

(323) Ofwat's framework assumes most future capital maintenance requirements can be funded via base, using econometric models. This is not the case. Base models focus on historic spend. This therefore has the effect of locking in low levels of spend, by assuming that historic spend was accurate and relying upon it to determine future allowances (despite, for example, significant growth in the asset base via prior AMP's enhancement spending).

(324) Therefore, the only price control mechanism available for companies to fund future capital maintenance needs is by submitting a CAC and by satisfying the CAC criteria (eg. giving compelling evidence that the funding need arises due to the company's unique situation or that future industry costs are higher than historical costs) and that this is not (fully) captured by the base cost models.[157] If a CAC is rejected, Ofwat may add this to the company's base cost requests and use it as evidence of an inefficient plan, thereby disincentivising companies from submitting CACs. In practice, when companies do submit these claims, companies rarely satisfy Ofwat's CAC threshold and most are rejected (including at PR24 – see para. (346) below).

(325) Ofwat's overall approach is clearly too restrictive for the purpose of assessing the sector's capital maintenance needs and difficult to reconcile with Ofwat's duty to secure resilience.

(326) There has been growing alignment on the inadequacy of the current approach to address asset health, and the consequences of failing to invest, among key stakeholders for several AMPs, including water companies, Defra, the EA and the National Infrastructure Commission ("**NIC**"). This includes:

(i) The NIC's 2024 report recommending that: "*The sector needs a forward looking asset health metric which assesses the likely remaining life of assets, and the probability of failure over time, to ensure that resilience is not threatened by a failure to invest in long term maintenance or to address future threats*".[158]

[157] Ofwat, PR24 final determinations, Expenditure Allowances (December 2024), page 27 (See here).
[158] NIC, Developing resilience standards in UK industry (September 2024), page 9 (See here).

(ii) Reckon's 2024 finding that "*the answer ... is a clear no*" to the question "*whether the current regulatory framework should be deemed "safe" in relation to asset health and the associated risks to outcomes in the future*".[159]

(iii) A June 2022 report for Water UK written by Economic Insight, stating that "*whilst Ofwat can observe overall totex spend, it cannot easily identify whether any underspend reflects 'efficiency' or 'cuts'. Nonetheless, the available evidence suggests that there is a need for a step-change in the level of asset maintenance and replacement at PR24 (and beyond) to ensure it is on a long term sustainable path*",[160] citing comparative replacement rates in England and Wales vs. the European average, age of mains, and increase in depreciation rates, meaning assets are being assumed to last longer.[161]

(iv) Concerns are exemplified by DEFRA's new Guidelines for Statutory DWMPs, which state that "*Your DWMP should formalise and document a plan of strategic, risk-based interventions to address asset health issues, as well as setting out the magnitude of the expenditure required*".[162]

(327) Likewise, this CMA acknowledged at PR19 that potential issues with capital maintenance may be forward looking, and may become more important, and suggested that Ofwat: "*considers developing indicators to track this issue and to enable it to enhance its analysis with a forward-looking element that will assist in triangulating results from its econometric modelling of historic costs*".[163]

(328) Asset health concerns are reflected in the approaches of several regulators, including Ofgem's Network Asset Risk Metric ("**NARM**") (which uses a monetised value of the failure risk associated with certain network assets) and Northern Ireland's capital maintenance uplifts for 'consequential maintenance' (having changed their approach in their PR19 control to provide these uplifts for additional current and future maintenance expenditure which might be required due to enhancement investments in prior price control periods).[164]

(329) Ofwat's approach is particularly harmful when directly compared to the approach of WICS, the water regulator in Scotland. WICS recognised the need for a step-change in approach to asset health in its SRC21 price-control, deeming its pre-SRC21 approach of allowing asset maintenance costs based on efficient short-term cash needs to ensure strong efficiency improvement incentives "*was not consistent with ensuring customers pay for the assets they rely on over the life horizon of the assets*" or encouraging "*an appropriate focus on the sustainable management of the asset base*".[165] This led WICS at SRC21 to state that: "*It is not about minimising charges in the next regulatory control*

[159] Reckon, Improvements to the regulatory framework for asset health and operational resilience, Workstream 2: Main report (5 July 2024), page 25 (See here).
[160] Economic Insight, Options for a Sustainable Approach to Asset Maintenance and Replacement (June 2022), page 14 (See here).
[161] Economic Insight, Options for a Sustainable Approach to Asset Maintenance and Replacement (June 2022), pages. 7-8 (See here).
[162] Defra, Guidelines for Statutory Drainage and Wastewater Plans (DWMPs) (February 2025), page 8 (See here).
[163] CMA, PR19 Final Report (17 March 2021), para. 4.293 (See here).
[164] In 2021, the Northern Ireland Authority for Utility Regulation (NIAUR) provided capital maintenance uplifts for what is called 'consequential maintenance' following enhancement investments in previous period. The NIAUR had previously considered that, prior to PC21, comparator companies would also incur consequential maintenance costs as a matter of course, and therefore their modelling of asset maintenance expenditure for water companies would already take consequential maintenance into account. However, at PR21, the NIAUR considered that there had been a material increase in the capital maintenance programme, leading to a consideration that this could drive increased consequential maintenance that would need to be taken into account. NIAUR, Water & Sewerage Services PR2021-27, paras. 6.18-6.34 (See here).
[165] WICS, Strategic Review of Charges 2027-2033: Final Methodology (12 December 2024), page 87 (See here).

*period and **leaving future customers to pay higher prices**. This would be inconsistent with the **Commission's duty to future customers** … [Scottish Water] will have to plan and act for the long term […] but it can count on the resources being available to make the right investment decisions for the longer term*."[166]

(330) WICS has now taken this further.

(i) Its final SRC27 price-control review states that, while Scottish Water will use Ofwat's PR24 base models for benchmarking, this is for opex only - capital maintenance spend will be removed from those models and be subject to a separate focused assessment.

(ii) WICS will combine a top-down asset base analysis (using the replacement cost and estimated asset lifetime to calculate an 'economic depreciation' for Scottish Water),[167] with a detailed bottom-up assessment of future asset replacement needs, so as to understand if Scottish Water is "*effectively maintaining its asset base and not creating challenges or risks for future generations of customers*".[168]

(iii) WICS will require Scottish Water to forecast asset condition to 2050 based on expected renewal rates and spend (in contrast to Ofwat's historic cost models).[169]

(iv) WICS' aim is to continue to transition to customer charges covering the full economic depreciation of assets, recognising that its analysis shows that "*investment in replacing assets would need to increase significantly over the coming years*" and recognising its "*statutory duty to both current and future customers*".[170]

(331) The FD does not take this focused, forward-looking, long-term approach to asset condition. While there are some indications (namely Ofwat's planned Asset Health Roadmap) that Ofwat recognises a need to better address this issue than it has at PR24 FD, it is significantly behind other regulators, despite the CMA's recommendation for change.

2.2 Anglian has made consistent efforts to advocate for change

(332) Ofwat's inadequate approach has persisted despite Anglian, and others, taking concerted action to address asset resilience from long before the FD. In particular, Anglian has:

(i) identified risks from ageing assets and need for asset stewardship in its 2007 SDS, including the need to invest in asset renewals and replacements and for a step-change in spending over the next 25 years.[171] Anglian has been one of the founding patrons of the Institute of Asset Management and one of the first companies in the world to achieve ISO55001 Asset Management Standard.

(ii) at PR19 (which occurred against a backdrop of mounting concern on asset health, climate change and the introduction of Ofwat's legal resilience duty), pressed the issue that not assessing capital maintenance and asset replacement needs results in underfunding botex, in a report by Dr Harry Bush and John Earwaker submitted to

[166] WICS, Strategic Review of Charges 2021-27, Final Decision Paper, Prospect for Prices, pages 5-7 (See here).
[167] WICS, Strategic Review of Charges 2027-2033: Final Methodology (12 December 2024), page 87 (See here).
[168] WICS, Strategic Review of Charges 2027-2033: Final Methodology (12 December 2024), page 87 (See here).
[169] WICS, Strategic Review of Charges 2027-2033: Guidance and Definitions to the Business Plan Table (2024), page 49 (See here).
[170] WICS, Strategic Review of Charges 2027-2033: Final Methodology (12 December 2024), pages 87-88 (See here).
[171] Anglian, Strategic Direction Statement, page. 57 (See here).

Ofwat and the CMA which recommended a forward-looking analysis of capital maintenance needs.[172]

(iii) led the industry since PR19 in understanding asset system resilience, including completing an in-depth holistic review of its entire asset base (the ASRAP) even though the PR24 Final Methodology did not require this. Building on the forward-looking Asset Management Plan Summaries produced for PR19,[173] Anglian used advanced digital tools, including a predictive analytics module, to create a digital replica of its asset base and to test multiple strategies to forecast its long term asset needs, reflecting each asset's assigned attributes (e.g., material, diameter, physical environment traits). This can be analysed to select an optimal mix of assets for renewal. The outputs have been used to provide Anglian's board and stakeholders with insight into the long-term sustainability of service performance and renewal rates across 9 asset classes, and to inform maintenance planning, emergency response and business cases for future investment.[174]

(iv) undertaken vital work with third-party experts to understand its asset base, including deep research with Professor Tim Farewell to analyse climate vulnerable mains.[175] The findings of this work (that Anglian's regional characteristics cause increased burst risks despite pressure management) has resulted in Anglian successfully receiving mains renewal CAC funds and has helped to shape Anglian's LTDS. Anglian also worked with KPMG, who assessed a clear link between weather and flooding and pollution and a strong correlation between rainfall and pollution caused by hydraulic overload and mechanical failure, helping Anglian to plan for anticipated PR24 pressures.[176]

(v) embraced Ofwat's AMMA process, that was designed to quantify asset management maturity in the water sector. Anglian proactively elected to appoint a third party (Mott MacDonald) to assure its results pre-submission, and is one of only two companies that has voluntarily published an updated AMMA showing its progress since 2021.[177] Ofwat's 2021 AMMA analysis, assured by Arup, identified Anglian as the highest scoring company for asset management maturity in the sector.[178]

(vi) campaigned (unsuccessfully) with others in the sector for the PR24 LTDS to elevate base rather than only enhancement within its assessment.

(vii) actively participated in Ofwat's Operational Resilience Workstream via consultation responses, working group attendance, site visits and volunteering to present company showcase slots to other companies and regulators.

Impact of Anglian's Data Analytics Approach to Long-term Asset Management

Anglian used a range of digital tools to develop its ASRAP, modelling over 5-year, 10-year and a longer term 25-year+ horizon to align with its SDS and LTDS, informed by its wider expert analytics work with Professor Farewell and KPMG on the impact of climate on its assets.

[172] Bush and Earwaker, Providing Appropriate Regulatory Funding for Capital Maintenance Activity Ensuring Capital Sustainability and Service Resilience (May 2019), page 2 (See here).
[173] Anglian, Asset Management Plan Summaries (2019) (Annex 018)
[174] And were provided to NIC to inform the new publication of the National Infrastructure Assessment.
[175] See, for example, Professor Tim Farewell's submissions to the CMA for the PR19 redetermination (See here).
[176] KPMG, The impact of climate change on key operational performance measures (August 2024) (See here).
[177] Anglian, Asset Management Maturity Assessment Anglian Water 2024 update (See here).
[178] Ofwat, Asset management maturity assessment – company by company summary (December 2021) (Annex 019).

This approach has enabled Anglian to identify material impacts on customers from a continuation of Ofwat's approach, and improvements that can be achieved with incremental cost increases. For example:

Gravity Sewers: Utilising failure models to predict likely failures due to deterioration, including installed data, material, soil type, liquid type and diameter vs. ability to amend baseline over time for different funding levels, for each of collapses, pollution incidents and flooding. This shows, for example:

(i) Deterioration in the absence of proactive renewals would rise from 290 bursts in 2025 to c. 400 per year in 2070 – a worsening of over **35%**

(ii) Using AMP7 maintenance renewal rates this could be reduced to c. 390 by 2070

(iii) Reduction achieved by a small amount of additional spend at AMP8 to c. 380 by 2070

Water mains: Identifying for water base mains a baseline deterioration rate particularly in light of climate change impacts, showing:

(i) Deterioration in the absence of proactive renewals would rise from c.5,500k bursts in 2025 up to an upper bound of c. 8,400 by 2050 – a worsening of over **50%**

(ii) Reduction achieved if utilise annual average water mains capital maintenance rate in AMP 7 (reducing to c. 7.200 by 2050).

(iii) Reduction achieved if add additional valued CAC claim (reducing to c. 6,600 bursts by 2050) – still worsening by **20%.**

This allows Anglian to understand the risks flowing from specific assets to customers, the environment and network, the magnitude of improvement that can be achieved for a specified increased expenditure level and the consequences of underinvestment. Investment can then be prioritised in a manner that maximises outcomes.

2.3 Potential reforms to Ofwat's approach

(333) In addition to its extensive actions outlined in para. (332) above, Anglian jointly sponsored (with Northumbrian, Wessex and Affinity Water) a project which instructed Reckon to examine the regulatory treatment of capital maintenance spend and asset health and considered potential reforms. Reckon identified four key concerns:

(i) **Informational**: Lack of useful information about risks of future service disruption and adverse environmental outcomes that may arise from poor asset health / deterioration, and how these risks are being managed.

(ii) **Behavioural and decision-making**: water company decisions are heavily influenced by the regulatory framework and may not be aligned with achieving good long-term customer and environmental outcomes in terms of the adequacy and efficiency of asset health investment.

(iii) **Funding**: funding available to water companies via customer bills under the regulatory framework would be insufficient to properly remunerate efficient companies adopting best long-term asset health and future risk management decisions.

(iv) **Responsibilities**: Ofwat may not take enough responsibility for using its own actions to understand and mitigate long-term risks of asset health / deterioration to customers and the environment.[179]

(334) Reckon identified several options (policy packages) for priority consideration, including[180]

(i) Retaining cost benchmarking as a starting point for base costs, but having an assessment to consider industry-wide forward-looking adjustments using a range of evidence. This would be combined with retaining focus on outcomes but enhancing the incentives on long-term performance (ie. including enhanced incentives and informational remedies);

(ii) Moving away from the use of base-cost plus models, and using an Ofwat-led assessment of capital maintenance using a range of models and tools. This would be combined with retaining focus on outcomes but enhancing the incentives on long-term performance (ie. including enhanced incentives and informational remedies);

(iii) Use of either of the approaches above on cost models in a way that draws on data on composite asset risk-metrics, (which would be similar to Ofgem's NARM approach). Anglian notes that it has subsequent to this report provided evidence to Ofwat of the potential to apply the NARM framework to high voltage electrical assets owned by water companies, providing evidence that these assets are end of life and require replacement.[181]

(335) Reckon's analysis draws on many of the same themes as WICS' adjustments to its regulatory approach and shows that Ofwat's current methods just do not provide an appropriate funding calculation for tackling asset health needs. The need for assessment of this area has been identified by Sir Jon Cunliffe and the Water Commission.[182]

3 Ofwat has underestimated the scale of the issue and failed to appreciate the limitations of base

(336) Ofwat's PR24 FD indicates that it underestimates the scale and urgency of the issue, not only in the inadequate asset health mechanisms provided at the FD, but also in its presentation of current asset status, and assessment of the sufficiency of past base spend.

3.1 Ofwat's assessment of current asset status is unduly positive

(337) Ofwat presents a positive overall picture of asset health in the FD, stating that capital maintenance expenditure has increased by 9% in real terms since 2011-2012, that performance against asset health performance commitments has improved, and asset health metrics such as mains repair, unplanned outage and sewer collapses show a stable or improving trend over time.[183] This analysis is misleading, and results in a misunderstanding as to the scale of the challenge to be addressed:

[179] Reckon, Opportunities for improving Ofwat's approach to asset health following the PR24 draft determinations (28 August 2024), pages 6 (See here).
[180] Reckon, Improvements to the regulatory framework for asset health and operational resilience, Workstream 2: Main report (5 July 2024), pages 42 and 50 (See here).
[181] Anglian, Applying the Distribution Network Operator (DNO) NARM Methodology to AWS Oil-filled HV Transformer & Switchgear assets (2024) (Annex 020).
[182] Sir Jon Cunliffe, Speech from Sir Jon Cunliffe, Independent Water Commission (27 February 2025) (See here).
[183] Ofwat, PR24 final determinations, Expenditure Allowances (December 2024), pages 78 and 81 (See here).

(338) First, when analysing asset health metrics, its important to recognise a distinction between asset replacement and other activities designed to maintain standards. While Ofwat states that it has compared asset condition now vs. asset condition in PR09 for certain asset classes to draw this conclusion, Ofwat's mains repair and sewer collapses analysis do not measure asset health in terms of long-term deterioration of structural conditions, but rather how often mains burst or sewers collapse, which can be influenced by shorter-term approaches that mask true conditions. Indeed, the NIC has labelled such measures as "*lagging indicators*".[184] As WICS has recognised, it is the level of replacement maintenance which informs whether companies are at a sustainable investment rate, with WICS using expected asset lives in setting funding as explained in para. (330) above.[185]

Short-Termism in Sewerage ODIs

FD Sewerage ODIs relate to performance commitments that only register sewer collapses that affect a customer, e.g., due to loss of toilet access, flooding etc. This encourages companies to install monitors to spot sewer back-ups and send response teams to overpump or tanker the sewer before customers are affected. It does not encourage companies to address cracks and deformities in pipelines that can also cause flooding, even absent a sewer collapse.

However, this is a short-term approach, which in terms of asset condition analysis leads to an artificially low number of collapses without renewing the asset.

This results in Ofwat considering there is no need for companies to spend more on renewals on the basis that sewer collapse metrics are improving. However, the condition of the underlying assets are in fact worsening, in a manner that the ODI performance commitment does not deem relevant.

(339) Second, while Ofwat cites increases in historical capital maintenance spend, this provides a limited picture on what levels of replacement maintenance have occurred. Increased spend over time is not indicative of capital maintenance improvements without controlling for: (i) population growth; (ii) asset-base growth - given capex must naturally expand with enhancement expenditure; and (iii) without considering the quality, direction and nature of that spend from a capital maintenance perspective.

(340) The better approach to understand the risks at hand, is to consider whether capital maintenance spend increases have kept pace with the asset base growth, given new technologically advanced, short life assets. This can be undertaken by comparing capital maintenance expenditure levels with the sector's RCV or (more critically given that RCV does not capture replacement rates), with the Gross Modern Equivalent Asset Value ("**GMEAV**") metric, under which Anglian estimates that sector assets are now valued at £700 billion.[186] By way of illustration, **Table 2** shows that such a range of high-level top down analyses to illustrate the sector is materially underfunded on these metrics.[187]

[184] NIC, Letter to Ofwat, Water company asset management (18 May 2023), page 1 (See here).
[185] See WICS, Decision Paper, Strategic Review of Charges 2021-2027, Asset Replacement (2023), page 2, which states that "effective and efficient asset management (and, in particular managing asset replacement) is a core function". (See here).
[186] Anglian Water, PR24: Anglian Draft Determination Representations, pages 33-34 (See here)
[187] Further explanation of these figures is provided in Anglian, Annex 12a Information on RCV run-off and SRC21 benchmarks for sustainable capital maintenance and Annex 12b Supporting benchmark analysis for information on RCV run-off and SRC21.

Table 2: Top-down underfunding estimates vs. RCV and GMEAV approaches

Ref	Benchmarking method	Approximate implied under-funding (£m/yr) based on outturn expenditure	Approximate implied under-funding (£m/yr) based on AMP8 IA
1	Comparison of capital maintenance run-rate with RCV run-off, using 4.13% of RCV in the Anglian FD Financial model	210	102
2	Comparison of WICS view of sustainable level of capital maintenance for Scottish Water, pro-rated using GMEAV	273 – 410	165-302
	Average of the above	276	168

Source: *Anglian Analysis*

(341) Third, Ofwat does not give sufficient reasons as to why it considers that further uplifts are not required. For example, Ofwat states that sewer conditions are reasonable, despite renewal rates being less than half of the rate of renewal of water mains (which Ofwat considers to be too low). Likewise, while Ofwat states that several companies informed Ofwat that they have maintained their assets over time, including Severn Trent and United Utilities,[188] there are clear reasons to be concerned about wider sector assets; indeed these companies' mains renewal rates have, like those of the sector, hugely declined (by 74% and 98% respectively since AMP4, and United Utilities has also seen sewer renewal rates decline 64% between AMP4 and 2021/22).

(342) Underestimating the issue may have contributed to the poor efforts to address it in PR24.

3.2 Ofwat has not adequately recognised the limitations of its base framework

(343) Part of Reckon's concern with Ofwat's framework is the lack of information derived on asset health, including from base models. Reckon has observed, for example, that while Ofwat treats the results from its base models "*as good evidence on companies relative efficiency ... these results relate more to short-term cost control than long term efficiency*", the "*lack of information generated by the regulatory framework on the long term risks to outcomes and reliable services in the future and/or how companies are managing these risks*" and "*no proper assessment by Ofwat of how industry-wide levels of efficient costs may differ in the next AMP compared to costs predicted by static models estimated using historical data (and high evidential burden for company evidence on this)*".[189] These concerns manifest in many forms in the FD, creating concerns, for example, that Ofwat will expand its mains renewal approach of utilising historic models to set underfunded targets subject to PCDs, to the future needs of other asset classes, where, as per para (228) above, a similar approach to other asset classes will quickly result in more than Anglian's total allowance being ringfenced to one asset or another, demonstrating in

[188] Ofwat, PR24 final determinations, Expenditure Allowances (December 2024), page 87 (See here).
[189] Reckon, Improvements to the regulatory framework for asset health and operational resilience, Workstream 2: Main report (5 July 2024), pages 18 and 22 (See here).

practice why Reckon's assessment has identified the need to change the approach to Ofwat's cost assessments.[190]

(344) That Ofwat does not adequately appreciate these concerns is evident in its reasoning for rejecting submissions that base has been insufficient to prevent asset deterioration.

(i) Ofwat states that PR19 allowances were only 0.4% less than companies requested.[191] But this does not show that allowances have been sufficient, given the vast scope of non-capital maintenance activities covered in base, and the distortive effects of the QAA process disincentivising claims (see **Chapter B (*Why Anglian is at the CMA*)**).

(ii) Ofwat dismisses arguments that benchmark companies in Ofwat's models are in a capital maintenance trough and distorting the capital maintenance allowance levels. This is incorrect. As explained in Anglian's DD, upper quartile companies are in a trough with regards to replacement expenditure, with this drop having particularly occurred since pre-2008, when botex models were first introduced. This is shown by Anglian's DD analysis of mains renewal rates, where a steep drop occurred at the time of the botex models introduction, as a response to the regulatory incentives the botex models created. Ofwat's FD analysis of trends since 2011[192] does not capture this change, or acknowledge its causal factors.

(iii) Ofwat's view[193] that the (concerning) mains renewal rate data does not provide insights on other asset classes particularly when capital maintenance spend has increased does not recognise that increases vs. historic spend does not translate into better asset health given short-term expenditure risks and population / capex growth, as per para. (338) above, while its statement that information gathering suggests companies have delivered large civil asset renewals does not (if the information gathered does indeed show true renewals) show that funding has been sufficient to empower the scale of sector asset renewal required. This is particularly where so many companies have overspent against base (**Chapter G.2, (*ODIs*)**) and concerns on network resilience are so high (see, for example, para. (326) above).

4 Ofwat's PR24 FD approach is inadequate and leads to material underfunding

(345) This lack of recognition on the significance of the risk and limitations of its current tools contribute to inadequate funding at PR24.

4.1 Ofwat's asset health approach at FD

(346) The PR24 FD provides limited mechanisms to protect asset health, and those that are provided are underfunded, under-utilised or overly constrained. In particular:

(i) Ofwat has continued to award most allowances in line with historical spend levels via base models (which fail to capture asset health needs, per para. (323) above).

(ii) Despite the sector's work on the AMMA (which identified Anglian as the leading company) or Anglian's significant work on its ASRAP, these initiatives do not appear to feature in any meaningful way in Ofwat's decision-making at PR24.

[190] Reckon, Improvements to the regulatory framework for asset health and operational resilience, Workstream 2: Main report (5 July 2024), page 28 (See here).
[191] Ofwat, PR24 final determinations: Expenditure Allowances (December 2024), pages 78 and 84 (See here).
[192] Ofwat, PR24 final determinations: Expenditure Allowances (December 2024), page 87 (See here).
[193] Ofwat, PR24 final determinations: Expenditure Allowances (December 2024), pages 86 and 87 (See here).

(iii) Ofwat placed little weight on the LTDS in PR24, as per **Chapter B (*Why Anglian is at the CMA*)**.

(iv) Ofwat further excluded base from the adaptive pathways that were at the heart of long term delivery strategies in the LTDS, despite companies' calls for its inclusion on the basis that Ofwat considers there to be less uncertainty in base costs.[194] While companies were required to explain in their LTDS how their approach to future base activities will contribute to long term outcomes, this was constrained by Ofwat's position that: "*our efficient base expenditure allowances provide a long term efficient allowance for capital maintenance and other elements of on-going company expenditure. In developing their long term delivery strategies, companies should assume that our base allowances continue to do so over the long term*".[195] Rather than recognising that the past backward-looking approach has inhibited maintenance, the LTDS Methodology maintained and masked undue pressures on base.

(v) Ofwat rejected the vast majority (both in number and value) of CACs received. Companies made 64 CACs. 11 were for asset maintenance with a combined value exceeding £1.5 billion (and there would undoubtedly have been many more but for the disincentives of the QAA). Ofwat allowed just £456 million (pre-frontier shift) to these claimants under the sector-wide mains renewals adjustment. While certain additional funds have been provided to specific companies for reservoir maintenance (United Utilities and Hafren, for a combined c. £71 million), and specific (albeit unclear) conditional gated allowances to Thames on certain capital maintenance issues, these are isolated allowances vs. the scale of the sector ask.

(vi) Ofwat's rejected CACs included targeted and well-evidenced Anglian CACs that were justified by its ASRAP, efficient unit rates and other data sources, and which will materially impact Anglian's asset health needs for boundary boxes and leakage. Meanwhile, the sector asset health CAC that has been granted (mains renewal) significantly underfunds the rate Ofwat requires renewals to be delivered due to Ofwat's inaccurate calculation of the implicit allowance for renewals (see **Chapter E.1 (*Base costs*)**).

(vii) The FD points to certain 'asset health performance commitments' targets. However, the mains renewals performance commitments have been underfunded (please see **Chapter E.1 (*Base costs*)**), with pressure on performance commitments amplified by the LTDS' position that companies must "*continue to improve their performance over the long term from base expenditure [and] .... challenge themselves to deliver more over time ... through their base expenditure allowance*"[196] without amending the backwards looking approach to base expenditure that has produced chronic underfunding. Further, sewer collapses performance commitments, as explained in para. (338) above, can be met with short-termist operational improvements, and therefore mask longer-term deteriorations in asset health.

(viii) The effects of Ofwat's approach are exacerbated by poorly-calibrated ODIs and unnecessarily restrictive PCDs, which risk incentivising companies to spend on

[194] Ofwat, PR24 and beyond: Final Guidance on Long Term Delivery Strategies (2022), page 48 (See here).
[195] Ofwat, Response to queries on long term delivery strategies (2022), page 1 (See here).
[196] Ofwat states that their forecasts expected companies to take account of Ofwat's approach in developing their long-term forecasts of what base buys. Ofwat's PR24 Final Methodology states that "companies should challenge themselves to deliver more over time for customers and the environment through their base expenditure". Ofwat, PR24 and beyond: Final Guidance on Long Term Delivery Strategies (2022), page 31 (See here).

narrowly defined asset classes and short-term targets rather than higher priority maintenance that delivers greatest benefit to customers, and leaves them under-funded for the latter.

(ix) Ofwat's plan to develop an "**Asset Health Roadmap**"[197] gives no guarantee of additional funds being provided in AMP8 for the broad range of asset classes for which Ofwat acknowledges it does not know what base buys, delays (once again) tackling this critical issue despite the CMA's PR19 recommendation and sector advocacy, and threatens to make the same mistakes on funding as Ofwat has already made for mains renewal on funding levels (discussed in Section 5.2 below).

4.2 The FD will materially affect Anglian's capital maintenance spend capabilities

(347) At the time of its Business Plan, Anglian's analysis (using its ASRAP tools, building on the forward-looking Asset Management Plan Summaries produced for PR19 identified above that showed the link between expenditure and quality of service for customers and the environment) showed that after mitigations from operational practices, reallocation of resources and the adoption of smart approaches to network and asset management, its asset performance could be held stable and deliver some performance improvement in AMP8 using capital maintenance spend levels envisaged at the time of the Business Plan.

(348) Based on modelling for its Business Plan, from AMP9 Anglian expected to need to increase base spend on replacement and renewal to address deterioration due to increasing failure rates of longer life assets such as pipelines and concrete or steel storage tanks installed via previous enhancement investments. These assets have not previously required significant expenditure and therefore are not present in the historic cost base used by the models upon which Ofwat's base assessment currently so heavily relies.[198] This resulted in the following modelled prediction of Anglian's asset performance over 25 years at the time of its Business Plan.

[197] Ofwat, PR24 Final Determinations: roadmap for enhancing asset health understanding in the water sector (December 2024) (See here).

[198] The outputs of this assessment were provided to the NIC to inform the new publication of the National Infrastructure Assessment.

Figure 25: ASRAP Prediction of Anglian 25 Year Asset Performance

Asset class		Unmitigated			Mitigated			Comments
		5 year	10 year	25 year	5 year	10 year	25 year	
Pipelines	1.1 Treated water mains	↘	↓	↓	↔	↘	↓	Mitigation via smart networks, and climate resilience programme
	1.2 Gravity sewers	↘	↓	↓	↔	↘	↓	Short term mitigation via smart networks, and advanced pipe selection
	1.3 Rising mains	↔	↔	↔	↔	↔	↔	
Treatment	1.4 Water treatment works	↔	↔	↘	↔	↔	↘	Short term funding required for cooling systems
	1.5 Water recycling centres	↔	↔	↘	↔	↔	↘	Amber after 25 years due to uncertainty in modelling over extended time frame.
	1.6 Bioresources	↔	↔	↘	↔	↔	↘	
Pumping	1.7 Boosters	↔	↔	↔	↔	↔	↔	
	1.8 Sewage pumping stations	↔	↔	↔	↔	↔	↔	
Storage	1.9 Storage points	↘	↓	↓	↔	↘	↓	Short term mitigation via reallocation of funding in base

Source: Anglian analysis[199]

(349) However, as explained in **Chapter E.1, (*Base*)**, Anglian has underfunded c. £500 million vs. its Business Plan due to base over-stretch, which will disproportionately impact maintenance spend. Therefore, the FD does not fund Anglian to maintain current levels of asset health.

(350) The practical impact is that Anglian must choose to cut-back on maintenance of certain asset classes, or overspend its base allowances. Many activities are critical, and must continue despite underfunding, meaning that Anglian already knows it will overspend base in its AMP. This is not a viable long-term strategy, given (i) the scale of asset replacement required; (ii) that companies must bear 50% of any overspend at PR24; and (iii) companies can only recover those funds in AMP9. This places too great a risk on financeability in the context of an already significantly over stretched base package, and material risks to attracting investment (see **Chapter H.1 (*Investability and Financeability*)**).

(351) To demonstrate the severity of the underfunding and choices facing Anglian, illustrative examples are provided of where Anglian's ability to manage risk through the choice of

[199] Anglian, PR24 Asset Systems Resilience Appraisal (October 2023), page 12 (See here).

where to invest is materially constrained in the FD. These assessments were informed by Anglian's sophisticated ASRAP tool.

Live Examples of Underfunding Impacts

Certain water assets represent **single points of failure** with potentially **significant impacts to communities or to critical national infrastructure**, particularly where water mains cross infrastructure such as motorways or railways. [redacted]

There is an **urgent need** identified both by Anglian's ASRAP assessment and the DWI to **increase maintenance spending on ageing storage points** to prevent and repair cracks that can lead to coliform ingress to drinking water. Anglian's current run-rate of expenditure of £25m per AMP, needs to **increase to around £85m each AMP based on further analysis gathered since its ASRAP and shared with Ofwat.** In reality, such increases are simply unaffordable within given allowances.

[redacted]

Anglian's ASRAP identified the requirement to increase investment and renewal **of gravity sewers.** This need could be delayed through base funded mitigations until AMP9. Anglian's experience towards the end of AMP7 and the impact felt from infiltration to its networks has shown that assets in high-ground water areas are in **more urgent need of remedy**, and that planned mitigations will be insufficient to meet performance expectations from those assets. Anglian has proposed to Ofwat to make a targeted increase in maintenance of assets in high ground water areas of around £90m to begin to address this issue and as a step towards the longer-term significant increase in gravity sewer renewals that is required. Within the constraints of the FD, this increase in investment is not possible. *(See* **Chapter E.1 (*Base costs*)***)*

(352) This concerning position is the consequence of Ofwat's approach to setting base allowances, for which Anglian has requested remedies in this Statement of Case. If the CMA is not minded to make these adjustments, Anglian requests £150m funding for storage points and gravity sewers, subject to a use-it-or-lose-it-mechanism to address to address the asset health risks for these asset classes created by the base cost pressures in the FD.

5 Ofwat Asset Health Roadmap comes too late and risks perpetuating errors

(353) Ofwat has not made meaningful progress on asset health since PR19, despite the CMA's recommendation to do so, and its vital that its next steps do not perpetuate past errors.

5.1 Ofwat's Asset Health Roadmap arrives too late and creates uncertainty

(354) Ofwat is only in 2025-2027 gathering data to "*determine what base buys*" for a wide range of assets,[200] and currently has not adequately assessed if the FD is sufficient to maintain a broad catalogue of assets.

(355) This illustrates Reckon's concern that there is insufficient information on the risks that may arise from poor asset health, including due to the lack of well-developed data, with Ofwat's base models relating more to short-term outcomes.[201]

(356) Ofwat has stated that it will consider any sector wide asset condition issues that need to be addressed mid-period. However, this will not address AMP8 underfunding concerns. The possible (uncertain) provision of unspecified funding, for unspecified assets over an unspecified timescale does little to mitigate the underfunding risks created. Nor can companies undertake necessary preparatory work now, which is when it is needed, to allow companies to ensure deliverability of their work programmes.

(357) Anglian is and will continue to proactively and constructively engage with Ofwat on its proposed Asset Health workstream, with Ofwat having defined the goal of their workstream using the terms Anglian proposed be adopted (i.e. improving long term service resilience through improved asset health in priority areas). However, Ofwat's analysis is too late to assess the adequacy of allowances within PR24.

(358) Furthermore, it is expected that (absent a fundamental shift in its approach) Ofwat will again assess what base buys for these assets on a backward-looking basis (where historic spend has not captured the level of renewals now necessitated). This risks materially underfunding asset classes, as has occurred in mains renewal.

5.2 Ofwat's Asset Health Roadmap risks unfairly penalising companies for their historical spend on specific asset classes

(359) As explained in **Chapter B (*Why Anglian is at the CMA*)**, Ofwat's mistakes in setting mains renewal allowances are not limited to its incorrect assumption that the sector can deliver a 0.3% renewal rate from base (see **Chapter E (*Base*)**). It has further effectively penalised some companies by requiring those with deteriorated asset condition who have renewed mains at less than the median renewals rate to achieve a more than 0.3% renewal rate from base, without any increase in their funding. This is on the basis that customers should not pay twice for this work. This does not affect Anglian, but it is wrong and Anglian is concerned that Ofwat will repeat this mistake and extend it to other asset classes in its Asset Health Roadmap.

(360) While Ofwat is rightly concerned to avoid customers paying twice, its approach fails to recognise that companies that have spent their entire base funds in a price control will have spent those allowances by responding to the regulatory incentives and asset health priorities in their asset base in any particular year, often by doing more than average renewal rates on separate asset classes. Good practice asset management uses risk-

[200] Ofwat, PR24 final determinations: Expenditure Allowances (December 2024), page 92 (See here).
[201] Reckon, Improvements to the regulatory framework for asset health and operational resilience, Workstream 2: Main report (5 July 2024), pages 13 and 18 (See here).

based approaches to prioritise capital investment and other asset strategies (such as emergency response) to deliver maximum value. It is therefore wrong to equate historical median spend on mains renewal, for example, with how much customers have effectively paid each company to conduct base mains renewal in past AMPs, where companies may have reasonably elected to utilise that funding on the maintenance of other assets whose needs or benefits were greater. A single asset class focus is unjust and wrong, and this approach is particularly concerning given Ofwat's recent statement that those found not to have been maintaining stable asset health could face enforcement under WIA and license obligations,[202] and tips the enforcement scales unfairly, where companies may be penalised for underspending on one asset, but presumably will gain no credit for overspending on another. This places too tight a leash around the way in which companies can flex their spend to asset needs.

(361) Although Anglian is not directly affected in the mains renewal context, it believes it vital that the CMA identifies this mistake, so Ofwat does not repeat it in setting additional asset class allowances via its Asset Health Roadmap.

6 The FD's asset health approach also creates additional risk for investors

(362) Asset health is emerging as a critical issue not only for companies but also their investors. Ofwat's approach therefore creates a broader risk for investment at AMP9 and beyond, providing companies and investors no confidence that required capital maintenance activities will be properly funded longer-term, despite the rapidly expanding capex assets that will require long term maintenance.

(363) This contributes to the sector's equity challenge. The significant additional replacement spend that Anglian anticipates being required in future AMPs does not form part of Ofwat's assessment of the equity funding the sector needs to attract, nor does Ofwat show how it will address the challenge of bill price rises due to a ramp up in such expenditure. Further, by delaying addressing sufficiently early the asset health challenge, Ofwat's approach will further exacerbate the steepness in price rises for future generations of customers.

7 While there is a clear case for wider regulatory reform in this area, in the shorter term Anglian asks the CMA to address targeted concerns in its FD

(364) Anglian submits that the above shows that Ofwat's FD and its overall regulatory approach marks a clear breach in its statutory duties.

(365) By failing to properly fund the maintenance of asset health in the water sector, the FD is contrary to the Consumer Duty, by not protecting the interests of future customers who will be forced to rely on costly, ailing infrastructure, for which there is little funding to renew.

(366) Further, failing to fund necessary asset work is in breach of the Functions and Financeability Duties. Without funding to secure long term asset health, water companies will be increasingly unable to combat leaks, pollution and provide high-quality services to customers, and will face the risk of unjustifiable and potentially inevitable licence breaches. This is particularly given Ofwat's recent indication that companies found not to

[202] Ofwat, Workshop 1 – Asset inventory & Priority Assets (February 2025), page 3 (See here).

have maintained assets could be pursued for licence breaches, and its inaccurate use of a median renewals as the benchmark to judge this for mains renewal.

(367) The risk posed by the FD to asset disrepair is further a breach of the Resilience Duty and SPS. Not only does this have significant and clear impacts for customers and the environment, but water utilities are part of the UK's critical national infrastructure. Failures to such infrastructure (as identified by the National Preparedness Commission)[203] have intersectoral impacts due to cascade effects,[204] such that water failures can undermine the resilience of a myriad of other sectors that rely upon it.[205] This likewise results in breaches of the Sustainability Duty, as the lack of adequate funding for long term solutions means that companies are forced to increase expenditure on short term less-costly solutions, rather than focus on long term sustainable development to the benefit of customers.

(368) Anglian recognises that the CMA is unlikely to be able to fully solve asset health concerns within this Redetermination. However, against this wider backdrop Anglian asks the CMA as a minimum to address the following targeted concerns to mitigate Anglian's asset health risks in AMP8:

(i) First, remedying the specific issues Anglian raises in other Chapters on base costs, ODIs and PCDs that would help Anglian to address the immediate asset health needs in AMP8 identified in Anglian's ASRAP. This includes granting Anglian's request for additional gravity sewer and storage points funding to the extent that each of its base claims are not granted, given the critical need for additional funding for these priority assets,

(ii) Second, remedying Ofwat's mains renewal implicit allowance, where it effectively penalised several companies for lower than average replacement activity (in kilometer outputs).

(iii) Third, Anglian asks the CMA to signal once again the need for a step-change in the approach to forward-looking asset maintenance and consider whether it is prudent to continue to revert this issue to future price reviews.

(369) Anglian recognises that sustainable increases in funding to address asset health will result in bill increases for current customers. Long term this would help to protect future customers from poor service and increased asset repair and emergency response costs and will smooth the price rises associated with funding sufficiently asset health. Long term asset resilience in the sector will reduce cost and risk to future customers.

[203] National Preparedness Commission, Regulating for Resilience (September 2024) (See here).
[204] The National Preparedness Commission recognises the need for 'significant cross-government activity and broader coordination' to minimise the risks associated with sectoral cross-dependency. See National Preparedness Commission, Regulating for Resilience (September 2024), page 35 (See here).
[205] The National Preparedness Commission states that "The UK is not self-sufficient in terms of resourcing, and extensive interdependencies mean that risks in one domain are likely to cascade and escalate across different domains." See National Preparedness Commission, Regulating for Resilience (September 2024), page 24 (See here).

Chapter F
Enhancement

1 Introduction

Anglian does not dispute its enhancement allowances at FD and welcomes that Ofwat found Anglian to be efficient on enhancement. This efficiency assessment was reflective of the significant coverage of external benchmarking and challenge that Anglian had applied to its plan ahead of Business Plan submission and throughout the overall process.

Nonetheless, PR24 represents a step change in the scale and complexity of capital programmes driven predominately by statutory obligations, both for Anglian and across all companies, which brings with it an increase in risk inherent in these types of projects. The fundamental shift towards a construction-oriented business model increases exposure to delivery uncertainties, while rigid PCDs further constrain financial flexibility to manage risks, respond to exogenous pressures and drive efficient delivery.

Ofwat has introduced some protections in the FD covering individual areas of enhancement, which go some way to mitigating these increased risks, however they do not fully mitigate them. To ensure the successful delivery of necessary investments, the FD must take into account the challenges posed by PR24 in contrast to previous price reviews when setting appropriate returns. The current FD fails to do so.

Separately, Anglian has two targeted requests for the CMA relating to enhancement:

(a) to adjust Anglian's enhancement leakage allowance, to reflect the adjustment to the baseline which Anglian requests in **Chapter G.1 (*ODIs*)**. Updating Ofwat's model to reflect the requested baseline change (assuming alignment with the WRMP glidepath) would provide an enhancement allowance of £21.8m, as explained further in that chapter; and

(b) to adopt a more credible frontier shift of 0.8% (which would increase Anglian's enhancement allowances by **£41 million** relative to the FD).

2 Anglian developed its enhancement plan, applying a 'double-lock' challenge on cost efficiency

(370) Ofwat's PR24 enhancement cost assessment recognised and supported the cost efficiency of Anglian's enhancement programme. Ofwat used significantly more data points than in PR19, including scheme level data incorporating thousands of projects across the industry in areas such as nutrient removal, sewage treatment centre growth and storm overflows. Ofwat's enhancement allowances for Anglian totalled £5.1 billion (before RPE and productivity) against Anglian's enhancement request of £5.0 billion. Given the extent of the cost challenge applied by Anglian to its Business Plan (see **Chapter C (*About Anglian*)**, Section 3.6), this assessment of efficiency did not come as a surprise.

(371) Whilst Anglian welcomes the enhancement allowance set by Ofwat in the FD in the round, the broader FD settlement does not sufficiently reflect the increased risk associated with delivering a much larger scale of enhancement investment relative to previous AMPs, the asymmetric risk introduced by PCDs or the returns required to allow Anglian to attract the equity needed to deliver that investment.

3 The increased scale and nature of Anglian's enhancement investment at PR24

(372) The scale and nature of enhancement investments has increased significantly at PR24. For Anglian, the total requested allowance for enhancement investments at PR24 is twice the size in comparison to AMP7[206]. The primary driver for this increase in investment across the industry is new statutory requirements, particularly from WINEP and WRMP, which require that enhancement expenditure increases significantly in 2025-2030 and subsequent periods. Statutory investments make up 94% of the enhancement investment in Anglian's plan, required to meet the increased requirements of the WINEP, WRMP, DWMP, water quality and other statutory obligations. The remainder 6% base and is enhancement to deliver on key long-term strategic priorities including delivering growth capacity, improving resilience and delivering on net zero greenhouse gas emissions.

(373) The table below sets out examples of the major investments included in Anglian's plan.

Table 3: Anglian's key enhancement investments for each of its SDS ambitions and related FD allowances

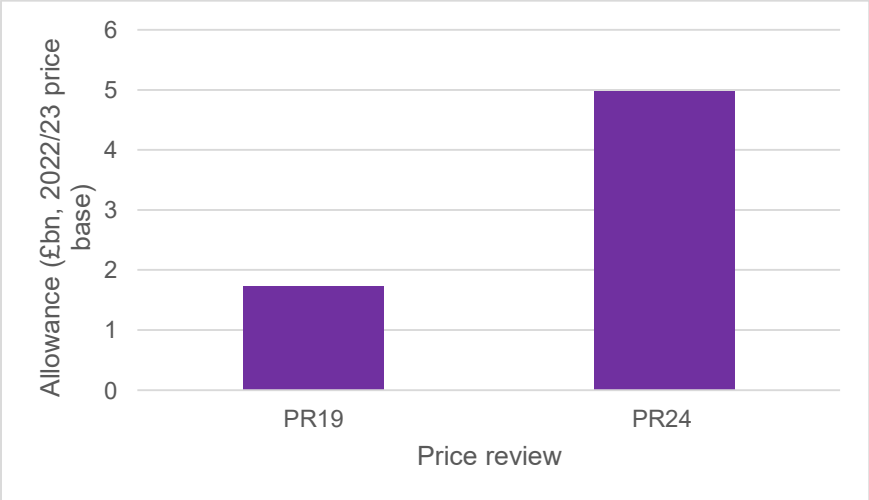
SDS ambition	Examples of key enhancement activity[207]	FD allowance[208]
Resilient to the risk of drought and flood	Interconnectors	£610 million
	Supply-side improvements including Strategic Resource Options (e.g. Reservoirs)	£1,070 million
	Reducing the use of storm overflows	£690 million
	Addressing raw water quality deterioration (i.e. nitrate and PFAS removal from drinking water)	£210 million
Enabling sustainable economic and housing growth	Metering	£110 million
	Growth at Water Recycling Centres	£270 million
	Microbiological treatment for bathing waters	£180 million
Work with others to achieve significant improvements in ecological quality of catchments	Nutrient removal and sanitary parameters	£1,050 million
	Monitoring	£150 million
A carbon neutral business	Sludge enhancement and Industrial Emissions Directive investments	£170 million

[206] PR24 allowances of £4.975bn, in comparison to a PR19 allowance of £1.73bn in 2022/23 price base.
[207] Selected investments with an allowance of over £100m in the FD.
[208] Post application of Frontier shift and RPE. Before any changes to allowances made after the FD publication. Figures to the nearest £10m.

4 A step change for the England and Wales water industry

(374) The water sector faces an unprecedented scale of enhancement investment in PR24, a significant step change from PR19 for both the sector and Anglian (not least considering that PR19 was Anglian's largest ever enhancement programme up to that point). The total expenditure programme over AMP8 is £11 billion for Anglian and £104 billion (a 71% increase on AMP7) for the industry.

Figure 26: Anglian Water enhancement allowances



Source: *CMA PR19 Final Redetermination Report; PR24 Final Determinations: Expenditure allowances*[209]

(375) This is just the beginning, with the necessary investments expected to increase for future AMPs as outlined in companies' Long Term Delivery Strategies (LTDSs) (see Section 6 below): the sector's LTDS expect approximately £270 billion of enhancement investment between AMP8 and the end of AMP12.

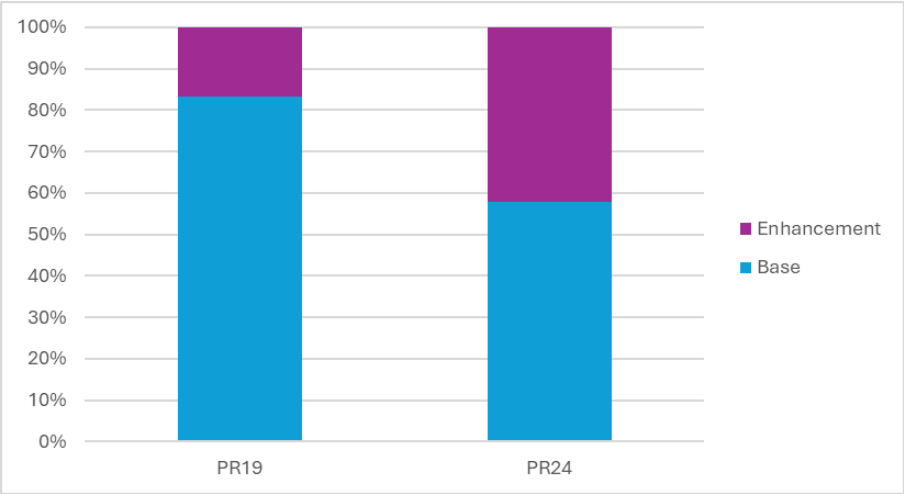
(376) The nature and extent of enhancement investment marks a significant shift in the type of plan that Anglian is delivering at PR24 relative to previous price reviews. In previous price reviews, Anglian has been a predominantly operational organisation, with the majority of its investment funding base activities with some additional enhancement investments. PR24 sets the stage for Anglian's operations to become more akin to the construction sector, with the percentage of totex allowances for enhancement rising from 26%[210] at PR19 to 45%[211] at PR24. The remaining base allowance also now requires additional capital delivery in activities such as mains replacement and provision of additional sludge capacity compared to previous price reviews.

[209] PR19 allowances of £1,466m in 2017/18 price base inflated to £1,730m in 2022/23 price base (CMA, PR19 Final Report (17 March 2021), para. 5.743 (See here)). PR24 allowances of £4,975m (Ofwat, PR24 final determinations: Expenditure allowances - enhancement cost modelling appendix (19 December 2024), table 54 (Total: 'our view') (See here). The PR24 allowance does not include amendments to allowances post-FD publication.

[210] The £1,466m enhancement allowance from para 5.743 of CMA PR19 Final Report as a proportion of the total enhancement allowance including £3,430m of modelled base costs from table 4-30, £367m of unmodelled costs in table 4-32 of the CMA PR19 Final Report, and £403m retail costs from Table A1.2 of Ofwat's PR19 Final Determination Securing cost efficiency technical appendix. (CMA PR19 Final Report (17 March 2021), table 4-32 (See here); Ofwat, PR19 final determinations: Securing cost efficiency technical appendix (16 December 2019), table A1.2 (See here).

[211] £4,975m enhancement allowance from table 54 of PR24 Final Determinations: Expenditure allowances appendix (note this does not include enhancement activity assessed through botex models, such as reducing risk of properties to flooding) as a proportion of the total enhancement allowance of £10,971m in table 55 of PR24 Final Determinations: Expenditure allowances appendix. (Ofwat, PR24 final determinations: Expenditure allowances - enhancement cost modelling appendix (19 December 2024), table 55 (See here).

Figure 27: Split of base and enhancement allowances for the water sector at PR19 and PR24



Source: Anglian, *Enhancement source file Annex 021*

5 PR24 presents a significant shift in risk associated with the scale of investment

(377) This step change in the scale and complexity of enhancement capital programmes, which will deliver significant benefits to customers and their environment and to resilience, inevitably also introduce a significant increase in risk which is inherent in these types of projects.

(378) Enhancement programmes naturally have a different and greater risk profile than base activities. Base cost activities encompass mostly routine activities associated with maintaining the existing operations and asset base. These activities are generally predictable, well-understood and benefit from established delivery mechanisms. Ofwat's definition of base costs recognises their regular and repetitive nature, with a degree of certainty in forecasting and execution. The volume of required base activity is expected to increase over time to support asset health, creating an issue with the sufficiency of costs within base, as discussed in **Chapter E.1 (*Base costs*)**.

(379) In contrast, enhancement programmes involve new activities and significantly greater uncertainty in delivery, cost estimation and timescales. In particular, uncertainty associated with price volatility driven by external factors is a key risk area. Furthermore, Anglian will be implementing its increased-scale enhancement programme in parallel to similar increased-scale programmes across all water companies. The water sector investment will in turn be taking place alongside other sectors in the economy with very large investments in the next decade at least, such as the energy sector. This places additional pressure across the sector and amplifies the risks related to supply chain constraints, contractor availability, costs and regulatory delays. While Anglian and its Alliancing model has sought to mitigate those risks, it cannot fully control for exogenous factors and third parties and residual risk and uncertainty inevitably remains. The risk and reward balance in the FD does not reflect this increased risk.

Table 4: Base costs vs enhancement costs comparison

	Base	Enhancement
Ofwat definition	Routine, year-on-year costs, which companies incur in the normal running of the business to provide a base level of service to customers and maintain the long term capability of assets.[212]	Generally where there is a permanent increase, or step change in the current level of service to a new 'base' level and/or the provision to new customers at the current service level.[213]
Opex/capex split	70% opex, 30% capex	6% opex, 94% capex
Nature of activity	Mostly: • Repeatable • Known • Operational • Working on/ with existing assets Cost and activity can generally be planned and is within company control.	Mostly: • One-off work at sites (though generating ongoing opex/ maintenance work) • Capital delivery • Constructing new assets Significantly more costs and activity outside of company control, dependent on third-parties and more exposed to exogenous shocks.

(380) Anglian's WRMP19 interconnector programme is a key example of how risks can manifest in relation to a large-scale capital programme, driven by exogenous factors and leading to uncertainty and costs overrun.[214] PR24 requires an even greater level of enhancement investment than PR19, significantly increasing Anglian's risk exposure.

[212] Ofwat, Appendix 9 – Setting expenditure allowances (July 2022), page 18 (See here).
[213] Ofwat, Appendix 9 – Setting expenditure allowances (July 2022), page 95 (See here).
[214] See Anglian Water Annual Performance Report 2024 (July 2024), page 271 (See here).

Example: Anglian's PR19 interconnector programme

The WRMP19 interconnector programme is a crucial part of Anglian's long term plans for water security in the East of England. The programme transfers surplus water from the north of Anglian's supply area to areas that currently have lower levels of drought resilience and where abstraction licences need to be reduced to avoid the risk of environmental deterioration. They form part of an increasingly interconnected supply system as set out in the 2024 WRMP.

In the PR19 redetermination the CMA allowed Anglian's full requested costs for the WRMP19 interconnector schemes.

During AMP7 several factors outside of Anglian's control resulted in significant cost increases and time delays to the WRMP19 interconnector programme. These included:

(i) **Covid-19 global pandemic** – extensive lockdowns delayed the early delivery of the programme.

(ii) **War in Ukraine** – The steel pipes for the programme were sourced from Mariupol in Ukraine. The war had a significant impact on the supply of steel pipes, subsequently significantly increasing prices.

(iii) **Significant planning delays** – Potable water mains do not qualify for DCO status and so Anglian has to seek planning permission from 14 separate local authorities. Planning delays have exceeded the statutory timelines by up to 90 weeks in some cases.

(iv) **2023/24 storm season** – A record number of named storms in the winter of 2023/24 led to exceptionally high water tables. The Fens that the interconnectors are laid in are particularly susceptible to heavy rainfall given the soil type and low-lying topography.

Overall, Anglian Water expects to spend £1,134 million against its PR19 allowance of £595m for the WRMP19 interconnectors.

(381) Anglian does not expect that the factors impacting the interconnector programme will apply to all parts of Anglian's enhancement programme. However, the experience of the WRMP19 interconnectors illustrates the extent to which exogenous factors can have a significant inflationary impact on the costs of enhancement programmes beyond those for which there are protection mechanisms in the price control. This uncertainty has already been experienced in AMP7, for a much smaller enhancement programme than Anglian will deliver in AMP8. It is important to note that the introduction of Ofwat's risk mitigations (as discussed in Section 7 below) would not have materially protected Anglian from the exposure to these factors. The PR24 capital programme requires an even greater level of investment and significantly increases Anglian's risk exposure from its totex plan. Anglian also faces greater restrictions on its flexibility to respond to such exogenous pressures given the significant increase in restrictive PCDs.

(382) Anglian's EnvAct_Inv4 programme also provides another example of the extent to which regulatory uncertainty can impact the delivery and costs of enhancement programmes.

Example: EnvAct_Inv4 programme

EnvAct_INV4 investigations are investigations to reduce storm overflow spills to protect the environment so that they have no local adverse ecological impact. These

investigations are planned for all of Anglian's storm overflows in AMP8 and they require Urban Pollution Management (UPM) modelling.

The programme of investigations remains in discussion with the EA post receipt of the FD.

There remains significant uncertainty regarding the methodology required to be used during the delivery of the EnvAct_INV4 programme, including:

(i) the methodology which will be employed;

(ii) specific modelling/quality parameters;

(iii) triage approaches;

(iv) defining thresholds for stage/pathway selection between various UPM level stages and SOAF investigations.

Additionally, the technical guidance relating to coastal and estuarine discharges was recently updated through the storm overflows assessment framework version 2, published towards the end of 2024.

The "Task and Finish" group, initiated by the EA and the industry in May 2023, aimed to define the screening process for UPM. However, there are still unresolved issues, including as to the approach to coastal waters investigations and SOAFv2 investigation modelling/threshold requirements. This uncertainty creates challenges for the expected programme of delivery and resource planning.

Although the uncertainty mechanism can potentially cover additional obligations, it does not account for the time spent on current approaches. This situation hinders the ability to deliver early or more ambitious investigations and does not extend obligation dates for additional resource arrangements.

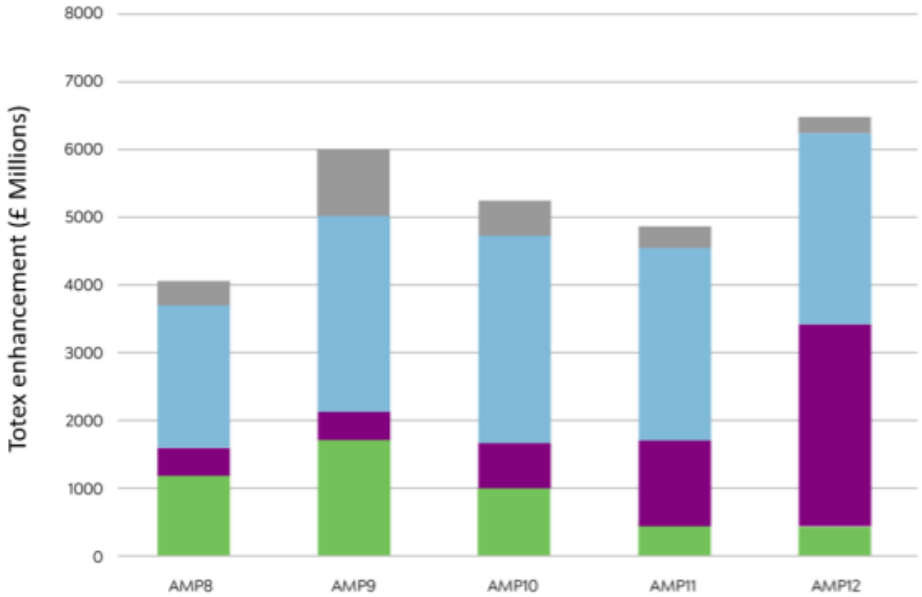
The significant uncertainty in resource requirements and methodology is increasing the uncertainty of delivering the studies within the current obligation dates. Additionally, study delays will affect the delivery of potential spill improvement schemes under for the most vulnerable sites by 2030.

The consequences of this ongoing uncertainty relating to the EnvAct_INV4 programme is impacting the expected programme of delivery, as the planned investigations and improvements are not progressing as initially scheduled. This has a ripple effect on related projects. The lack of clarity on technical scenarios and requirements is making it difficult to plan resources effectively. Without knowing the level of resource support needed, it is challenging to allocate the right amount of time, budget, and personnel to the projects.

6 The step-up in enhancement costs is permanent, not temporary

(383) The scale of Anglian's enhancement plan cannot be reduced or deferred, as the vast majority of Anglian's enhancement programme delivers statutory obligations. Anglian's LTDS is also clear that deferring enhancements would disproportionately store up risk for future customers. Looking over a long-term period of 25 years, PR24 marks just the start of heightened level of required enhancement investments.

Figure 28: The enhancement investment required of Anglian over the next 25 years as published in its LTDS in October 2023.



Source: Anglian, *Long Term Delivery Strategy (October 2023), page 2. Colours refer to each of Anglian's four SDS ambitions*

(384) The core pathway as set out above was published in October 2023 alongside Anglian's Business Plan submission. Since this submission, the enhancement requirement for the AMP8 core pathway has increased by over £1 billion from £4 billion at original submission to over £5 billion in the FD.[215] The key additional costs reflect:

(i) Updates to reservoir development and construction costs (+£300 million);

(ii) Updates to nutrient removal programme costs (+£300 million);

(iii) Two additional desalination options brought into the core pathway reflecting updated WRMP view of water resource constraints (+£150 million);

(iv) Updated costs to reflect latest guidance on microbiological treatment solution (+£150 million);

(v) Updates to the costs and sites at which Water Recycling Centre growth investment is required (+£110 million)

(vi) Updated costs and additional scope of the storm overflows programme (+£100 million).

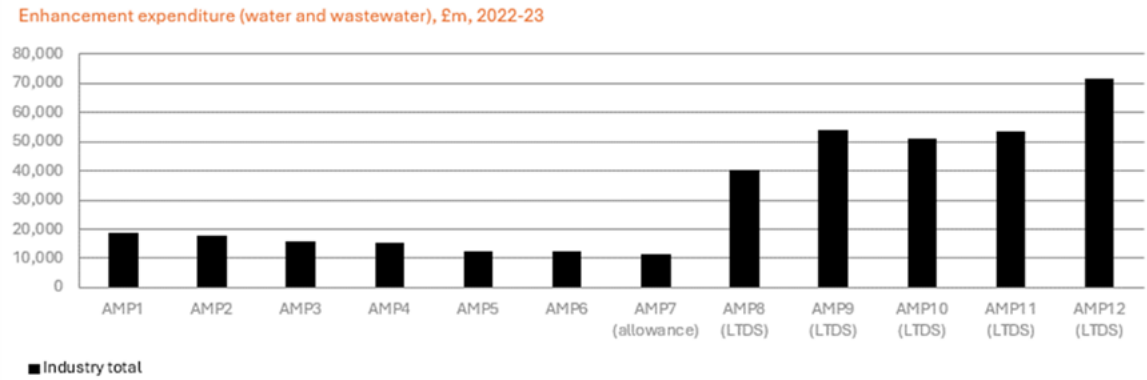
(385) These, and the PR19 interconnector programme are representative of the type and scale of uncertainty the enhancement programme experiences. Whilst the above changes have been sufficiently reflected in totex allowances in the FD, Anglian is still subject to significant potential changes similar to those which arose in AMP7, for which there is insufficient risk protection.

(386) This dramatic change in investment requirements is a trend replicated across the water industry as shown by the chart below illustrating the enhancement expenditure spent in

[215] The like-for-like change is greater than £1bn because some of the LTDS core pathway costs were ultimately reflected in base allowances in the Final Determination. These include mains renewals and reducing flooding risk for properties.

previous AMPs and the expected enhancement expenditure in future AMPs according to companies' published LTDSs.[216]

Figure 29: Enhancement expenditure in previous AMPs and expected expenditure in future AMPs



Source: Anglian, *LTDS Sector Analysis v12*

(387) The step-up in investment is expected to continue, with roughly £260 billion of enhancement investment alone forecast between 2025 and 2050, based on companies' PR24 Business Plans and LTDSs. Over the next 25 years, the sector expects to deliver an enhancement programme that is roughly three times the size of the sector's current RCV (which stands at £99 billion).[217]

(388) As mentioned above for the PR24 plan for AMP8, the main drivers behind the increasing enhancement investment requirements are statutory obligations (e.g. to deliver on environmental, and drinking water quantity and quality requirements), leaving little flexibility for companies to choose how and where to focus their enhancement investment. Exogenous factors also exert upwards pressure on costs such as growth, climate change and the geography of the relevant region. The scale of this capital investment remains vast, even taking into account assumptions about 'what base buys' and, in Anglian's case, beneficial assumptions on other factors such as technology and partnership working. Alternative scenarios show higher degrees of investment may be required.

(389) This trend shows that the move from an operations focussed business to a capital delivery ***and*** operations business structure is permanent in the England and Wales water sector. It is therefore critical that this significant and enduring factor must be reflected in the risk and reward balance of the PR24 settlement across all companies.

7 The regulatory protections in the FD are insufficient for the risk and uncertainty faced by companies

(390) Ofwat's FD does not provide adequate protection for water companies facing unforeseen cost escalations in enhancement programmes. While the enhancement allowances themselves reflect the expected view of costs at a point in time, the rigidity of the FD's regulatory approach fails to sufficiently account for real-world volatility such as supply

[216] Anglian, LTDS Sector Analysis v12 (Annex 022).
[217] Oxera, Investability at PR24, Final report for Water UK (27 August 2024) (See here).

chain disruptions, inflationary pressures and changing regulatory and planning requirements.

(391) The dynamic nature of construction costs needs to be reflected in the FD. Without this, Anglian bears disproportionate financial risks which are not reflected in the overall balance of risk and reward.

(392) Ofwat recognises the increased risk to some extent and has introduced some protection mechanisms covering individual areas of enhancement. Some of these, such as the PFAS uncertainty mechanism were developed with significant input from Anglian and other companies. These go some way to mitigating risk. However, these protections do not go far enough and they are insufficient to cover the significant risk associated with such as large expansion of the enhancement programme as Anglian and other companies will experience in AMP8. Examples of specific risks that remain include:

Table 5: Protections in the FD and specific risks that remain relating to Anglian's enhancement programmes

Protection	Description	Comments
Notified items (end-of period reconciliation of costs)[218]	This applies to loss of landbank[219] - including costs associated with actions resulting from new or changed statutory guidance or directions from Defra in relation sludge-to-land but not other triggers - for example, events related to landbank availability. This also applies to new PFAS schemes for treatment works that are required by the DWI following investigations.	Ofwat rejected companies' proposals that the materiality threshold relevant to this notified item should be reduced to reflect the risk that cost increases that would be very material to bioresources may not be considered material under the terms set out in Condition B of companies' licences and that the notified item would therefore be worthless. There remains a very high risk that companies will have to bear additional costs of up to £150 million from prospective changes.
Storm overflows uncertainty mechanism[220]	For additional overflow schemes required as a result of: • the results of investigations carried out in 2025-27, to meet Urban Waste Water Treatment Regulations requirements ("**UWWTR**") • newly designated bathing waters	The mechanism only applies if companies are overspending their PR24 allowance. Therefore any benefit companies and customers earn from delivering storm overflow reduction benefits more efficiently would be removed through the addition of new storm overflow schemes. The mechanism doesn't cover any new standards emerging

[218] Ofwat, PR24 final determinations: In-period adjustments (19 December 2024) (See here).
[219] There is a very high risk that during AMP8 the laws and/or guidance from the government governing the application of biosolids to agricultural land will change, requiring companies to make significant investment in response.
[220] Ofwat, PR24 final determinations: Expenditure allowances (19 December 2024), Chapter 4.7.5, p187-188 (See here).

Protection	Description	Comments
	• revision of the Storm Overflows Discharge Reduction Plan ("**SODRP**") Also for additional investigations linked to the new Storm Overflow Assessment Framework ("**SOAF2**") guidance, providing the original investigation allowances are fully spent.	from Ofwat's wastewater enforcement activities, work other than overflows to meet new bathing waters (e.g. disinfection of final effluents) or additional work required on emergency overflows.
Cost of labour[221]	An ex-ante allowance RPE allowance is made for the cost of labour. At PR29 an ex-post true-up will be made between the forecast and outturn wage growth using the ONS Annual Survey of Hour and Earnings ("**ASHE**") construction wage index.	This adjustment is insufficient in reflecting changes to the labour costs incurred by companies. The shortfall in this true-up is already being observed. In October 2024 the Chancellor announced an increase in the rate of employers' National Insurance Contributions, to take effect from the start of 2025/26. This sum was not provided for in the ex-ante allowance but neither will it be recovered in the true-up because the ASHE index covers only earnings received by employees rather than the cost to their employers. Anglian expects this to have an impact of well over £30m during AMP8[222].
Cost of materials, plant and equipment[223]	No ex-ante RPE allowance is made but at PR29 an ex-post true-up will be made between CPIH and the new infrastructure construction output process index published by the ONS.	The new infrastructure construction output process index (COPI) is based solely on the construction of roads and bridges so is a questionable benchmark for water and sewerage projects. As an output measure, it double counts the frontier shift challenge. Anglian's AMP7 enhancement programme has been substantially more costly to

[221] Ofwat, PR24 final determinations: Expenditure allowances (19 December 2024), Chapter 4.1, pages 260-261, 268-274 (See here).
[222] £30m assumes headcount similar to AMP7. However, the AMP8 enhancement programme will necessitate a significant increase in headcount which will substantially increase the impact of the National Insurance Contributions change.
[223] Ofwat, PR24 final determinations: Expenditure allowances (19 December 2024), Chapter 4.1, pages 260-261, 268-274 (See here).

Protection	Description	Comments
		deliver than anticipated because of significant rises in the price of construction materials in the wake of the Covid pandemic and the invasion of Ukraine. For instance, Anglian expects to spend £1.134bn against its £0.595m PR19 allowance for WRMP19 interconnectors due to a combination of these factors.[224] However, the result of the true up would have been negligible if applied in AMP7 because the cumulative difference between CPIH and the COPI index is negligible over the period.
Major project funding and cost sharing[225]	The default cost sharing rate for enhancement is 40:40[226]. There are targeted exceptions to this cost sharing rate including: 40:10[227] for continuous water quality monitoring and investigations. 25:25 for high uncertainty enhancement areas: • IED enhancement expenditure • Schemes >£100m subject to enhanced engagement and cost sharing option • Activities needed to comply with EPR requirements for sludge-to-land. Funding for Colchester water recycling to be agreed via large schemes gated process. Colchester water recycling plus two inter-connector schemes in the Enhanced Engagement	Differential cost sharing rates for enhancement programmes help to mitigate risk to an extent. However, much of this risk mitigation is targeted to very specific areas of enhancement, as detailed in the lefthand column, and does not address the overall need to reflect the overall change in the risk and reward profile of the sector.

[224] See Anglian Water Annual Performance Report (July, 2024), page 271 (See here).
[225] Ofwat, PR24 final determinations: Expenditure allowances (19 December 2024), Chapter 4.7.1, pages 303-305 (See here).
[226] Companies cover 40% of the costs of overspends, companies retain 40% of the costs of underspends against allowances.
[227] Companies cover 10% of the costs of overspends and retain 40% of the costs of underspends against allowances.

Protection	Description	Comments
	process subject to 25:25 cost sharing. Five very large schemes (two reservoirs, two desalination plants and Peterborough-Grafham interconnector) to be managed via RAPID and delivered by a third-party under either DPC or SIPR. On top of 'base' development costs Ofwat allowed contingency sums (to be spent on a 'use it or lose it' basis) and introduced a bespoke IdOK with 2% materiality threshold.	

(393) Therefore, while Anglian welcomes that Ofwat recognises the need for risk protections and the inclusion of these mechanisms accordingly, considerable residual risk remains. In particular, the number of risk mitigations covering individual components of the enhancement programme do not truly reflect the new risk profile of the water sector as a whole and these protections do not (nor could they be expected to) control for all of the associated risk.

8 Price control deliverables (PCDs)

(394) In the FD, Ofwat has also included PCDs for over 90% of Anglian's overall enhancement programme, which offer protection to customers in case of non-delivery. This means that over 90% of Anglian's enhancement spend has an additional layer of back-stop customer protection against non-delivery.

(395) However, Anglian has concerns that certain elements of Ofwat's proposed PCDs (including in particular time-limited PCDs) fail to account for the realities of major capital programme delivery and in some cases exacerbate the risks outlined above. Anglian considers that the PCDs must account for variability within the capital delivery programme in order to manage risks and uncertainties where these arise through a holistic approach. These concerns are set out in full in **Chapter G.2 (*PCDs*)**.

9 Anglian's targeted requests to the CMA on enhancement allowances

9.1 Anglian's overall view on enhancement allowances

(396) As set out above, Anglian is supportive of the enhancement allowances made in the FD in the round. There are individual areas of enhancement where Anglian disagrees with Ofwat's approach to enhancement cost assessment, including a failure to reflect the necessary costs associated with additional sludge capacity (-£29 million), smart metering (-£28 million) and the assessment of its Colchester re-use scheme (-£15 million). However, Anglian considers the enhancement allowances made in the PR24 FD to be acceptable overall. Anglian particularly welcomes the use of scheme level assessment for the largest areas of enhancement such as interconnectors, supply-side schemes, P-

removal, storm overflows and growth at STWs. These strike the right balance between taking the benefits of an econometric approach, whilst taking into account appropriate site-specific factors that could influence efficient costs.

(397) Anglian also welcomes that Ofwat's methodology for enhancement allowances included a step to take into account factors that are not appropriately reflected in modelled costs through Enhancement Assessment Criteria A1.1.3 d)- f).[228] This is similar to the cost adjustment claim process for base costs. This approach was applied to Anglian's CAM4 and SWC8 interconnector schemes to reflect that these included a treatment element and need to be built with more expensive steel pipes which were sufficiently reflected within the scheme level model.

9.2 Anglian requests two specific adjustments regarding enhancement allowances

(398) Anglian's requests with respect to enhancement allowances are limited to two specific adjustments as outlined below.

9.2.1 To adjust Anglian's enhancement allowance for leakage (a consequential change from its request to adjust the leakage PCL baseline)

(399) As explained in **Chapter G.1 (*ODIs*)**, since the FD, Ofwat has changed Anglian's leakage PCL to reflect its updated WRMP but has not updated its baseline. Anglian requests that the CMA update Anglian's baseline (which is currently based on the PR19 2024/25 target PCL) to reflect its outturn performance for 2024/25 (currently forecast to be 180.45 ML/d in line with the WRMP).

(400) As a consequential change to that adjustment, Anglian also requests that the CMA adjust its leakage enhancement allowance to reflect that requested adjustment to the baseline Updating Ofwat's model to reflect the requested baseline change (assuming alignment with the WRMP glidepath) would provide an enhancement allowance of **£21.8 million**. Full details are provided in **Chapter G.1 (*ODIs*)**.

9.2.2 Ofwat's frontier shift is unjustifiably high for enhancement allowances

(401) The FD frontier shift is intended to capture the rate of efficiency improvements that even the most efficient companies in the industry can achieve from improvements in working practices and new technology. It is applied to all expenditure allowances, including base and enhancement, save for costs that are mostly outside company control and self-financing costs.

(402) Ofwat has set the frontier shift at 1% in the FD. However, for the reasons set out in detail in **Chapter E.1 (*Base costs*),** Section 3.4, Anglian considers that this 1% frontier shift is unjustifiably high and poorly evidenced and should therefore be reduced across all expenditure allowances.

(403) Anglian therefore requests that the CMA adopts a lower frontier shift, by reducing it to a more credible 0.8%, which would remove the unjustified reduction of **£41 million** to Anglian's enhancement allowances.

[228] Set out in the Ofwat, PR24 Final Methodology Appendix 9: Setting Expenditure allowances (December 2022), page 156 (See here). ("d) Is there compelling evidence that the additional costs identified are not included in our enhancement model approach? e) Is there compelling evidence that the allowances would, in the round, be insufficient to account for evidenced special factors without an enhancement model adjustment? f) Is there compelling econometric or engineering evidence that the factor(s) identified would be a material driver of costs?").

10 Ofwat's duties and request to the CMA

(404) Ofwat has endorsed a step-change in enhancement investment in the FD, which enables Anglian to carry out crucial investment and improvements during AMP8. However, the increased risk profile associated with this huge increase in enhancement investment, even after Ofwat's mitigations, has not been adequately reflected in the rate of return. Ofwat has therefore failed to discharge its financeability, resilience and growth duties, ultimately compromising the interests of customers (existing and future).

(405) To ensure the successful delivery of necessary investments, Anglian asks that the CMA take into account this residual risk in setting appropriate returns.

(406) Anglian therefore asks the CMA to:

(i) Reflect the changing risk profile of the sector when setting the cost of capital;

(ii) Adjust Anglian's enhancement leakage allowance, to reflect the adjustment to the baseline which Anglian requests in **Chapter G.1 (*ODIs*)**. Updating Ofwat's model to reflect the requested baseline change (assuming alignment with the WRMP glidepath) would provide an enhancement allowance of **£21.8 million**,[229] as explained further in that chapter.

(iii) Adopt a more credible frontier shift of 0.8% (which would increase Anglian's enhancement allowances by **£41 million** relative to the FD).[230]

[229] This equates to a 0.31% increase in customer bills in customer bills in AMP8.
[230] This equates to a 0.56% increase in customer bills in AMP8.

Chapter G.1
ODIs

1 Introduction

ODIs are the financial consequences to companies of underperformance or outperformance relative to their PCLs set by Ofwat.[231]

Ofwat considers that the FD package maintains "*achievable yet stretching performance commitments levels so that the package will continue to drive significant improvement in performance*"[232] and "*the overall package represents a fair outcome across stakeholders*"[233]. This is not the case, in particular for Anglian: several targets are unachievable with current base allowances.

At PR19, Ofwat also required the sector to deliver unrealistic PCLs with an insufficient base allowance. As a result, the sector has been unable to meet these PCLs: of the 12 PCLs reported in the WCPR, in 2023-24, only two WaSCs were meeting more than half of these[234], resulting in expected total forecast AMP7 ODI penalties of £987.2m.[235] This is despite almost all companies overspending their base allowances.[236]

In PR24, Ofwat has set even more ambitious PCLs in absolute terms, again without providing commensurate funding through base allowances. Ofwat's PR24 FD therefore compounds the error of the PR19 FD by continuing to underfund the sector to deliver sustainable improvements in performance.

Anglian fully accepts the need for the incentives that arise from underperformance payments (and outperformance payments): good performers should make good returns, poor performers should make lower returns and customers should pay less if they receive poor service, in this industry as any other. Anglian also recognises that its performance in some areas, such as pollutions, requires continued improvement, and accepts that it will need to make underperformance payments in those areas until performance improves, even though in other areas such as leakage it continues its industry-leading performance.

However, much of the gap between the PCLs and existing performance is unrelated to efficiency but instead to mis-specified PCLs and inadequate funding and Anglian is exposed to disproportionate underperformance payments in some instances. This stretch is not balanced by reasonable rewards in areas where Anglian's performance leads the sector as Ofwat has set PCLs which are likely to result in Anglian paying penalties despite pushing frontier performance still further.

It is clear that there is significant risk asymmetry within the overall FD ODI package. For a notional company the P50 is expected to be -0.49% of RoRE[237] but for a company with the notional structure in Anglian's region the P50 is even more asymmetric at -0.89%, roughly £240m for Anglian, with the P10 exposing Anglian to underperformance payments of over -£500m.[238]

[231] Ofwat, PR24 Final methodology: Outcome Delivery Incentive (Appendix 8) (December 2022), page 4 (See here).
[232] Ofwat, PR24 Final Determinations: Delivering Outcomes for Customers and the Environment (February 2025), page 1 (See here).
[233] Ofwat, PR24 Final Determinations: Delivering Outcomes for Customers and the Environment (February 2025), pages 1-2 (See here).
[234] Hafren Dyfrdwy (HDD) was meeting 7/12.
[235] See datafile "Outcomes SOC source files" (Annex 023), Tab "AMP 7 penalties". Note this uses updated PCC with Covid adjustment, and excludes MeXs.
[236] Discussed further in Section 2 below.
[237] KPMG, PR24 Final Determinations – risk analysis for a notional company (January 2025), Section 6 (Annex 002).
[238] KPMG analysis, Anglian Water, PR24 Risk and Financial Resilience (Annex 004).[238] KPMG analysis, Anglian Water, PR24 Risk and Financial Resilience (Annex 004).

In the round this leaves Anglian with unacceptable levels of risk which significantly exacerbates the challenge of attracting the new equity it needs to deliver its FD, to the detriment of consumers. Anglian's particular concerns are:

(i) **Poorly calibrated PCLs**: For total pollution incidents, the FD sets Anglian an impossible task by using a normalisation approach which fails to reflect Anglian's performance in relation to its asset base: Even in the best case, with the most rapid improvement possible given the funding available, Anglian will pay underperformance payments every year.

(ii) **Disproportionate incentives**: For total pollution incidents the underperformance rate itself is disproportionate, is inconsistent with Ofwat's customer research and does not align with the valuations derived directly from Anglian's own customers. A more realistic PCL and proportionate ODI rate would leave Anglian with strong incentives to improve performance without being unduly penalised for a poorly calibrated PCL.

(iii) **Unrealistic baselines**: PCLs are only achievable if they are set from a well evidenced starting point. For leakage, for which Anglian's performance is sector-leading, Anglian's assumed starting point does not reflect reality, as it is set on the basis that fails to reflect the level of leakage that has been funded by customers or the challenges of moving the frontier. The FD approach blunts incentives for frontier performance.

(iv) **Inconsistent approaches**: Ofwat applies inconsistent approaches to setting PCLs. Some are driven by historical data while others are driven by poorly evidenced free assertions (i.e. water supply interruptions) or historical PCLs (i.e. external sewer flooding).

(v) **Insufficient expenditure allowances**: The deliverability and investability challenges that arise from these PCs are compounded by Ofwat's continued expectation that performance improvements can be made through base allowances, without additional funding. The PCD regime exacerbates the issue, removing flexibility which could allow greater investment in performance improvements.

(vi) The **OAM**, introduced to protect against miscalibration of the package, is helpful in principle but the final version introduced a material deadband, without consultation, watering the OAM down so that it no longer provides the median company with the prospect of a 'fair bet'.

While there are a number of broader concerns, Anglian is seeking to be targeted and proportionate, proposing practical solutions most amenable to the redetermination process. Anglian therefore asks the CMA to reset the PCLs, baselines and/or rates as appropriate to maintain the strong incentives to improve performance to which Anglian is already responding.

Alternatively, if the CMA agrees that the PCLs impose unacceptable stretch on existing base funding but would prefer to retain the PCLs as they are, Anglian requests adequate funding to close the gaps that the FD has created between its PCLs and the means provided to achieve them. Specifically, Anglian asks the CMA to:

(i) **Leakage**: (i) provide a more proportionate PCL for Anglian by adjusting Anglian's baseline (which is currently based on the PR19 2024/25 PCL) to reflect its outturn performance for 2024/25 (currently forecast to be

180.45 ML/d in line with the WRMP); and (ii) provide the associated enhancement allowance based on Ofwat's models. Specifically, if the CMA aligns the baseline to the WRMP, the associated enhancement allowance to meet the PCL from that baseline would be £21.8 million.

(ii) **Total Pollution Incidents**: (i) accurately reflect Anglian's performance in relation to its asset base by setting a PCL informed either by: (a) relative performance using adjusted sewer length metric which accounts for the number of pumping stations and WRCs each company has relative to its sewer length and the industry median, or (b) relative performance using the weighted average of performance across asset categories. Alternatively, in the event of an unchanged PCL, Anglian would welcome further engagement with the CMA to discuss how much additional base funding would be required to further reduce its total pollutions in line with its PCL; (ii) lower the Total Pollution Incidents rate for underperformance and outperformance payments to £0.605 million on a normalised basis (i.e. per incident per 10k km of sewer), to improve proportionality, reflecting Ofwat's and Anglian's customer evidence; and (iii) exclude category 4 incidents from the PCL, or provide for the PCL, underperformance rate and funding to be adjusted in the event that the EA changes its categorisation approach..

(iii) **External Sewer Flooding:** apply an industry-standard PCL for external sewer flooding, consistent with Ofwat's approach to internal sewer flooding, by adjusting: (i) the 2024/25 baseline to reflect the median of companies' average performance over the last four years and (ii) the PCLs for each year of AMP8 by setting them on a glidepath from the revised 2024/25 baseline to the median of companies' own PCLs for 2029/30.[239]

(iv) **Water Supply Interruptions**: reflect the latest performance data in setting the PCL by adjusting: (i) the 2024/25 baseline to reflect the median of companies' performance over the last four years and (ii) the PCLs for each year of AMP8 by setting them on a glidepath from the revised 2024/25 baseline to the median of companies' own PCLs for 2029/30.[240]

(v) **OAM**: remove the deadband introduced at FD and restore the original OAM to provide the median company zero outperformance or underperformance payments and therefore with a "fair bet". If the CMA wishes to consider alternative approaches with similar effects, Anglian has proposed a dynamic incentives regime[241] during PR24 and would be happy to present and discuss its ideas.

2 Past performance against PR19 Performance Commitments

(407) At PR19, Ofwat required the sector to deliver overly ambitious PCLs out of an insufficient base allowance, as evidenced by the fact that of the 12 PCLs Ofwat reports in the WCPR,

[239] Including correcting the calculation error in the Excel file with Ofwat's working of the PCLs for external sewer flooding. See datafile "Proposed PCLs ESF" (Annex 024).This gives revised PCLs set out in Table 13. See Section 6 below for further detail.

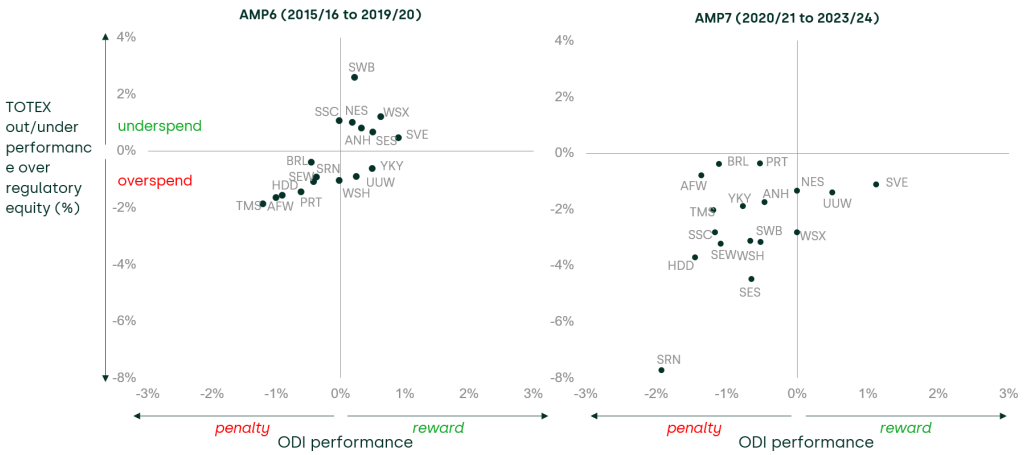
[240] This gives revised PCLs as set out in Table 14. See Section 7 below for further detail.

[241] Anglian Water & Reckon, Comparative performance and incentives for the UK water industry (January 2024), page 3 (See here) (prepared to support Anglian's response to the Department for Business and Trade's 'Smarter Regulation: Strengthening the economic regulation of the energy, water and telecoms sectors' consultation (See here)).

in 2023-24, only two WaSCs, HDD and WSX, were meeting more than half of these, even though almost all companies overspent against their base allowances (by £5,849m[242]). Across the industry (including both WaSCs and WOCs), the expected cumulative underperformance payments on common PCs for AMP7 stands at a net figure of £987.2m[243]

(408) The figure below shows the cost and PC performance achieved by the industry over AMP6 (on the left) and AMP7 (on the right). Both are expressed as a percentage of notional regulatory equity and after the application of cost-sharing. The figure shows that the PR14 settlement was calibrated such that some companies, in total seven, were able to meet or exceed their PC performance within cost allowances over AMP6. By contrast, all companies have overspent their cost allowances over AMP7, and only two have achieved positive ODI payments (Severn Trent and United Utilities). At the PR19 FD,[244] Ofwat forecast that over AMP7, companies would be exposed to ODI RoRE risk of between -3% to 3%, and totex RoRE risk of between -2% and +1% (except HDD, which was exposed to greater RoRE risk as a result of its small size). The chart below shows that in outturn ODI performance has been significantly skewed to the negative end of that range, while more than half of companies' totex performance falls below Ofwat's -2% lower bound.

Figure 30: TOTEX and ODI RoRE performance over AMP6 and AMP7, as a % of notional regulatory equity



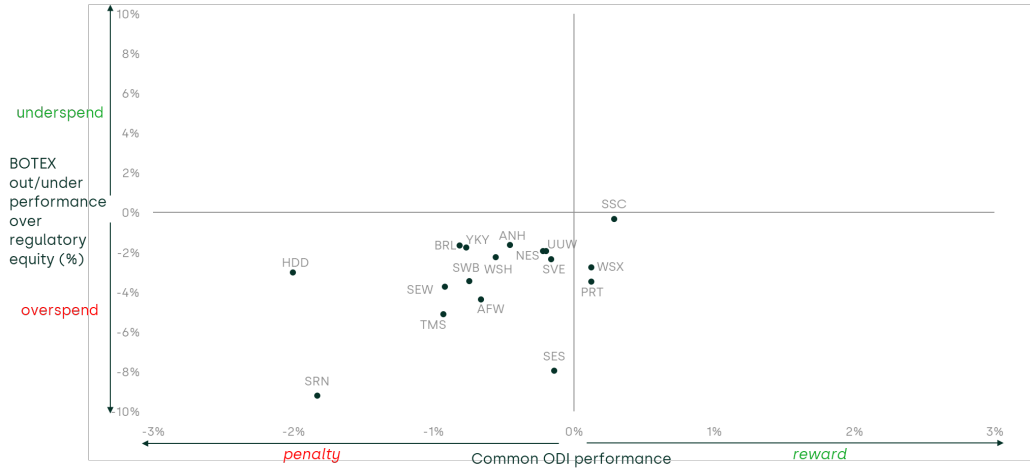
Source: *Oxera Analysis.*

(409) Adjusting the figure to isolate base expenditure (the relevant cost category for examining the stretch on base) and removing bespoke ODIs shows that the vast majority of companies incurred both significant base overspend (£3,961 million[245] in total after cost sharing) and ODI penalties (£720 million[246] in total) over the first four years of AMP7. This

[242] 2017/18 FYA CPIH-deflated price base.
[243] Includes all WaSCs and WoCs (excludes C-MeX and D-MeX from Y5 projection. Uses PCC figures with Covid adjustment).
[244] Ofwat, PR19 Final Determinations:, Aligning Risk and Return Technical Appendix (December 2019), pages 25 and 28 (See here).
[245] 2017/18 FYA CPIH-deflated price base.
[246] 2017/18 FYA CPIH-deflated price base.

remains the case even if the one-off energy price shock is accounted for. This is for a set of PCLs that Ofwat considered to be stretching but achievable.[247]

Figure 31: Base expenditure and common ODI RoRE performance over AMP7, as a % of notional regulatory equity



Source: *Oxera Analysis.*

(410) Anglian's own performance in PR19 reflects this sector-wide challenge. This is also a function of Anglian being set more stretching PCLs than the rest of the industry in certain areas (e.g in leakage and PCC) and being insufficiently funded to meet these PCLs. This is partially reflected in Ofwat's latest WCPR, where Anglian is currently meeting only 5 out of the 12 selected performance PCLs and classed as "lagging".

(411) This measure of Anglian's relative performance reflects relatively tougher PCLs. In absolute terms, Anglian's outturn performance generally ranks between leading and median over the AMP7 period. **Table 6** below shows how each company in the industry compares to median performance against the 12 metrics reported in WCPR, alongside the new common metric for external sewer flooding. The table shows in green where companies are at or above the industry median. Anglian is the WaSC with the joint second highest performance on this basis—placing at or above the industry median in 9 out of 13 common ODIs. The a 'UQ' label shows where companies are at or above the upper quartile. Anglian ranks joint 2nd among the WaSCs on this basis, alongside Hafren.

[247] Ofwat, PR19 final determinations, overview of companies' final determinations, page 6 (See here).

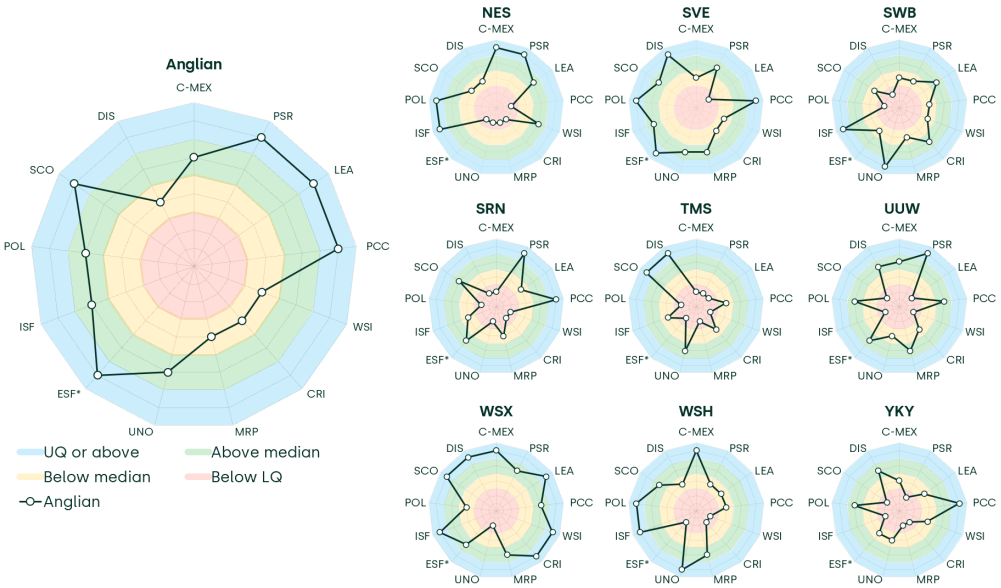
Table 6: Anglian AMP7 performance against WCPR and new common metrics (at or better than median and/or upper quartile), average 2020/21 to 23/24

Table 4: Ranked	C-MEX	Priority Services Register	Leakage	Per capita consumption	Water supply interruptions	Drinking water quality	Mains repairs	Unplanned outage	External sewer flooding	Internal sewer flooding	Pollution incidents	Sewer collapses	Treatment works compliance	Above median	Above UQ
Wessex Water	UQ		UQ		UQ	UQ				UQ		UQ	UQ	11	7
Anglian Water		UQ	UQ	UQ					UQ			UQ		9	5
Hafren Dyfrdwy			UQ	UQ		UQ		UQ	UQ		*			6	5
Severn Trent Water				UQ					UQ		UQ		UQ	9	4
Welsh Water	UQ							UQ		UQ	UQ			8	4
Northumbrian Water	UQ	UQ								UQ	UQ			6	4
South West Water			UQ					UQ		UQ				5	3
Southern Water		UQ		UQ										4	2
Thames Water												UQ	UQ	3	2
United Utilities		UQ												7	1
Yorkshire Water				UQ										3	1
SES Water					UQ	UQ	UQ	UQ						5	4
Bristol Water	UQ		UQ				UQ							4	3
Portsmouth Water	UQ				UQ		UQ							3	3
South Staffs Water					UQ		UQ							4	2
South East Water		UQ												3	1
Affinity Water														4	0

Source: *Oxera Analysis. Leakage (LEA) compared on normalised basis, per unit length of mains. Total pollution incidents (POL) normalised per adjusted sewer length—proposed in section 5 of this chapter. HDD is excluded from the comparison of total pollution incidents, as its small scale is considered by Ofwat to invalidate it as a comparator on a common basis. We rank WoCs separately in the second section of the table, as they report against fewer metrics and therefore cannot directly be compared to WaSCs*

(412) Finally, the chart below shows the distribution of performance for Anglian against each of these outcomes across the four quartiles of performance (red for below lower quartile; yellow for below median; green for above median and blue for at or above upper quartile). The same chart is shown for each of the WaSCs on the right-hand side. A greater area within the black line indicates better performance—if a company was above upper quartile for each measure, then it would record a blue value for each measure (taking up the most area), while if a company was below lower quartile for each measure, then it would record a red value (taking up the least area).

Figure 32: WaSC AMP7 performance by quartile



Source: *Oxera Analysis. Leakage (LEA) compared on normalised basis, per unit length of mains. Total pollution incidents (POL) normalised per adjusted sewer length—proposed in section 4.5 of this chapter. * External Sewer flooding is not one of the current 12 WCPR metrics, but will become a common ODI at AMP8.*

(413) As **Figure 32** shows, Anglian is above median for 9 of the 13 metrics. A well-calibrated PC and ODI package should ensure that a median or good performer, like Anglian, is able to earn a reasonable return on the PC package through the associated ODIs: The system is intended to balance rewards and penalties to ensure that the package as a whole is "a fair bet". However, the PR24 FD does not achieve this. Anglian forecasts being in significant net penalty over the course of AMP7, as explained below.

3 Overview of ODI package in PR24

(414) Although Ofwat has increased base cost funding in PR24 predominately in relation to energy costs and rates, it has also increased the number of obligations and level of stretch that must be delivered from base without an associated increase in base cost funding. As a result, Anglian is underfunded by around £500 million of base cost pressure on base in addition to the efficiencies which Anglian had already built into its Business Plan.

(415) The FD has therefore repeated the errors of PR19 by failing to provide sufficient base allowances to give a median performing company a "fair bet" of achieving the PCLs.

(416) Ofwat itself anticipates an overall negative skew on underperformance payments across companies in PR24[248]. However, Anglian believes outcomes will be still worse than this across the industry, as Ofwat's projections reflect optimistic company proposals for PCLs in their Business Plans, incentivised by Ofwat's "ambition" criteria in the QAA including "compliance PCLs" which companies are incentivised to set at "full compliance". Anglian currently estimates that even if it were to overspend its base cost allowances, it would

[248] See Ofwat, PR24 Final Determinations: Aligning Risk and Return Allowed Return Appendix (March 2025), Table 18 (See here) (Overall balance of risk for the median company as a percentage of appointee regulated equity. Mid-point of overall balance of risk for outcomes is -0.2% of appointee regulated equity).

incur net penalties of **c. -£240 million**,[249] across the five years of PR24. This is despite targeting investment and activities to achieve significant improvement across all PCs, including c. 49% reduction in Total Pollution levels, 67% in Serious Pollutions and 52% in Spills, as shown in the table below.

Table 7: Anglian anticipated performance improvement in key water recycling PCs in PR24

Performance Commitment	Anticipated Performance Change
Total Pollutions	49% AMP8 Reduction
Serious Pollutions	67% AMP8 Reduction
Internal Flooding	16% AMP8 Reduction
External Flooding	24% AMP8 Reduction
Spills	52% AMP8 Reduction

Source: *Anglian AMP8 planning scenario WR base overspend March 2025.*

(417) KPMG's analysis of the FD for a notional company operating in Anglian's area shows clear risk asymmetry, particularly for the ODI package.[250] This analysis follows the same methodology as KPMG's risk analysis for the notional company but uses the FD's PCLs and incentive rates for Anglian, along with Anglian's historical performance for leakage and total pollution incidents.[251] The analysis shows that the ODI package is more severely mis-calibrated and asymmetric for Anglian that it is for a typical WaSC.

Table 8: comparison of ODI risk ranges

	P10	P50	P90
Notional WaSC – ODIs and MeXes	-1.55%	-0.49%	0.51%
Notional company in Anglian's area - ODIs and MeXes	-1.89%	-0.89%	0.08%

Source: KPMG, *PR24 Final Determinations – risk analysis for a notional company (January 2025) (Annex 002)* and KPMG analysis, *Anglian Water - PR24 Risk and Financial Resilience (Annex 004).*

(418) There are clear outliers within this analysis. Total pollution incidents, leakage, per capita consumption and external sewer flooding each have material negative impact in a P50 scenario. While Anglian disagrees with the FD's approach in relation to a number of PCs, the remainder of this chapter focuses on the priority issues for Anglian, namely Leakage, Total Pollutions, External Sewer Flooding[252] and Water Supply Interruptions[253] as well as

[249] This estimate has been developed in early 2025 as part of scenario planning for AMP8. There is significant uncertainty in forecasting performance. This scenario takes account of year to date performance for 2024/25 and funding allowed for in the Final Determination and how it might potentially be allocated. It uses Anglian's benefit mapping approach to activity planning described in Anglian, Benefits mapping: Anglian approach to ODI planning with its FD allowances (March 2025) (Annex 025). This is a point in time view and does contain uncertainty, however it is of a similar order of magnitude to KPMG's view of the P50 position for a notional company operating in Anglian's area with Anglian's determination. This estimate excludes the measures of experience. There is a range of potential performance with our view of the P10 downside being over -£500m penalty.

[250] KPMG analysis, Anglian Water, PR24 Risk and Financial Resilience (Annex 004).

[251] KPMG, PR24 Final Determinations – risk analysis for a notional company (January 2025), section 5 (Annex 002).[251] KPMG, PR24 Final Determinations – risk analysis for a notional company (January 2025), section 5 (Annex 002).

[252] Other PCs where Anglian has concerns with Ofwat's approach (but has de-prioritised for the purpose of the Redetermination) are Serious Pollution Incidents, Biodiversity and Water Quality Contacts.

[253] Water Supply Interruptions is a material driver of risk in KPMG's P10 scenario.

the OAM. Anglian's likely outcomes for AMP8 for other PCs are, however, also relevant to the overall risk and reward balance of Anglian's FD.[254]

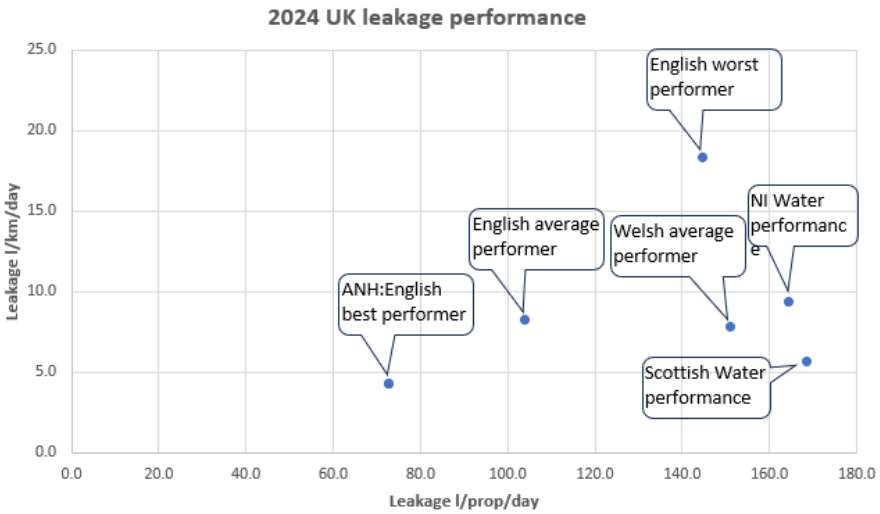
(419) The rest of the Chapter is structured as followed: (i) leakage; (ii) total pollutions incidents; (iii) external sewer flooding; (iv) water supply interruptions; (v) the OAM; (vi) Ofwat's legal duties; and (vii) Anglian's requests to the CMA.

4 Leakage

(420) Anglian is concerned that the FD has set Anglian's starting baseline for its PR24 performance at a level that does not reflect reality, as it is materially beyond Anglian's own best estimate of its 2024/25 performance. As explained in **Chapter E.1 (*Base costs*)**, the FD also underfunds Anglian to maintain its current leakage levels which exacerbates the challenge of meeting the PC.

(421) Leakage is a strategic priority for Anglian given its water scarce region, and its performance is sector leading, as shown in the following figure where better performance is reflected by being closer to the origin (bottom left):

Figure 33: 2024 UK leakage performance

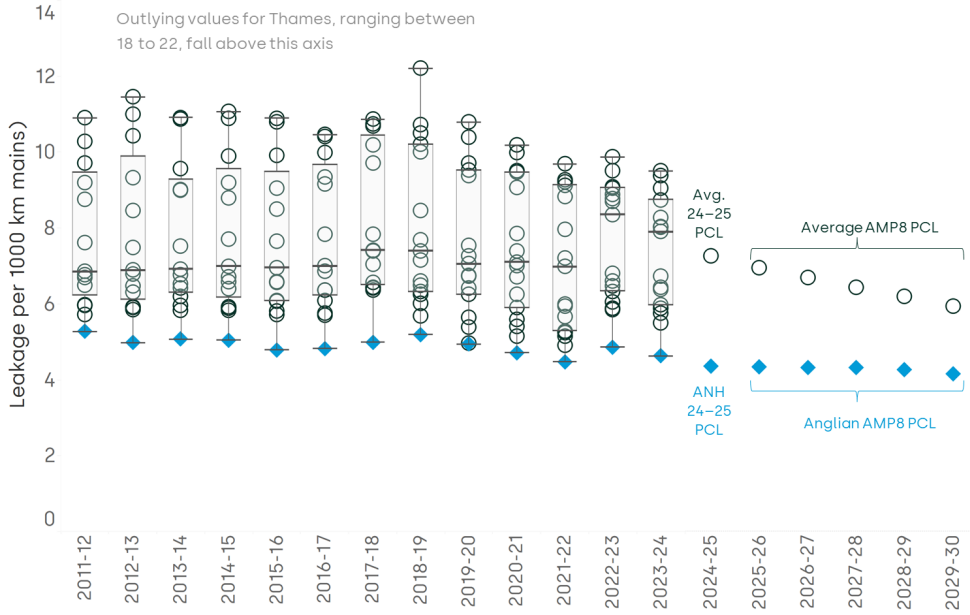


Source: Anglian internal analysis. See dataset *"CMA leakage replication"* (.xlsx" (Annex 031).

(422) Anglian has worked hard to reduce leakage further in AMP7 and continues its longstanding position as a leading company on leakage on either of the two common approaches to normalisation. When normalised by the length of water mains, Anglian reported the lowest levels of leakage in the industry for 2023-24. Anglian is also a strong performer when normalised on a per property basis, ranking second on this basis in 2023-24. Anglian has also paved the way for others in the industry to improve their leakage position, trialling new smart technologies and collaborating through the Safe Smart Systems and National Leakage Test Centre industry innovation projects.

[254] See **Chapter H.1 (*Investability and Financeability*)**.

Figure 34: Industry comparative leakage performance



Source: Oxera analysis based on data from Ofwat model, *"PR24-FD-CA13-Leakage_v2.xlsx"* (republished 5 March 2025 (See here); Ofwat model, *"PR24CA04" (December 2024)* (See here); and Ofwat model *"Leakage Dataset - March 2023" (22 March 2023)* (See here).

(423) This performance is a result of sustained efforts to reduce leakage in the East of England, which is particularly important for the supply/demand balance in this fast-growing region. Nonetheless, in AMP7, due to a combination of factors (including the significant impact of extreme weather in 2022-23) Anglian has not delivered the levels of reduction hoped, despite significant overspend on base and enhancement leakage allowances. By year 4 of AMP7 Anglian had already spent £112.5m (2023/24 prices) in enhancement, in comparison to the PR19 FD enhancement allowance to reduce leakage of £79.86m.[255] While Anglian has not delivered the hoped for level of reduction, customers will be compensated through the AMP7 incentive rate returning enhancement funding for reduction not delivered.

(424) Anglian remains a leading performer on leakage, with low absolute leakage levels. However, in AMP7 Anglian has under-performed against Ofwat PCLs – which were unrealistically stretching, in requiring large improvements from an already frontier company. Ofwat is persisting with this error in AMP8.

4.1 Ofwat's approach to setting the PR24 PCL baseline

4.1.1 Ofwat's FD

(425) The Leakage PC is measured as the percentage reduction in three-year average leakage from a 2019-20 baseline. It is set for the majority of companies (including Anglian) on a company-specific basis.[256]

(426) Given that actual performance for 2024/25 is unavailable, Ofwat uses assumptions to set the 2024-25 baseline. The FD sets the 2024/25 baseline at company forecast levels for 11 companies, at less stretching benchmarks than forecast for 3 companies, and at a

[255] See here.
[256] Ofwat, PR24 Final Determinations: Delivering Outcomes for Customers and the Environment (February 2025), page 119 (See here).

more stretching level than was forecast for 3 companies (including Anglian). This decision to set a more stretching baseline (based on a median 2023/24 annual improvement rate to 2024/25) provides an unreasonable expectation for one of the leading companies in the sector. In addition, by adjusting the baseline which does not align to the WRMP, Ofwat fails to meet their own stated goal of consistency between the Water Resources Management Plans (WRMPs) and Business Plans at PR24.[257]

(427) For those companies (including Anglian) that are not forecasting to meet their PR19 PCL, Ofwat makes assumptions about the level of performance it expects companies to achieve in 2024/25. Ofwat makes this assumption in a very arbitrary way as illustrated for Anglian in the table below. It takes:

(i) the level of leakage reduction achieved in each of the last 6 years (Row B in table below);

(ii) excludes the years where leakage performance deteriorated (C);

(iii) then takes the median reduction in these 4 years. This results in an assumed level of leakage reduction that should be achieved in the year 2024/25 to be 8.75 ML/d. This is illustrated in the table below.

Table 9: Decomposition of Ofwat's approach to calculating historical leakage improvement

Anglian	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	
Leakage performance (annual average, ML/d) (A)	191.3	199.9	191.0	182.4	173.4	190.5	182.1	
Leakage improvement from previous year, ML/d (B)		-8.6	8.9	8.6	9	-17.1	8.4	Median improvement of (C)
Exclude negative improvements from (B), ML/d (C)		X	8.9	8.6	9	X	8.4	8.75

Source: Data from Ofwat, *PR24 Performance Commitment Model, Leakage (March 2025)* (See here)..

(428) This is the basis on which Ofwat sets Anglian's 2024/25 annual average leakage baseline at 173.3 ML/d[258], and therefore three-year average baseline for Anglian at 182.0 ML/d [259] or 6.2% below the 2019/20 baseline. [260]

[257] Ofwat, Creating tomorrow, together: Our final methodology for PR24 Appendix 9: Setting expenditure allowances (December 2024), page 85 (See here).
[258] i.e., 2023/24 performance (182.1Ml/d) minus 8.75Ml/d (assumed improvement following Ofwat's calculation).
[259] i.e., the average of 2022/23 (190.5Ml/d), 2023/24 (182.1Ml/d) and Ofwat's assumed 2024/25 (173.3Ml/d)
[260] Of 194.1Ml/d

(429) Separately, FD states that it intends companies to earn an enhanced ODI payment "*when they achieve the frontier of performance*" so as to "*incentivise innovation to improve performance*". However, the GD does not deliver this.

4.1.2 Discussions with Ofwat post-FD

(430) In the FD Anglian Water Outcomes appendix, Ofwat stated that following confirmation from the EA and Defra of the change requested by Anglian to its WRMP, it would engage with Anglian and consider any request to update the PR24 PCLs post publication of FD.[261]

(431) Following submission of the updates in early December 2024, the EA and Defra agreed to the revisions to the final WRMP in January 2025. The updates reflected Anglian's outperformance on per capita consumption (due to the success of smart metering), underperformance on leakage levels (due to the significant impact of the extreme weather in FY22-23) and the delay to Anglian's strategic pipeline. Overall this position is net beneficial for Anglian's regional supply demand balance until 2029-30, at which point WRMP29 will apply.

(432) Following the confirmation of the revised WRMP post-FD publication, Ofwat confirmed a partial adjustment to Anglian's AMP8 Y5 PCL to align with the revised WRMP (168.2 Ml/d annual average) however did not adjust the 2024/25baseline accordingly.

(433) During this revision process, Anglian provided evidence to Ofwat demonstrating why the amended baseline was inappropriate and poorly calibrated, and why the revised WRMP profile should be adopted for the entire AMP8 period[262], namely:

(i) [redacted]

[redacted]

(434) However, [redacted]

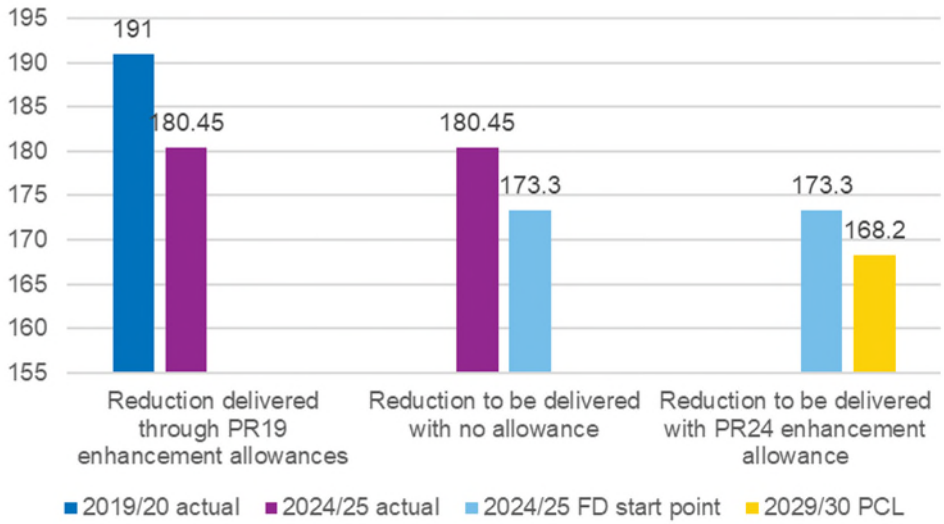
[261] Ofwat, PR24 Final Determinations: Anglian Water Outcomes appendix (February 2025), page 3 (See here).
[262] Anglian: letter to Ofwat: PR24 Final Determination: leakage performance commitment level (PCL) (31 January 2025) (Annex 026) [CONFIDENTIAL]).
[263] Ofwat, Creating tomorrow, together: Our final methodology for PR24 Appendix 9: Setting expenditure allowances (December 2024), page 85 (See here).

4.2 Anglian's concerns

(435) Ofwat's approach to setting the 2024-25 baseline for the Leakage PCL is unreasonable as it sets the baseline at a level which Anglian is neither forecast nor funded to deliver in 204/25. At the PR19 Redetermination, Anglian was allowed enhancement costs of £64.1 million(2017/18 price base).[264] The CMA included a clawback mechanism (through the Tier 1 penalty rate) on this enhancement allowance, to ensure that any leakage reduction that Anglian expected to deliver through enhancement allowances during AMP7, but did not, would be returned to customers.[265] In 2022/23 and 2023/24 Anglian, did not achieve its PCL and - despite significant expenditure and effort - is forecasting to miss its PCL in 2024/25. This is expected to result in a net penalty of £32m (2022/23 price base), some of which is being returned to customers through reduced revenue in 2024/25 with the remainder to be returned through the PR24 midnight adjustment. So Anglian's 2024/25 outturn position – *not the 2024/25 PCL position* - marks the level of leakage that customers have funded ahead of AMP8. This penalty mechanism did not apply to most companies, as it was applied by the CMA Redetermination to companies who were allowed enhancement costs for leakage reduction.

(436) The customer protections clawback that the CMA put in place at PR19 means that Anglian will only recover from customers enhancement expenditure for the level of leakage actually achieved by the end of AMP7 (which is currently expected to be aligned to the forecast used for the WRMP glidepath). This leaves a situation where there is no funding allowed either through PR19 or PR24 allowances to achieve the reduction in leakage between the actual leakage level that will be achieved in 2024/25 (and aligning with the WRMP glidepath) Ofwat's incorrect 2024/25 baseline.

Figure 35: Funding sources for reductions in leakage[266]



Source: Anglian's APR20, updated WRMP, PR24 FD. See datafile *"Outcomes SOC source files"*, tab *"Reduction through allowances"* (Annex 023).

(437) Because of this clawback mechanism, Anglian's net enhancement allowance[267] will have funded it to achieve its actual 2024/25 outturn level of leakage, not the baseline set by

[264] CMA, PR19 Final Report (17 March 2021), para. 12.40(b) (See here).
[265] CMA, PR19 Final Report (17 March 2021), para. 8.188 and paras. 8.191 - 8.194 (See here).
[266] Assuming a 2024/25 outturn in line with the WRMP (180.45Ml/d).
[267] PR19 enhancement allowance minus the tier 1 clawback.

Ofwat. Ofwat has not explicitly acknowledged the effect of the clawback, throughout the DD and FD.

(438) Consequently, Ofwat's calibrated 2024/25 baseline provides an unreasonable expectation for one of the leading companies in the sector.

(439) Through this decision, Ofwat has failed to meet its stated goal[268] of consistency between the WRMPs and Business Plans at PR24, despite the revised WRMP having been formally agreed with other regulators (the EA and Defra) through a structured change control process.

4.3 Impact on PCL

(440) The below table sets out Anglian's updated WRMP profile, as per the revised WRMP tables. Updating the baseline to align with the 2024/25 WRMP value would result in the full alignment of the WRMP leakage reduction profile with Anglian's AMP8 PCLs in all years of AMP8.

Table 10: Leakage from Anglian's updated WRMP

Parameter	Units	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Updated WRMP Profile (aligns to WRMP24 data tables line 4NY)	**Ml/d single year**	180.45	177.41	175.47	173.76	171.83	168.20
Updated WRMP Profile (using WRMP24 data table line 4NY)	**Ml/d three year average**	184.34	179.99	177.78	175.55	173.69	171.26

Source: updated WRMP24 table 4NY. See datafile *"Outcomes SOC source files"*, tab *"Updated WRMP24 leakage"* (Annex 023).

4.4 Impact on enhancement allowances

(441) Ofwat uses the outputs of the leakage performance commitment level model to inform the leakage enhancement cost model. It equates the level of leakage reduction between the 2024/25 baseline and the 2029/30 PCL to the amount of leakage reduction activity that should be funded from enhancement allowances. Anglian supports the proposed 2029/30 leakage PCL as this aligns with the leakage level underpinning Anglian's revised WRMP. However, because Ofwat erroneously intervened to adjust the 2024/25 leakage baseline beyond the level funded, this underplays the level of enhancement allowance required to meet the 2029/30 PCL.

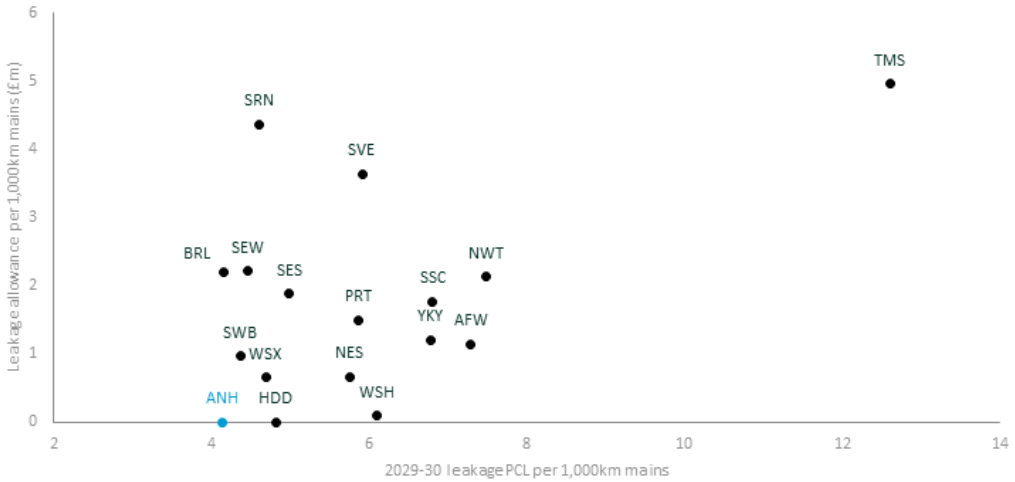
[268] Ofwat, Creating tomorrow, together: Our final methodology for PR24 Appendix 9 Setting expenditure allowances (December 2024), page 85 (See here).

(442) Ofwat's revised FD set a leakage allowance of £0m for Anglian Water[269] to deliver a 5.1Ml/d leakage reduction based on its flawed approach to setting the start point.

(443) This approach leaves Anglian with a significant shortfall in expenditure required to deliver the assumed level of leakage reduction from its actual 2024/25 baseline position.

(444) Further to this, the absence of any leakage enhancement (and base) allowances for leakage results in a situation where Anglian is expected to remain the leading performer on leakage in the industry (leakage per km of mains) with zero leakage allowance (£0m). Perversely, other companies are granted allowances of up to £178m to achieve a poorer level of leakage performance.

Figure 35a: Industry normalised leakage performance



Source: Oxera, *Assessment of the cost to maintain frontier leakage performance (March 2025),* Figure 1.3, (Annex 007).

Implementation of leakage enhancement allowance

(445) The correction to this error in enhancement allowances is simple and mechanistic. Ofwat's leakage enhancement model[270], is driven by the difference in the annual average level of leakage between the 2024/25 baseline and the 2029/30 PCL. Once the 2024/25 baseline is corrected, the model will produce the relevant enhancement allowance.

(446) Therefore, if, as Anglian requests, the baseline is updated to reflect Anglian's outturn performance for 2024/25 (currently forecast to be 180.45 Ml/d in line with the WRMP), then inserting this value into the model[271], automatically corrects Anglian's leakage enhancement allowance[272] to £21.778m. [273] [274]

[269] Ofwat's initial Final Determination granted Anglian a leakage enhancement allowance of £41.4m to reduce leakage by 21.8Ml/d from its starting point of 173.3Ml/d to 151.5Ml/d. Subsequent to the Final Determination, Ofwat updated the end point to reflect the revised WRMP, but did not update the start point. This resulted in a revised allowance to deliver a 5.1Ml/d reduction in leakage from 173.3Ml/d to 168.2Ml/d.

[270] Ofwat, PR24 CA34 Water Leakage enhancement expenditure model (Version 3.1 as republished on 13 March 2025) (See here).

[271] Ofwat, PR24 CA34 Water Leakage enhancement expenditure model (Version 3.1 as republished on 13 March 2025), cell B8 of the 'Additional Leakage Enh and Cap' tab (See here).

[272] Ofwat, PR24 CA34 Water Leakage enhancement expenditure model (Version 3.1 as republished on 13 March 2025), cell I16 of the 'Allowance' tab (See here).

[273] This request is lower than Anglian's actual view of costs for this leakage reduction of £34.9m. In line with its general approach to cost modelling, although Anglian's view of the required costs for leakage reduction differs from the output of the model - principally in relation to the mains replacement unit rate - it accepts the overall enhancement allowance in the round after this change.

[274] Anglian estimates that this would have a bill impact of 0.31%.

4.5 Ofwat's approach to leakage blunts incentives for frontier performance

(447) More generally, we note that even if the CMA adjusts Ofwat's approach, Anglian expects a zero underperformance or outperformance payment on current forecasts. This is despite Anglian being one of the best performing companies on leakage and needing to find ever-smaller and less accessible leaks and ever more innovative solutions to the problem to further improve its performance. By comparison, laggard companies can chase easier leaks, using well-established techniques (often those pioneered by Anglian).

(448) Anglian therefore believes that its leakage performance should put it in a position to expect to receive outperformance payments, not zero and certainly not paying underperformance payments as Ofwat's FD does. It is difficult to see why companies would strive to reach or to push the frontier if they are punished for doing so.

(449) Anglian therefore asks the CMA to consider whether, in the round, it agrees with Ofwat's perverse approach to leakage. If it does not, then we would seek a more fundamental reform of the approach, that recognises the higher costs of further improving performance for a company at the frontier, and the need for incentives for such a company to innovate to do so (and to provide incentives for laggard companies to become a frontier performer).

(450) This basic perspective, we suggest aligns with that of the CMA at PR19, which provided additional funding for Anglian as a strong performer.[275] Ofwat has failed to provide its reasoning for rejecting Anglian's arguments on this front in its analysis of the ODIs, and its stated reasons (within its Expenditure Allowances Chapters) are incorrect, for the reasons explained above.

5 Total pollutions incidents

(451) Anglian fully accepts that its total pollutions performance requires an improvement in AMP8, particularly recovering from recent performance. Anglian proposed to achieve a 35% improvement for total pollution incidents from 2023/24 performance by the end of AMP8 as part of the DD Representations. Following on from performance in 2024/25 and accounting for the parameters of the FD, Anglian is developing plans for an even more ambitious reduction. While the Company has worked hard and invested significant sums to improve its current performance and will continue to do so, it also contends that:

(i) the PCL is unachievable and the way in which it has been calculated applies a flawed normalisation, which fails to reflect Anglian's performance against its asset base;

(ii) the ODI underperformance rate is disproportionately high, especially given uncontrollable factors such as extreme weather events and uncertainty about its future scope (notably, whether category 4 incidents will be brought into scope); and

(iii) the FD fails to fund Anglian (through base allowances) to achieve the performance improvements to meet the PCL.

(452) Combined, Ofwat's approach produces a PCL that Anglian has no prospect of achieving, regardless of efficient performance and significant improvement over AMP8: Even with the £100 million additional funding committed by shareholders in AMP7 and in a planning scenario with over expenditure of base funding to improve its total pollutions position in AMP8, Anglian would expect to face underperformance payments of over £100 million.

[275] CMA, PR19 Final Report (17 March 2021), Section 8 (See here).

5.1 Ofwat's approach to setting the PC and ODI

(453) For the purposes of the PC, pollution incidents are defined as "the total number of pollution incidents (categories 1 to 3) in a calendar year emanating from a discharge or escape of a contaminant from a water company sewerage asset affecting the water environment, per 10,000km of sewer length from wastewater assets for which the company is responsible".[276]

(454) The Total Pollutions PCL is set at a common level for almost all companies (including Anglian) and involves two elements: (i) the baseline is set at the median of the industry's average 2020-24 performance; and (ii) the 2029-30 PCL represents a 30% improvement from the 2024-25 baseline. Ofwat principally expects companies to deliver these performance improvements from base allowances and makes no material enhancement allowances for reducing pollution incidents.[277]

(455) The ODI rate is calculated using the top-down approach, with a starting RoRE allocation of 0.6% wastewater RoRE. The result is a median ODI rate that is more than twice as high as at PR19 and an incentive rate for Anglian that is £248k per incident, - a high rate, despite these incidents being predominantly (~95%) category three incidents which by definition have minor environmental harm.

(456) Ofwat includes a collar at -0.75 RoRE for almost all companies (including Anglian). The collar limits the scale of underperformance payments "*which could affect the attractiveness of water companies to investors*", but to maintain incentives, Ofwat stated that it calibrated the collar (for almost all companies, including Anglian) to reflect the potential range of underperformance the company could achieve.[278]

5.2 Background to Anglian's performance on total pollutions

(457) Anglian's performance on total pollution incidents requires improvement. During AMP7 significant increases in total pollution incidents have been observed (in 2020 the Company had 210 incidents but in 2024 expects to report around 445 incidents). Anglian views this as unacceptable and is determined to improve its performance. Anglian has introduced an internal initiative 'Project Nexus' for the final year of AMP7 to improve performance (through interventions, strategic changes and reprioritisations) on measures where it is currently lagging, and to start AMP8 on a solid performance footing.

5.2.1 Anglian has faced a range of upwards pressures in AMP7

(458) As part of working to target significant performance improvements and support its Service Commitment Plan and Pollution Incident Reduction Plan, Anglian has undertaken a significant exercise to understand the root causes of pollution incidents and establish a baseline for AMP8. This work has revealed three primary drivers for the increase in Total Pollution incidents:

[276] Ofwat, PR24 Total Pollution Incidents definition (version 1.0, December 2024), page 2 (See here), on the basis of reporting guidance from the EA's and Natural Resources Wales' water and sewerage company Environmental Performance Assessment ("EPA") methodology (version 11, February 2024), pages 5-6 (See here).

[277] Ofwat, PR24 Final Determinations: Delivering Outcomes for Customers and the Environment (February 2025), page 182 (See here).

[278] Deadbands were rejected on the basis that collars had been applied. Ofwat, PR24 Final Determinations: Delivering Outcomes for Customers and the Environment (February 2025), page 42 (See here).

Driver 1: Greater visibility of incidents:

(459) There has been a significant increase in the number of incidents reported to Anglian by the public. In 2020, members of the public reported 63 incidents but this increased to over 180 in 2024. This reflects heightened public awareness of river health.

(460) Anglian has rolled out over 30,000 Digital Sewer Visualisation ("DSV") monitors since the start of 2023, an increase of over 2,000%, giving the Company one monitor per two kilometres of network. This increase in monitoring coupled with improved guidance for staff has resulted in an increase in 40 incidents in 2024 compared to 2020.

Driver 2: environmental factors, especially climate change

(461) There has been an 8% increase in average rainfall between 2020 and 2024 compared to the previous 10-year average. Pollution incidents caused by hydraulic overload of Anglian's systems have increased by 19% in the same period.

(462) We expect this pressure to persist in the future. Anglian's independent consultants KPMG have found a clear link between weather patterns and performance for flooding and pollution; a strong correlation between rainfall and incidents caused by Hydraulic Overload (0.46 for total pollution incidents) and mechanical failure (0.3 for total pollution incidents).

(463) KPMG find that in AMP8, as many as 24% of total pollution incidents, 23% of external incidents and 13% of internal incidents will be attributable to climate change. Base cost allowances will therefore become more stretched through attempts to tackle new challenges. Ofwat has taken no account of this driver of increased pressure upon its base.[279]

Driver 3: Asset deterioration

(464) Aging infrastructure contributes to an increase in pollution events from asset deterioration. Since 2020 incidents with a root cause associated with mechanical, electrical or civil / structural issues have increased by 20%.

5.2.2 The Company is driving performance improvement in AMP8

(465) In light of the factors outlined above, improving performance will require sustained focus and increased investment. In the final years of AMP7, Anglian's shareholders agreed to invest an additional £100m to improve performance in AMP8 [280]. and the Company is exploring plans to over-spend base allowances to improve its performance for this and other water recycling performance commitments.

(466) Planning is still ongoing, using Anglian's benefit mapping approach described in **Annex 025** to identify the optimal interventions to drive down pollutions. For illustration, however, if Anglian were to overspend its base allowance for water recycling by £200m, it would likely increase its activities in the following areas:

(i) Increased sewer maintenance and inspection - £56m additional expenditure in AMP8 (including DSV programme).

[279] KPMG, The impact of climate change on key operational performance measures (August 2024), pages 24-25 (Annex 027).
[280] Anglian, Pollution Incident Reduction Plan: 2023 performance update, page 14 (See here).

(ii) Enhanced Sewer Cleaning & planned preventative maintenance (including Predictive network risk tool, Dual Manhole Investigations and Repair Programme, Sewer Capital Maintenance, CCTV Inspections, Interceptor Removal)

(iii) Increased activity tackling sewer misuse and enforcement against third parties - £22 million additional expenditure in AMP8

(iv) Investing pumping station resilience - £6 million additional expenditure in AMP8 (including for example, Power Resilience Initiatives, Mitigation Plans for Critical pumping stations, Auto Pump Reset, Pump Airlock Alarms, Auto / Manual Pump Reverse).

(v) Increase front-line response teams and resourcing, including a dedicated pollution response team - £57 million additional expenditure in AMP8 (including for example, Dedicated Pollution Response Resource, Alert / Alarm Triage Improvements, Fast Response Jetter Tankers, Flooding Response Resource, Property Level Mitigations and Repair).

(vi) Create a specific team to respond to issues at pumping stations - £9m additional expenditure in AMP8.

(vii) Increase activity to manage excess flow (surface water management and infiltration reduction) – £48m additional expenditure in AMP8 (including for example, Surface Water Management Schemes, Infiltration Schemes, Catchment Flow Balancing / Optimisation, Leakage / Infiltration Team, Upstream catchment management)

5.3 Ofwat has set a PCL and ODI which in combination expose Anglian to unfair and disproportionate penalties

(467) Anglian's reported total pollution incidents have increased in the last years of AMP7**35**, which was not foreseen at the time it submitted its Business Plan for AMP8. The Company is committed to reducing pollutions at the highest rate it considers feasible. However, Ofwat has failed to calibrate the PCL and ODI in a way which enables the Company sensibly to address these issues, several of which are outside of its control.

5.3.1 The FD fails to set an achievable PCL

(468) The Total Pollutions PCL is set at a common level for almost all companies (including Anglian) on the basis that pollution incidents are "*principally caused by issues under company control such as containment and control failures which can be managed through maintenance and operational interventions*".[281] In fact, this is an untested assumption, as the impact of weather conditions can only be partially controlled for and receiving water courses are a significant factor on whether an escape is classed as a qualifying pollution incident.

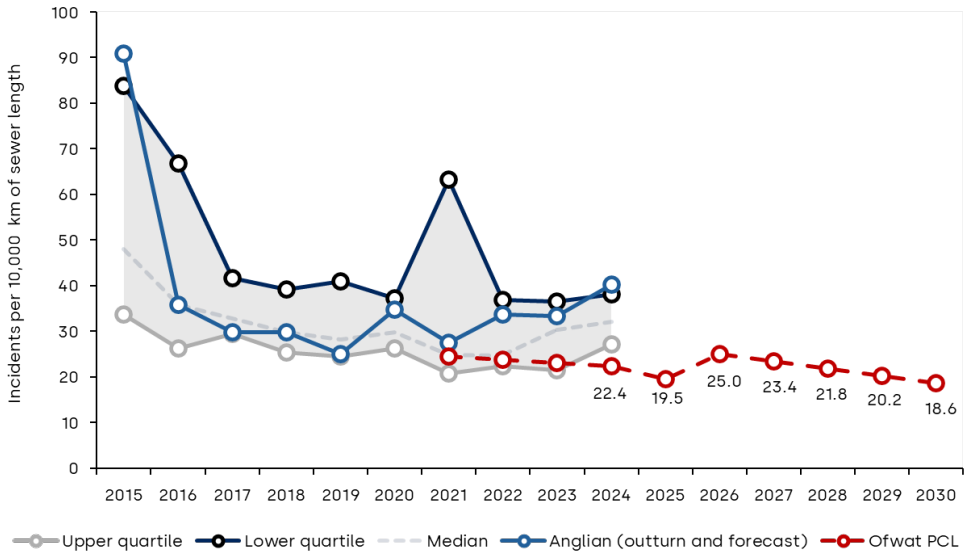
(469) The FD sets a 30% PCL, based on "a clear expectation set by the EA that companies should be incorporating into their operational planning"[282] and the median-baseline set was based on "outturn performance". Ofwat stated that Anglian's suggested PCL for pollution incidents at DD Representations of 23.6 incidents per 10,000km of sewer

[281] Ofwat, PR24 Final Determinations: Delivering Outcomes for Customers and the Environment (February 2025), pages 182-183 (See here).
[282] Ofwat, PR24 Final Determinations: Delivering Outcomes for Customers and the Environment (February 2025), page 24 (See here).

length by 2029/30[283] "would result in no improvement to performance by 2030",[284] and deemed the PCL Ofwat has set as "realistic ... to maintain focus on this important area".[285]

(470) Ofwat's assertion that Anglian did not propose a performance improvement is incorrect. It appears that Ofwat compared Anglian's PR19 PCL to its PR24 proposed PCL rather than Anglian's actual performance. The end result is a PCL that is simply unrealistic with the allowances provided. As illustrated by **Figure 35b** below, the FD's PCL requires all companies to perform beyond historical upper quartile performance over AMP8 despite most companies already missing the less stretching PCLs over AMP7.

Figure 35b: Pollution incidents (using Ofwat's normalisation)



Source: *Oxera analysis*

(471) Even with rapid and sustained improvement (which is the Company's priority), Anglian will receive significant underperformance payments in all five years of the AMP. The PCL is unachievable due to (i) the way in which performance is normalised (by length of sewer mains rather than all polluting assets); and (ii) the insufficient funding within base allowances to deliver the scale of change required, particularly given the unusually high impact of climate change in Anglian's region. This impossible stretch will be significantly exacerbated if the EA changes its definition of total pollutions during AMP7, as it is currently consulting on.

5.3.2 The FD applies a flawed normalisation metric, which unfairly impacts Anglian

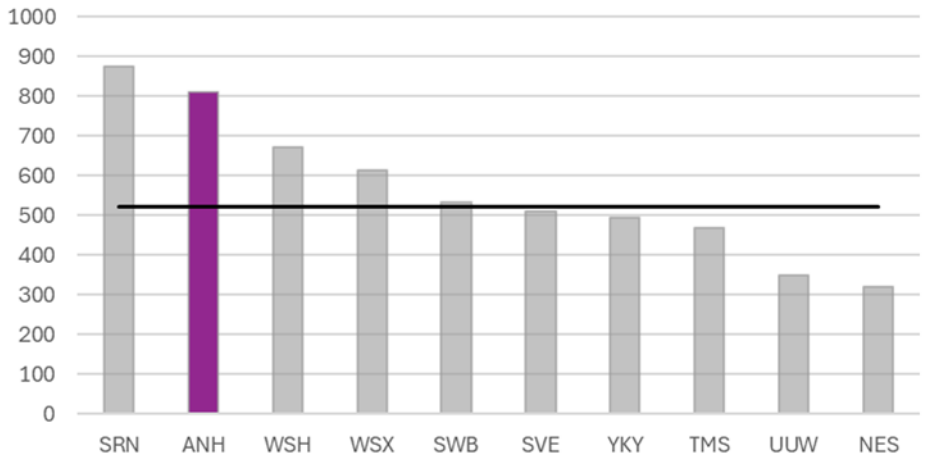
(472) Anglian's Business Plan[286] explains that category 1-3 pollution events do not just happen at sewers and that Anglian has more non-sewer assets relative to sewer length than other companies (as illustrated in the Figures below).

(473) However, Ofwat's approach in the FD normalises performance solely by length of sewer and ignores pollution risk from other assets. Thus, Anglian's performance is measured

[283] Anglian, PR24: Anglian Water's Business Plan for AMP8 (2025-2030) Draft Determination Representations, page 103 (See here).
[284] Ofwat, PR24, Overview of Anglian Water PR24 Final Determination (December 2024), page 19 (See here).
[285] Ofwat, PR24, Overview of Anglian Water PR24 Final Determination (December 2024), page 3 (See here).
[286] Anglian, Outcomes PR24 data tables commentary (October 2023), Plan 1.12 Total pollution incidents, pages 52-56 (See here).

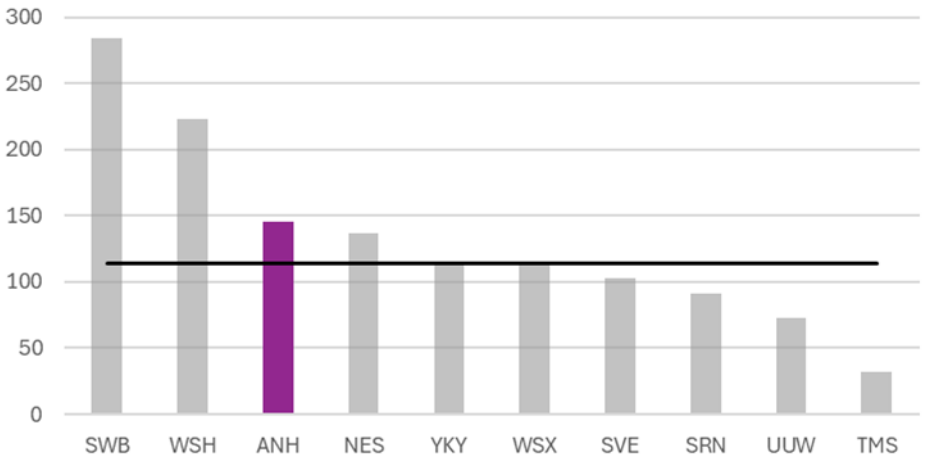
as if it had fewer potentially polluting assets than it actually has. This approach gives a misleading picture of environmental performance.

Figure 36: Number of pumping stations per 10,000 km of sewer by company (black line represents median)



Source: Anglian calculation of industry APR data using Reckon data. See datafile *"Proposed PCLs POL"* (Annex 033).

Figure 37: Number of sewage treatment works per 10,000 km of sewer by company (black line represents median)

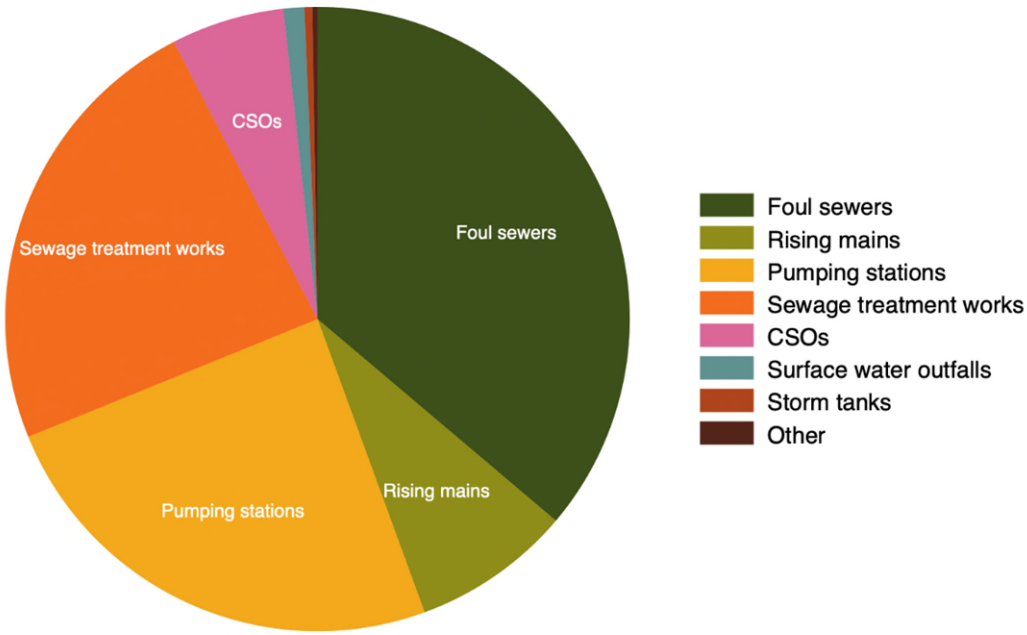


Source: Anglian calculation industry APR data using Reckon data. See datafile *"Proposed PCLs POL.xlsx"* (Annex 033).

(474) Typically, less than half of pollution incidents are caused by sewers. Therefore, comparing the pollution data against length of sewer alone will skew the dataset and fail to capture differences in the number or capacity of pumping stations or the number of water recycling centres associated with demographic and topographical characteristics of the regions served.[287]

[287] Anglian Water, Appendix to Anglian Water's response to the Environmental Performance Assessment (EPA) consultation (November 2024), Section 2 (Annex 028).

Figure 38: Category 1–3 pollution incidents by source, average across English companies (2021-2023)



Source: Anglian, *Appendix to Anglian Water's response to the Environmental Performance Assessment (EPA) consultation (November 2024),* Page 5 (Annex 028)

(475) Ofwat's common PCL requires Anglian to deliver no more than 13.5% of industry pollutions, despite having 18% of sewage treatment works and 20% of network pumping stations. Anglian also has 29% of the industry's rising mains, which at an industry level are eight times more likely to experience incidents than foul sewers.[288] This is because they are pressurised systems where problems with the asset are more likely to lead to an environmental impact.

(476) Ofwat defends its approach by cross-referring to the EA's definition in the EPA. However, Ofwat is not obliged to use this approach. As the economic regulator, it is at a minimum obliged to account for any distortions it creates, in setting PCLs or rates.

(477) Anglian has provided statistical evidence that benchmarking companies in a way that accounts for non-sewer assets as well as sewer assets better explains performance variation across companies than Ofwat's simplistic per-sewer normalisation as described below.[289]

5.3.3 Better approaches to normalisation exist

(478) In October 2024, the EA and Natural Resources for Wales consulted on aspects of the EPA for 2026 – 2030, including on the normalisation of the performance metric on total pollution incidents. In its response, Anglian stressed the shortcomings of the performance metric currently used and put forward two alternative performance metrics:

[288] Datafile "Proposed PCLs POL" (Annex 033).
[289] Anglian Water, Appendix to Anglian Water's response to the Environmental Performance Assessment (EPA) consultation (November 2024), Sections 3.4 and 4 (Annex 028).
[289] Anglian Water, Appendix to Anglian Water's response to the Environmental Performance Assessment (EPA) consultation (November 2024), Sections 3.4 and 4 (Annex 028).

(i) Metric based on normalising incidents by adjusted sewer length; and

(ii) Metric based on weighted average performance across asset categories.

(479) Both are intended to give a better representation of differences in companies' asset bases to enable a more like-for-like comparison across companies of the number of pollution incidents. This in turns allows for a fairer comparison of companies' relative performance.

(480) The two approaches proposed by Anglian are outlined below. Further details on them are set out in the appendix Anglian submitted as part of its response to the EA/NRW consultation.[290]

(i) Normalising incidents by adjusted sewer length

(481) The first of the two approaches proposed by Anglian builds on the calculation underlying the currently performance metric on pollution incidents (which is used by the EA for its EPA and by Ofwat for the total pollution incidents performance commitment).

(482) Under this approach, rather than dividing each company's total pollution incidents by its sewer length, the number of incidents would be divided by the product of a company's sewer length and a company-specific adjustment factor. This is set out below.

$$Pollution\ performance\ metric\ = \frac{Number\ of\ pollution\ incidents}{Sewer\ length * Adjustment\ factor}$$

(483) The adjustment factor is calculated from industry wide data on company's wastewater assets, as follows:

$$Adjustment\ factor = \left[1 + \frac{Pumping\ stations\ per\ km\ sewer}{Median\ pumping\ stations\ per\ km\ sewer} + \frac{STWs\ per\ km\ sewer}{Median\ STWs\ per\ km\ sewer}\right] * \frac{1}{3}$$

(484) This company-specific adjustment factor reflects the extent to which companies differ in terms of their number of pumping stations and sewage treatment works (STWs) in their network *relative to the length of their sewers*. The approach focuses on these types of assets as, together with sewers, they collectively account for more than 90% of English companies pollution incidents in AMP7.

(485) All else equal, the adjustment factor for a given company is greater the higher that company's number of pumping stations per kilometre of sewer, and the higher that company's number of STWs per kilometre of sewer.

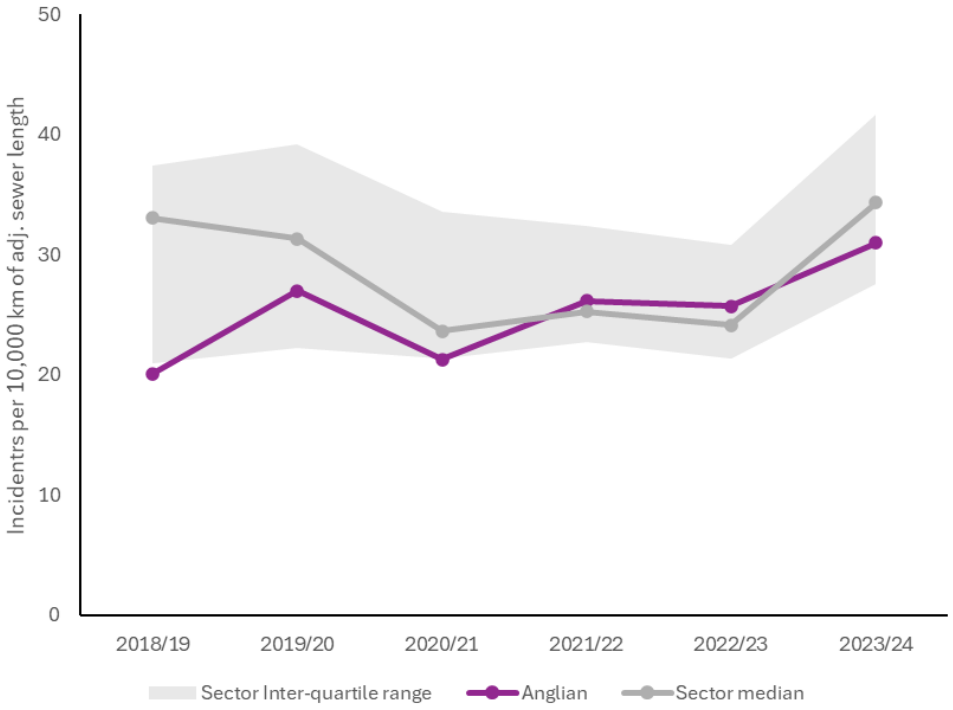
(486) As shown in the formula above, calculating the adjustment factor involves the multiplication of the term in square brackets by a third, because there are three different asset types. Thus, the adjustment factor would end up equal to one for a company that has the industry median number of sewage treatment works per sewer km and the industry median number of pumping stations per sewer km.

(487) **Figure 39** shows the performance of Anglian and that of the median performing company, as well as the sector inter-quartile range, when the number of pollution incidents is normalised by adjusted sewer length, as outlined above.[291]

[290] Anglian, Appendix to Anglian Water's response to the Environmental Performance Assessment (EPA) consultation (November 2024), sections 3 and 5 (Annex 028).

[291] The sector median and the inter-quartile range exclude data for Hafren Dyfrdwy.

Figure 39 Anglian and industry performance using adjusted sewer length metric



Source: See datafile *"Proposed PCLs POL"*, Tab *"SoC Chart 1".* (Annex 033)

(488) As shown in the figure, on the basis of a normalisation based on adjusted sewer length, Anglian's performance since 2018/19 has been close to or better than the industry median.

(ii) Normalising by weighted average across asset categories

(489) The second alternative approach proposed by Anglian in its consultation response is to use a performance metric that reflects a weighted average of performance measured separately across different asset categories.

(490) This second approach would draw on more granular data on the number of pollution incidents by category of the asset identified as the source of the incidents (e.g. the number of pollution incidents from sewers, the number of incidents from pumping stations etc.). Information on the asset category at the source of a pollution incident is captured in the data that companies report to the EA/NRW but is not currently used in the performance metric used by the EA or Ofwat.

(491) Drawing on such granular data, the metric on performance would be calculated by (i) first deriving a metric of pollution incident performance for each asset category individually, using a normalisation metric that is tailored to that asset category (e.g. incidents from sewers would be normalised by sewer length and incidents from pumping stations would be normalised by number of pumping stations), and (ii) then calculating a weighted-average of the performance across the asset categories in order to give an overall view of performance.

(492) For the purpose of weighting a company's performance across the different set of asset categories – the second step in the calculation outlined above – Anglian proposed that

the pollution metric from each asset category be weighted by the relative contribution that each asset category makes to the total number of pollution incidents across the industry.

(493) Similarly to the case for the adjusted sewer length metric above, when looking at the metric based on weighted average performance across asset categories, Anglian's performance since 2018/19 has been at or better than the industry median.

5.3.4 Improved normalisation can be used to inform PCLs which more accurately reflect Anglian's performance in relation to its asset base

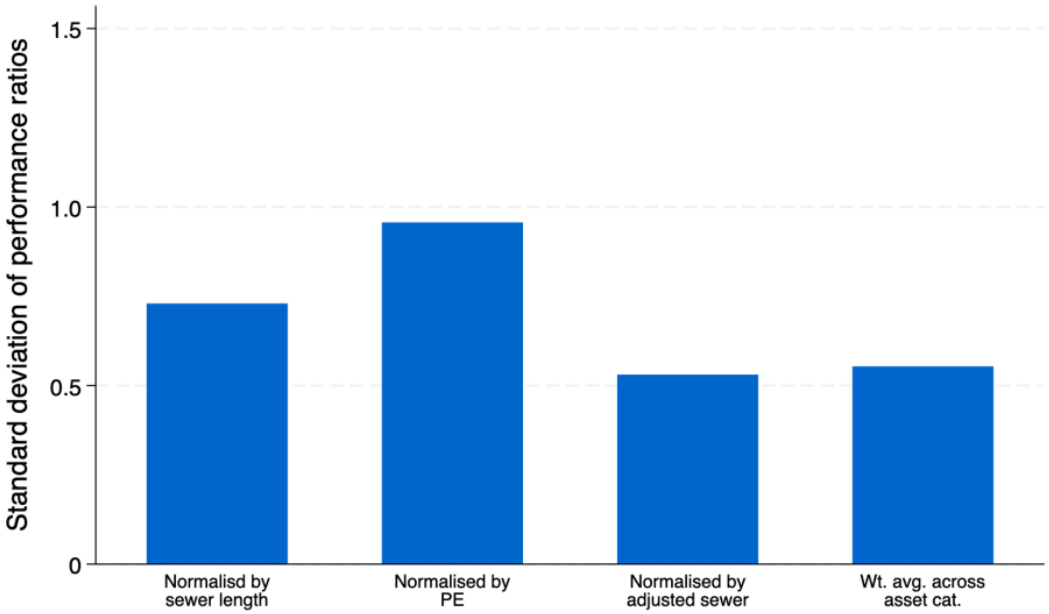
(494) Anglian considers that either of the alternative metrics put forward in its response to the EA/NRW consultation would be an improvement on the metric that is currently used, by the EA/NRW and by Ofwat, to assess and compare companies' performance on pollution incidents. Either of these alternative metrics have a stronger operational and engineering rationale than the current metric, as they give a better representation of company assets and likely sources of pollution.

(495) Furthermore, there is clear statistical evidence that the two alternative metrics are more reflective of drivers of pollutions than the current performance metric. Both better explain the variation across companies' performance on pollution incidents than using sewer length alone.[292] This can be seen in a comparison of performance ratios under different approaches to normalisation.[293] The performance metric based on adjusted sewer length yields a considerably lower standard deviation of performance ratios than either the current metric or the metric based on sewerage population equivalent (normalising using PE was an alternative to sewer length suggested by the EA/NRW in their consultation).

[292] Further details on that analysis is set out in Anglian, Appendix to Anglian's response to the consultation on the Environmental Performance Assessment (EPA) consultation (November 2024), Section 3.4(Annex 028).[292] Further details on that analysis is set out in Anglian, Appendix to Anglian's response to the consultation on the Environmental Performance Assessment (EPA) consultation (November 2024), Section 3.4 (Annex 028).

[293] We put forward the idea of calculating and analysing performance ratios as part of our PR24 business plan. The performance ratio for a particular company is calculated as its performance under a given metric divided by the median level of performance against that metric across companies. This is an established concept, related to the efficiency ratio from Ofwat's cross-company benchmarking of water companies' costs. In the same way that Ofwat recognises that the range or spread of efficiency ratios can be informative about the relative merits of candidate cost benchmarking models, considering of the spread of performance ratios can be informative about the relative merits of candidate pollution metrics.

Figure 40: Standard deviations of performance ratios for candidate pollution performance metrics



Source: Anglian, *Appendix to Anglian Water's response to the Environmental Performance Assessment (EPA) consultation (November 2024),* page 19 (Annex 028).

(496) Nonetheless, Anglian is not looking for the CMA explicitly to use one of these metrics instead of Ofwat's current performance metric for total pollution incidents. There could be practical issues arising if it were to apply a different metric for Anglian (and potentially other companies subject to a CMA determination) than the metric used for other companies.

(497) Instead, there is a more proportionate and targeted approach available, as put forward in Anglian's PR24 Business Plan.[294] **This is to retain the current PC definition but to revise the PCL for Anglian in a way that would mimic, as far as practical, the effect of the EA/NRW and Ofwat moving to one of the more appropriate performance metrics.**

(498) The CMA could use either approach for this, but Anglian suggests that its first alternative, based on adjusted sewer length, makes more intuitive sense. It is simpler than the second performance metric, which uses more granular data on pollution incidents. Anglian provides an illustrative recalculation of its PCL on this basis, below..

(499) This can be done by: (i) reproducing Ofwat's method for setting PCLs for total pollution incidents using the performance metric based on adjusted sewer length; and then (ii) converting from a PCL expressed in terms of *adjusted* sewer length to a PCL in terms of unadjusted sewer length (i.e. the current PC definition) using the company-specific adjustment factor for wastewater asset density from the formula above.

(500) Ofwat calculated a baseline for 2024/25 based on the median value of companies' average performance (on the current metric) over the last four years. It then applied a 30% glidepath over the period to 2029/30 to set the PCLs for each year of AMP8.

[294] Anglian, Outcomes PR24 data tables commentary (October 2023), section 1.13 (See here). Anglian, Outcomes PR24 data tables commentary (October 2023), section 1.13 (See here).

(501) Drawing on annual data on length of sewers, number of pumping stations and number of STWs across the companies in the industry Anglian has calculated the company-specific adjustment factor for wastewater asset density for each company. These were then used to calculate, for each company, the average performance under the adjusted sewer length performance metric over the last four years. The median across companies was a performance level of 25.80 incidents *per km of adjusted sewer length*. PCLs for AMP8 can then be calculated by applying the 30% glidepath over the period to 2029/30.

(502) The table below shows: (1) the PCL set at the PR24 FD; (2) a common industry PCL based on the application of Ofwat's PR24 calculation method but using historical performance data under the adjusted sewer length performance metric; and (3) the corresponding PCL for Anglian Water that is based on the PCL from (2) but converted back to a metric expressed in terms of incidents per 10,000km sewer length.[295]

Table 11: Calculation of Anglian's PCLs for total pollution incidents

	Units	2025/26	2026/27	2027/28	2028/29	2029/30
1. PCL at FD	Incidents per 10,000km sewer	25.02	23.42	21.82	20.23	18.63
2. Common industry PCL based on Ofwat FD method but adjusted sewer length performance metric	*Incidents per 10,000km adjusted sewer length*	24.25	22.70	21.15	19.61	18.06
3. Revised PCL for Anglian for application under current performance metric	Incidents per 10,000km sewer	31.06	29.08	27.10	25.11	23.13

Source: See datafile *"Proposed PCLs POL"*, Tab *"SOC Table"* (Annex 033).

(503) This approach has the effect of increasing the PCL for Anglian, under Ofwat's current PC definition, by 24% in each year of AMP8.

(504) These calculations are made for the current performance metric definition and would need revisions for any changes made by the EA/NRW to that metric (e.g. changes to include category 4 pollution incidents).

5.4 The FD fails to provide sufficient allowances to meet the total pollutions PCL

(505) Ofwat rightly expects significant improvement from the sector and treats the expectations set out in the Defra's Water Industry Strategic Environmental Requirements (WISER) as statutory. However, despite its statement that it has "*provided sufficient allowances through base expenditure to deliver improvements in performance*", Ofwat has in reality made a conscious choice to require a significant improvement by the end of AMP8 in performance solely through base, which is at odds with how other statutory improvements in environmental or water quality improvements are funded and with the approach taken, for instance, in respect of leakage, where step-change improvements are funded by enhancement.

(506) The scale and pace of required improvements over AMP8, as reflected in the glide path to 2029/30 involving a 30% performance improvement, does not seem to be funded from either base cost or enhancement allowances. This is a substantial improvement - more

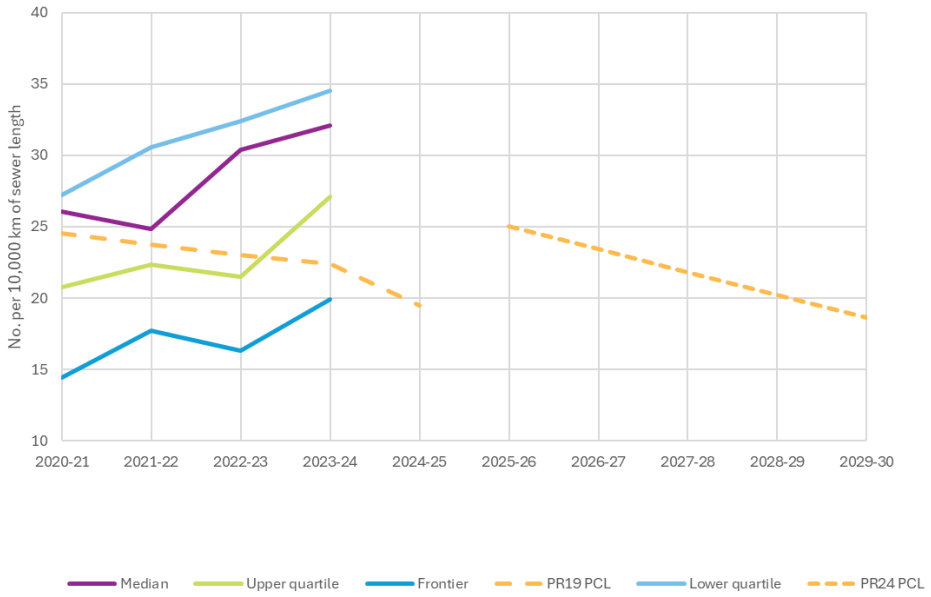
[295] The adjustment factor used here for each company is the average of the adjustment factor over the last four years based on the approach Anglian submitted to the EA.

than that the 30% on paper because of upward pressures on reported performance (e.g. more monitoring, climate change, etc). Ofwat's base cost allowances are calculated in a way that gives weight to expenditure over the last five years and in that period industry reported performance has got worse. It is very difficult to see how the base cost allowances can be seen to support the levels of performance.

(507) As noted above, there has been upward pressure on performance from increased visibility of incidents, increased rainfall and asset deterioration that are likely to be sustained. Even in a planning scenario where Anglian significantly overspends its base allowances it still expects significant penalty for this performance commitment.

(508) The industry's performance in AMP7, with a marked deterioration over the last two years of the FD clearly demonstrates that funding through base alone does not suffice to achieve stretching PCLs to reduce total pollutions. The approach to this PCL at PR24 appears to doom the industry to the same, or worse, outcome as during AMP7.

Figure 41: Industry performance and PCL for total pollution incidents in AMP7 [OBJ]



Source: Ofwat, *Total pollution incidents datafile (March 2025)*

5.5 The ODI is poorly calibrated and exposes Anglian to a significant risk of disproportionate underperformance payments

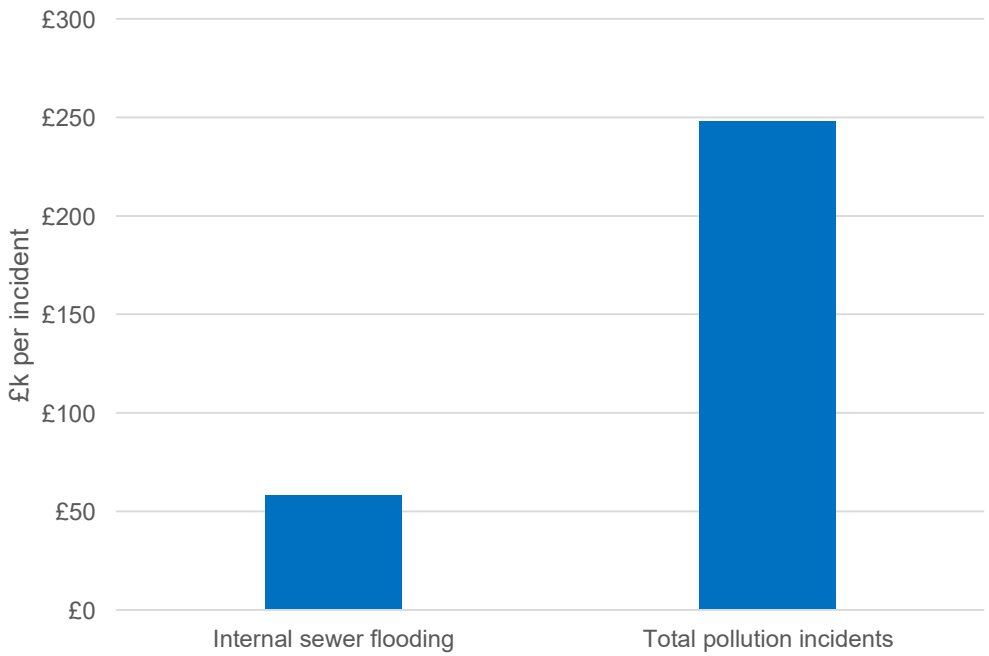
(509) Ofwat's approach to generating top-down ODIs has materially increased the ODI rate on Total Pollution Incidents, in Anglian's case from £69k in AMP7 to £248k, on a per incident basis, which is significantly higher than the rate on, for example, Internal Sewer Flooding of £58.10k. This does not reflect Ofwat's own customer research, which shows that Total Pollution Incidents are less important to customers than Internal and External Sewer Flooding.

Figure 42: Ofwat view of relative ranking of performance commitments using top down approach to using customer preferences to inform ODI rates

PC	Customer research 1 (ranking of valuations)	Customer research 2	Customer research 3 (% of customers ranking as high importance)	Overall proposed ranking
Internal sewer flooding	1 (H)	H	84% (H)	**H**
External sewer flooding	2 (H)	H	84% (H)	**H**
Water supply interruptions	3 (H)	H	83% (H)	**H**
Compliance risk index (CRI)	4 (H)	H	87% (H)	**H**
Customer contacts	5 (M)	H	87% (H)	**H**
Discharge permit compliance	N/A	M	82% (M)	**M**
Serious pollution incidents	6 (M)	M	82% (M)	**M**
Storm overflows	8 (M)	L	82% (M)	**M**
Total pollution incidents	7 (M)	M	82% (M)	**M**
River water quality	9 (L)	M	82% (M)	**M**
Leakage	N/A	M	81% (L)	**M**
Per capita consumption	N/A	L	79% (L)	**L**
Business demand	N/A	L	79% (L)	**L**
Bathing water quality	10 (L)	L	82% (M)	**L**

Source: Ofwat, *Top-down approach: Using customer preferences to inform ODI rates (June 2023)*, page 2 (Annex 029).

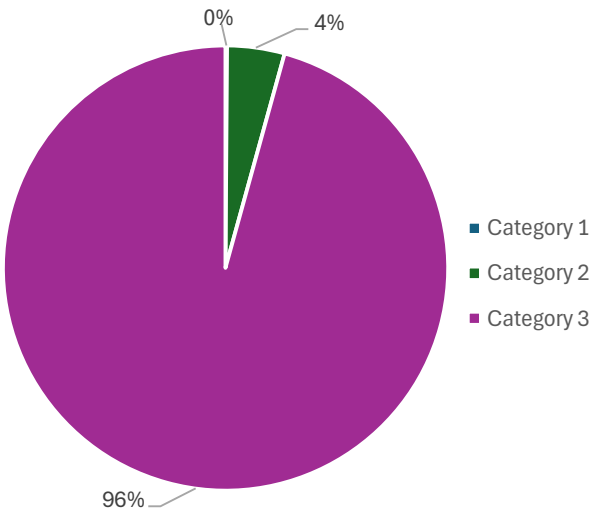
Figure 43: POL v ISF rate per incident



Source: Ofwat FD normalised ODI rate, translated to a per incident rate using AW's submitted normalisation figures for AMP8

(510) In the first four years of AMP7, 96% of incidents experienced in Anglian's region have been category three, defined in the EA's guidance as *having "a minor or minimal impact on the environment, people or property with only a limited or localised effect on water quality."*[296] Yet under Ofwat's approach, such an incident incurs a penalty that is four times higher than a home flooded with sewage.

Figure 44: Anglian's pollution incidents by category, AMP7



Source: See datafile *"Outcomes SOC source files",* tab *"AW POL incidents by category"* (Annex 023).

(511) Ofwat's approach on pollutions has become disconnected from the customer and environmental perspective and requires adjustments to ensure a proportionate approach. **This calibration may cause companies to focus on pollution incidents over sewer flooding, despite customer research by Ofwat and Anglian showing the latter as a higher priority**.

(512) Therefore, we request that the CMA reduce the Total Pollution Incidents rate to reflect the relative customer prioritisation of this measure in relation to other performance commitments such as Internal Sewer Flooding.

5.5.1 The incentive rate which Anglian proposed in its Business Plan is based on extensive customer valuations and is a better alternative

(513) One alternative would be to use Anglian's PR24 Business Plan incentive rate, based on its own extensive customer valuations captured within the Six Capitals Social Value framework. These valuations were considered best in class at PR19[297]. To ensure that incentive rates are set in relation to robust valuations which ensure a strong connection between the measure to be incentivised and the measures most valued by customers, Anglian's valuations are based on a comprehensive and rigorous societal valuation programme that includes multiple sources of evidence, such as willingness to pay surveys, post-event surveys, and benefit transfer methods. The valuations are triangulated using a wide range of data, ensuring that they are representative of customer preferences and priorities. The programme has been independently assured and aligns

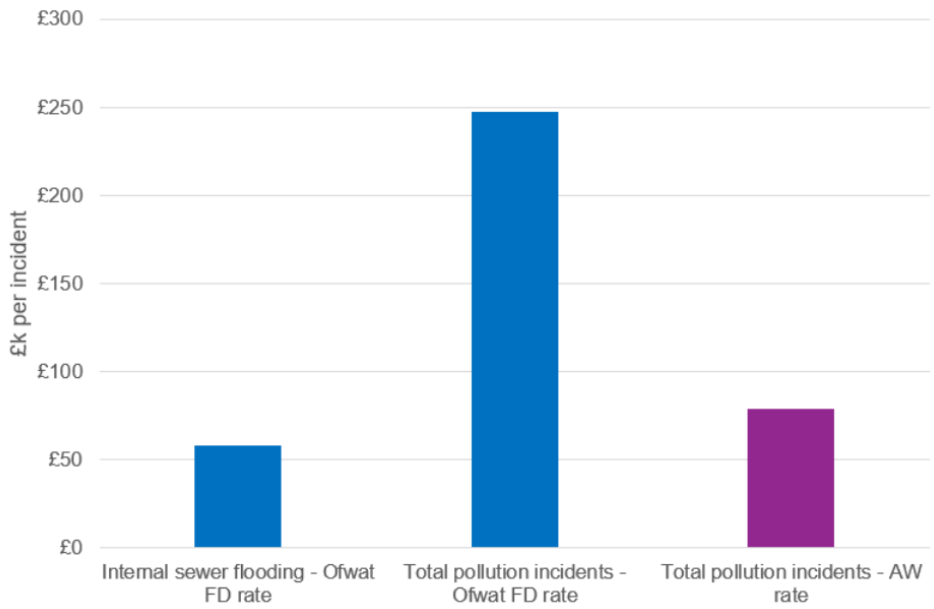
[296] Environment Agency, Water and sewerage companies in England: EPA metric guide for 2023 (23 July 2024) (See here).
[297] Anglian received an 'A' rating by Ofwat for customer engagement at PR19. See CMA, PR19 Final Report (17 March 2021), para. 2.46 (See here).

with best practice guidance from regulatory bodies. Anglian's approach to valuation is integrated into the Company's decision-making processes through the Six Capitals framework, ensuring that customer values are consistently considered in planning and investment decisions. The valuations are regularly updated, including as part of the development of the PR24 Business Plan[298], to reflect changes in customer preferences and external factors, maintaining their relevance and accuracy over time. Further details of Anglian's approach to societal valuation can be found in Annex 032.[299]

(514) Using Anglian's customer valuations for this PC would be a targeted and proportionate intervention that helps achieve consistency between PCs, without fully revisiting Ofwat's approach to setting incentive rates.

(515) The rate proposed was £0.605m on a normalised basis (i.e. per incident per 10k km of sewer), based on this analysis. While this is slightly higher per incident than internal sewer flooding (see figure below), Anglian continues to support this rate for both underperformance and outperformance payments given it reflects Anglian's customers' views on the marginal benefit of performance. The precise incentive rate is a topic that may merit further discussion.

Figure 45: POL v ISF rate per incident, including proposed Anglian rate



Source: Ofwat FD normalised ODI rate, translated to a per incident rate using AW's submitted normalisation figures for AMP8

5.5.2 The future scope of the PCL / ODI is uncertain in light of potential changes by EA

(516) There is a danger that the risk presented by the current position may be increased by a change in the way the EA classifies pollution incidents. This is currently uncertain and Ofwat's response unknown. At present, there is no requirement to report incidents which do not cause harm to the environment. The EA is, however, considering re-classifying

[298] Anglian, Our PR24 Business Plan (October 2023), page 132 (See here).
[299] Anglian, Annex: a note on Anglian's Societal Valuation programme (Annex 032). Also see CCW, End sewer flooding misery (See here) for research on the impact of sewer flooding on customers, and improvements made by companies.

category 4 incidents (which do not cause material harm to the environment) to category 3. This would greatly increase the total measured pollutions (by at least 30% for the industry), solely as a result of a measurement change, and would result in most companies being classified as "EPA red" for total pollutions. Other potential regulatory pressures and changes such as including spills from storm overflows on dry days could have an even greater impact. If Ofwat's PCLs are not changed, the effect would be to penalise disproportionately companies for changing regulatory expectations.

(517) Ofwat notes it "might" adjust its approach to reflect this using its standard change control process but this is very high level. So there is significant and unacceptable regulatory uncertainty on an issue which is likely to materially affect the level of underperformance payments faced by companies. Even if the guidance from the EA is not finalised during the redetermination, companies require greater certainty as to how regulatory changes will be reflected in the PC.

(518) We therefore ask the CMA to ensure that its PCLs either reflect this change (if it is finalised within the redetermination) or that Ofwat will do so in a predictable manner (if not), to avoid arbitrary and unintended increases in the underperformance payments companies face. Potential solutions include reporting performance for the PC using the old definitions consistent with how PCL and incentive rate were set (even if the EA expects different figures to be reported to it) or Ofwat reconsiders both PCL and ODI rate with a view to leaving the median company financially neutral post adjustment relative the FD.

5.5.3 Extreme weather can impact performance

(519) Finally, extreme weather conditions have increased over the last years, with surface water as well as groundwater level putting pressure on Anglian's network. Independent consultants, KPMG have found a clear link between weather patterns and performance for flooding and pollution.[300] This causes particular pressures on spend for Anglian, given the East of England is particularly susceptible to these issues.[301] These factors add to the upward pressures which the Company faces on controlling and reducing pollutions.

(520) It is important that the volatility which companies are exposed to with extreme weather events is appropriately reflecting when setting or measuring performance against the PCL as well as when calibrating the underperformance payment and necessary collar: there are no incentive benefits from exacting heavy underperformance payments on companies for uncontrollable weather events.

5.6 Conclusion on Total Pollutions

(521) The FD's approach fails the test of proportionality: it imposes an extremely high incentive rate (and therefore underperformance payment risk) for a performance measure which starts from an unrealistic level and currently carries significant lack of clarity and uncertainty and can be heavily influenced by external factors.

(522) Ofwat states that poor performers will have to "*deliver **significant improvements** or face material underperformance payments*".[302] However, this outcome is not achieved by the

[300] KPMG, The impact of climate change on key operational performance measures (August 2024), page 25 (Annex 027).[300] KPMG, The impact of climate change on key operational performance measures (August 2024), page 25 (Annex 027).

[301] Anglian, Thriving East, page 8 and 12-15 (See here)[302] Ofwat, PR24 Final Determinations, Delivering Outcomes for Customers and the Environment (February 2025), page 18 (See here).

[302] Ofwat, PR24 Final Determinations, Delivering Outcomes for Customers and the Environment (February 2025), page 18 (See here).

FD as even with significant improvements in performance, Anglian will face material underperformance payments.

(523) Partly because of underfunding, Anglian is exploring planning scenarios of overspending base cost allowances to achieve a significant decrease in Total Pollutions throughout the AMP. However, this will still mean that Anglian will receive underperformance payments for Total Pollutions throughout each year of PR24. Ofwat's failure to provide an appropriate mix of allowance and PCL will therefore have a significant detrimental effect on Anglian and its ability to fund programmes from Base.

(524) Accordingly, Anglian asks the CMA to:

(i) adjust the measurement of performance against the PCL to reflect at least the normalisation factors that have contributed to Anglian's unrealistic PCL either by:

(a) using an adjusted sewer length metric taking into account the number of pumping stations and WRCs that each company has relative to its sewer length, and relative to the median across the industry; or

(b) using weighted average of performance across asset categories;

(ii) re-calibrate the PCL and ODI rate for Total Pollutions proportionately by reducing the underperformance rate to £0.605m on a normalised basis; and

(iii) exclude category 4 incidents from the PCL, or providing for the PCL, underperformance rate and funding to be adjusted in the event that the EA changes its categorisation approach.

(525) Alternatively, Anglian would be open to engaging with the CMA on how much additional funding would be required, in the event of an unchanged PCL, to further reduce its total pollutions.

(526) Even full acceptance by the CMA of Anglian's proposals would leave the company facing a large challenge and almost certain heavy underperformance payments over the AMP. This is intentional. Anglian supports incentive regulation and does not seek to avoid responsibility for its own performance. However, currently Ofwat's calibration for this measure places an unachievable level of stretch and excessive downside risk on Anglian. Adjusting these elements of the performance commitment would make the scale of improvement and penalty rate proportionate whilst recognising and accounting for the need for Anglian to significantly improve on the companies' current performance.

6 External sewer flooding

6.1 Overview

(527) As for leakage, the FD has set a PCL for Anglian based on a baseline set at its bespoke PR19 PCL for 2024/25, which effectively penalises the Company for historically achieving strong performance in reducing external sewer flooding. The fact Anglian has been unable to replicate this performance more recently, due in part to extreme weather impacts and prevailing volatility[303], exacerbates the challenge and disproportionality of Anglian's underperformance exposure.

[303] KPMG, The impact of climate change on key operational performance measures (August 2024), page 25 (Annex 027).
[303] KPMG, The impact of climate change on key operational performance measures (August 2024), page 25 (Annex 027).

(528) There is a clear case, instead, for applying an industry-standard PCL, consistent with Ofwat's approach to internal sewer flooding.

(529) Ofwat's current approach disincentivises frontier performance, just as it does for leakage: Ofwat uses strong performance early in one AMP to set more challenging PCLs than the industry in future AMPs (regardless of actual performance in the interim). This approach also fails to set a fair bet for Anglian.

6.2 Ofwat's approach and background

(530) Ofwat set Anglian an overstretching PCL at PR19 with no additional funding, which was c.20% more challenging than the median and the second most challenging for the entire sector.[304]

(531) Although Anglian performed at or above the upper quartile for the first three years of the AMP it underperformed against its PCL across AMP7 as a whole, resulting in forecast net penalties of -£19.218 million for the AMP[305]. Despite that outturn, Ofwat has selected Anglian's 24/25 PCL as the baseline for setting the PCL in PR24.

(532) This is a result of Ofwat setting the PCLs for external sewer flooding on a company-specific basis in PR24: The baseline is set on a company-specific basis, based on either outturn performance, the company forecast for 2024-25 or (in Anglian's case) the PR19 2024-25 PCL. The PCLs are then set based on a glidepath from each company's 2024/25 baseline to an industry common performance endpoint in 2032-33. The latter is set at the industry median PCL position from companies' Business Plans.[306]

(533) The result of this approach is that a PCL that Anglian is not currently meeting – that was set at a stretching level in PR19 solely because of Anglian's upper-quartile performance - is continuing and being strengthened even though performance now is not upper quartile. This is unreasonable, inconsistent and disincentivises frontier performance, as explained further below.

6.3 Ofwat's company-specific approach is inconsistent with other PCLs, the Final Methodology and related analysis and principles of good regulatory incentive design

(534) The fact that Ofwat has set the baseline on a company-specific basis[307] also runs counter to the PR24 Final Methodology, in which Ofwat proposed that for external sewer flooding there would be a common level of performance to be delivered through base expenditure. Ofwat expanded as follows: "*For external sewer flooding, we do not consider there is a valid rationale to take a different approach to that used for internal sewer flooding. Both measures share the same drivers and therefore we should not expect different levels of*

[304] See datafile "Proposed PCLs ESF" (Annex 024).
[305] Anglian, Annual Performance Report 2024, line 3B.5 (See here).
[306] For completeness, the ODI rate was set using the top-down methodology with a starting RoRE allocation of 0.6% wastewater RoRE. The median ODI rate per 10,000 wastewater connections set at the FD is a 122% increase on the median PR19 rate, adjusted for inflation. Ofwat included a collar at -0.6% RoRE, being the level Ofwat considered appropriate to mitigate against external factors, whilst maintaining incentives to meet the PCL. Outperformance was also capped at 1.5% RoRE. See: Ofwat, PR24 Final Determinations, Delivering Outcomes for Customers and the Environment (February 2025), pages 73 and 75-76 (See here).
[307] Ofwat has set company specific PCLs on the basis of either companies' outturn performance, the company forecast for 2024-25 or the PR19 2024-25 PCL (as in Anglian's case).

performance from base expenditure between companies for external and internal sewer flooding".[308]

(535) Anglian agrees. This approach is supported by the overlap between the two measures from an operational and asset management perspective, as Ofwat also recognised in its 2023 assessment of the influence of enhancement expenditure on historical performance trends for PR24.[309]

(536) Taking a common approach with other PCLs, including internal sewer flooding is also consistent with principles of good regulatory incentive design which do not support using a particular company's own historical performance (or expenditure) to set its performance PCLs (or cost allowances) and is consistent with offering a fair balance of risk across the price control package, with reasonable opportunities for out-performance to offset risks of under-performance. Such an approach would ensure consistency between PCLs and price control expenditure allowances, as well as regulatory consistency (in the treatment of three similar areas of performance, i.e. internal and external sewer flooding and total pollutions).

(537) Ofwat justifies its company-specific approach to the PCL on the basis that it avoids imposing too stretching PCLs on the companies that are lagging[310]. However, Ofwat's convoluted approach to setting company-specific PCLs is a disproportionate and incoherent response to this concern and creates unintended consequences for companies that are *not* lagging.

6.4 Ofwat's approach distorts incentives for improving performance over time and fails to provide a balanced package for Anglian

(538) Setting company-specific PCLs based on strong historical performance artificially penalises frontier companies if they fail to repeat such performance, even if they remain strong performers. This disincentivises companies from reaching the frontier as doing so may simply result in even more stretching PCLs and higher penalties in the next AMP. This risk encourages companies to aim for median performance to avoid future exposure. In this scenario, as Anglian explained in its Response to the DD, a more reasonable and proportionate approach is to use the information revealed by outturn AMP7 performance to set an appropriate baseline and therefore PCL for AMP8[311].

(539) More generally, this approach fails to provide Anglian with a balanced package of risk with opportunities to outperform as well as underperform and a fair bet: In cases such as external sewer flooding, where it has performed relatively well in the past (and this has been reflected in its historical PCLs) it is faced with a more demanding PCL than other companies, yet where it has performed less well in the past e.g. water quality contacts, it is faced with a common industry-wide PCL. Notably, the Company has not identified any PCs for which Ofwat set a company-specific PCL that resulted in a less demanding PCL for Anglian than the sector median PCL.

[308] Ofwat, Creating tomorrow, together: consulting on our methodology for PR24 Appendix 9: Setting expenditure allowances (7 July 2022), page 71 (See here).

[309] See: Ofwat, IN 23/07: Assessing the influence of enhancement expenditure on historical performance trends for PR24 (14 July 2023), page 9 (See here). Ofwat reported examples of activities driving improved performance over time across a range of PCs, based on information provided by companies. In presenting these examples, Ofwat grouped internal and external sewer flooding together and listed the examples relevant to both.

[310] Ofwat, PR24 Draft Determination: Delivering outcomes for customers and the environment (July 2024), page 111 (See here).

[311] Anglian Water, Price Review 2024: Anglian Water's Business Plan for AMP8 (2025-2030): Draft Determination Representations, pages 91, 94 and 107 (See here).

(540) Anglian is currently forecasting producing a material improvement in its external sewer flooding performance in PR24, and anticipates a 24% reduction across the AMP as against a 2025 baseline. However, even with this significant performance step-change, Anglian still net underperformance payments across the AMP of c. £7.4m.

6.5 Anglian asks the CMA to align with Ofwat's approach to internal sewer flooding by applying an industry-standard PCL

(541) Anglian therefore requests that the CMA apply an industry-standard PCL for external sewer flooding, consistent with Ofwat's approach to internal sewer flooding, by following the explanation and methodology below.

(542) The table below compares in broad terms the approaches Ofwat followed in respect of these two performance commitments.

Table 12: Broad comparison at FD to set PCLs[312]

PC	Setting the 2024/25 baseline	Setting the endpoint of the glide-path
External sewer flooding	Company-specific baseline: see subsections above for explanation of how these were set.	Common endpoint for 2032/33, determined by the median of companies' proposed PCLs for that year.
Internal sewer flooding	Common 2024/25 baseline based on median of companies' average performance over 2020/21 to 2023/24.	Common endpoint for 2029/30, determined by the median of companies' proposed PCLs for that year.

(543) The key difference in approach concerns the 2024/25 baseline. As set out above, for external sewer flooding Ofwat calculated a company-specific 2024/25 baseline for each company. In contrast, for internal sewer flooding, Ofwat derived a 2024/25 baseline that was common across companies, and which reflected the median of the sector's recent average performance.

(544) In addition, there is a difference in how the endpoint of the glide paths are determined. For internal sewer flooding there is a common endpoint for 2029/30, determined by the median of companies' proposed PCLs for that year. By contrast, for external sewer flooding the endpoint based on the median of companies' proposed PCLs for 2032/33. It is unclear why 2032/33 is considered more appropriate than 2029/30.[313]

(545) Reflecting the above, Anglian has calculated PCLs for external sewer on a consistent basis with internal sewer flooding. This is based on a glidepath connecting the median of

[312] For internal sewer flooding, Ofwat made specific adjustments with regards to the PCLs for Hafren Dyfrdwy and United Utilities. It also (i) did not take into account the recent performance from those two companies when calculating the median to set the common 2024/25 baseline, and (ii) when deriving the 2029/30 endpoint, it used an average of (a) the median of the sector's forecast performance for that year when all companies but Hafren Dyfrdwy are considered and (b) when all but Hafren Dyfrdwy and United Utilities are considered.

[313] Ofwat, PR24 Final Determinations: Delivering outcomes for customers and the environment (February 2025), page 69 (See here). Ofwat simply notes that its choice of setting a common level by 2032/33 represented "*an appropriate balance for moving towards a common level: recognising PCLs were previously set on a company specific basis; and avoiding setting an unachievable level of stretch for some companies in the 2025-30 period*" (page 110).

companies' average performance over the period 2020/21 to 2023/24 to the median of companies' Business Plan proposed PCLs for 2029-30. In doing so:

(i) First, due to concerns identified by Ofwat about the data from Thames Water on external sewer flooding, Anglian has excluded figures for Thames Water from the calculation of the median values, in line with the approach used by Ofwat at FD.[314]

(ii) Second, there is a small calculation error in the Excel file with Ofwat's working of the PCLs for external sewer flooding.[315] Ofwat has recognised this error but it has not made a correction.[316] In the calculation's presented below, this error has been corrected.

(546) The table shows the PCLs for Anglian Water over AMP8 under this replication of the approach applied to internal sewer flooding. For reference, the table also shows the values for the 2024/25 baseline and, where relevant, the performance in the years after 2029/30 associated with the glide-path derived under each approach. [317]

Table 13: Anglian PCLs for external sewer flooding under alternative approaches

	Baseline	AMP8 PCLs					Post-AMP8 performance		
Approach	**2024/25**	**2025/26**	**2026/27**	**2027/28**	**2028/29**	**2029/30**	**3030/31**	**2031/32**	**2032/33**
FD approach	16.13	15.84	15.55	15.26	14.97	14.68	14.39	14.10	13.49
FD approach (with correction)	16.13	15.80	15.47	15.14	14.81	14.48	14.15	13.82	13.49
Replication of ISF approach.	18.29	17.65	17.01	16.37	15.73	15.09	–	–	–

Source: Anglian analysis based on Reckon data. See datafile *"Proposed PCLs ESF"* (Annex 024).

(547) Anglian requests that the PCLs from the row "Replication of ISF approach" in the table above are applied as its PCLs for external sewer flooding in AMP8.

(548) Finally, given the significance of extreme weather impacts in relation to this PCL, Anglian notes the importance of retaining Ofwat's collar on underperformance payments for this PCL, to mitigate the risk of large penalties driven by uncontrollable factors.

7 Water supply interruptions

(549) Ofwat's approach to setting the baseline performance for 2024/25 for water supply interruptions contrasts with the approach it followed for other PCs in the FD, where it has set common PCLs, creating an unnecessary inconsistency.

[314] Ofwat, PR24 Final Determinations: Delivering outcomes for customers and the environment (February 2025), pages 69-70 (See here).
[315] This relates to an error in applying the year-on-year change from the 2024/25 baseline to the 2032/33 endpoint.
[316] Ofwat, PR24 final determinations change log (last updated 28 February 2025), row 46 (see here).
[317] There is a potential argument that to replicate in full the FD approach used for internal sewer flooding to external sewer flooding, it would be appropriate to also exclude Hafren Dyfrdwy and/or United Utilities when calculating the median of recent performance levels and the median of proposed PCLs/forecasts for 2029/30. For internal sewer flooding, Ofwat calculated company-specific PCLs for these two companies to take account of regional factors and the size of the asset base respectively, and there is the potential for these issues to also apply to external sewer flooding. Excluding those companies when deriving the PCLs for external sewer flooding would lead to less demanding PCLs than Anglian has proposed, but we have not sought to explore these issues on the grounds of proportionality and have included Hafren Dyfrdwy and United Utilities in the calculations.

(550) Ofwat set the 2024/25 baseline for Water Supply Interruptions as the value of the PR19 PCL for that year: 5:00 minutes. This was unchanged from its PR24 DD. However, "*[f]or other performance commitments, [Ofwat] adjusted the baseline position to take into account the latest reported performance*."[318]

(551) Anglian sees no good reason for this inconsistency and supports the use of the latest available data in setting PCLs. By failing to use the latest data, Ofwat has set PCLs for water supply interruptions over AMP8 that would be unduly demanding for a notional efficient company, (especially in the early years).[319]

(552) Based on Ofwat's reports of average company performance, a 5.00 PCL is more demanding than the upper-quartile, at 06:18, let alone the median at 9:38. Across the sector, there are only three companies whose average performance over 2020–2024 was below 05:00 minutes. Ofwat's 5:00 minute PCL therefore cannot reasonably be supported from a fair assessment of recent sector performance. Furthermore, the rate of improvement in water supply interruptions over time does not support the use of Ofwat's baseline for 2024/25.

(553) Anglian considers that the PCL for water supply interruptions should be set using an approach which is more consistent with that for other PCLs, and in particular one that is grounded in the recent historical evidence on companies' performance. In particular, Anglian proposes that: (a) the 2024/25 baseline for calculation of the PCLs is based on the median of companies' performance over the last four years and (b) the PCLs for each year of AMP8 are set on the basis of a glidepath from the 2024/25 baseline to the median of companies' PCLs for 2029/30. This would produce revised PCLs as follows.

Table 14: Anglian's PCLs for total pollution incidents

Year	2025/26	2026/27	2027/28	2028/29	2029/30
PCL at FD	05:00	05:00	05:00	05:00	05:00
Revised PCL requested from the CMA	08:43	07:47	06:51	05:56	05:00

Source: Anglian analysis based on Reckon data. See datafile *"Proposed PCLs WSI*" (Annex 034).

8 The Outturn Adjustment Mechanism (OAM)

(554) In its DD, Ofwat proposed a set of PCLs that imposed a significant downside skew on the industry's expected outcomes. Furthermore, given the overall industry underperformance in AMP7, there was clearly a very significant risk of very large penalties for much or all of the industry, particularly given the high underperformance rates proposed on pollutions.

(555) Anglian, like many companies, pointed this out in its response to the DD. Ofwat appeared to take the point, in that it proposed in October 2024 an entirely new regulatory mechanism: the Outturn Adjustment Mechanism or OAM. This was a significant

[318] Ofwat, PR24 Final Determinations: Delivering Outcomes for Customers and the Environment (February 2025), page 89 (See here).

[319] At Ofwat, PR24 Final Determinations: Delivering Outcomes for Customers and the Environment (February 2025), page 89 (See here), Ofwat explains that "[g]iven that eight companies in the 2020–24 period have met or exceeded this performance commitment level for water supply interruptions, we consider it is an achievable but stretching target at final determinations". However, it is not the case, that eight of the companies have generally, or on average, met or bettered the 5:00 minute performance level. Rather, over the four years from 2020 to 2024, eight companies have met the 5:00 performance level *at least once*. In fact, four companies met the target in only one of those four years.

development, late in the process, with companies given 14 working days to respond to the consultation.[320]

(556) Anglian agreed with the stated purpose of the mechanism, to:

(557) "*recalibrate[s] investor returns in the event of significant, systematic out or underperformance across the sector, providing protection for customers and companies against the potential for miscalibration of the outcomes package."*[321]

(558) *"to calibrate the risk and return package so that an efficient company, with the notional capital structure, has a reasonable prospect of earning the base allowed return. This is sometimes referred to as ensuring a 'fair bet'."* [322]

(559) Anglian therefore cautiously welcomed the OAM in response to Ofwat's consultation.[323] The mechanism appeared to encapsulate the core principle of yardstick regulation: that relative performance should drive outperformance payments. We have previously championed this type of approach, both in Anglian's response to the Department of Business and Trade's consultation on smarter regulation and bilaterally with Ofwat.[324]

(560) Yardstick competition has many attractive features; notably it mimics competition by setting companies against one another. Even if average industry returns are recalibrated each period, a true yardstick regime will still have very strong incentive properties because each company's individual performance will have little effect on overall industry performance. However, this system also provides some security, in that common over-or under-performance by the industry does not result in across-the-board rewards or penalties, again rather like a competitive market: in which a common cost or demand shock does not necessarily benefit or disadvantage any one company.

(561) The OAM, being based on the median company rather than the industry's overall performance is a little different in its mechanics but in principle works just the same way. Even recalibrating the returns for the median company does not harm the incentives to out-perform, as each will work to be or to beat the median company. The OAM was therefore in no sense equivalent to a system in which a given company's returns are recalibrated: it neatly combined strong performance incentives with a mechanism to ensure that neither customers nor companies, on aggregate, would make windfall losses or gains from bad calibration. Customers were doubly protected so that in the event of widespread industry outperformance the median company would not earn outperformance payments. Not only would customers receive the better service from this good performance but they would not pay higher bills for it.

(562) However, the FD provides that the OAM will apply not, as consulted upon, by recalibrating the median company to zero, but instead introducing a deadband so that the OAM will trigger only if the median company would otherwise earn more than +0.5% RORE outperformance payments or –0.5% RORE underperformance payments. Ofwat cited the fact that not all companies supported the OAM. However, stakeholders were only given one opportunity to comment on the OAM, under severe time pressure. Anglian notes that 0.5% of RoRE is highly material from a cost of equity perspective.

[320] Ofwat, PR24: Consultation on outturn adjustment mechanism (15 October 2024), page 4 (See here).
[321] Ofwat, PR24 Final Determinations: In-period adjustments (December 2024), page 12 (See here).
[322] Ofwat, PR24: Consultation on outturn adjustment mechanism (15 October 2024), page 2 (See here).
[323] Anglian, Response to Ofwat Consultation on outturn adjustment mechanism (November 2024), page 1 (Annex 030).
[324] Anglian & Reckon, Comparative performance and incentives for the UK water industry (January 2024), page 3 (See here).

(563) The introduction of the deadband implies (and indeed Ofwat explicitly states[325]) that the OAM should trigger only vary rarely and thus constitutes a large change, without consultation or explanation, from its original suggestion. Elsewhere in its Risk and Return FD document Ofwat speaks of balancing incentives with protection mechanisms but this explanation is not specifically advanced for the change to the OAM, so Ofwat's reasoning is unclear. However, if this is the reason, it makes little sense because the original version of the OAM has the full, high-powered regulatory incentives created by yardstick competition, as mentioned above. A dead-band simply exposes customers and companies to unnecessary variations in payments without achieving the aim of delivering a 'fair-bet' that the allowed return can be achieved.

(564) Anglian therefore requests that the CMA consider the OAM and either restore the original version of it that was consulted on, or, if it has the appetite for a more fundamental reform, consider how the regulatory mechanism can best provide both incentives for companies and protection for customers and those companies. Anglian has previously proposed a system of dynamic incentives for performance that is similar in intention to the OAM and would be happy to discuss this or other solutions.[326]

9 Ofwat's FD approach is incompatible with Ofwat's legal duties

(565) Ofwat recognises the risk of poorly calibrated outcomes regimes, stating that "If PCLs are beyond what is achievable by the majority of companies, **we are not giving the sector a fair chance to earn rewards from improved performance.** This runs the risk that companies might decide it is not worthwhile to make the effort to pursue their PCLs, which will not benefit customers or the environment. It would also result in the sector being placed **at high likelihood of immediate underperformance from the start of the 2025-30 period**. This would also not **support delivery of the large investment programme required to deliver improvements for customers and the environment** over the 2025-30 period and beyond".[327]

(566) As shown above, Ofwat has miscalibrated several material ODIs in such a way that Anglian's targets are disproportionately challenging—relative both to its peers and to the company's historical performance. In areas where Anglian is leading, such as leakage and external sewer flooding, Anglian's track record of high performance leads to it facing more stringent targets. For total pollution incidents, Anglian faces higher penalties and a more challenging target than comparators as a result of a flawed approach to normalisation. The result is that for Anglian, a strong performer in absolute terms, the FD does not deliver a fair bet. Despite Ofwat's intentions in calibrating the ODI regime, Anglian does not have a fair chance to earn rewards and it will face immediate underperformance from the start of AMP8.

(567) The presence of miscalibration in the regime invalidates Ofwat's assumption that a PCL package that is achievable by the majority of companies provides a fair chance across the sector. Even had Ofwat calibrated the PR24 cost of capital correctly for the notional company (which Anglian contests, see Chapter H.2 (WACC)), the ODI penalties Anglian faces as a result of the miscalibration of the PR24 FD skew its returns below the level

[325] See Ofwat, PR24 Final Determinations: Aligning Risk and Return Allowed Return Appendix (December 2024), page 21 (See here).
[326] Anglian & Reckon, Comparative performance and incentives for the UK water industry (January 2024), page 5 (See here).
[327] Ofwat, PR-24 Final Determinations: Delivering Outcomes for Customers and the Environment, (February 2025), page 21 (See here).

required to finance its statutory functions. Failing to correctly balance the risk arising from a miscalibrated ODI package with available returns fails Ofwat's financeability duty.

(568) Ofwat's outcomes regime has, for the reasons set out above, fallen into this trap by setting unrealistic PCLs that are not supported by the allowances provided.

(569) Cost allowances derived in a way that do not cover the expectations of unduly stretched PCLs will, in future, present companies with the dilemma of whether to invest further beyond their allowances in order to meet these PCLs and to avoid underperformance payments under the outcomes framework. In the long- term, Ofwat's approach creates perverse incentives to be a mediocre performer as it effectively discourages companies that aim for frontier performance. Whilst this is unlikely to be Ofwat's policy intent, it is the unintended consequence of its approach, which will ultimately serve to undermine outcomes for customers, the environment and resilience.

10 Request to the CMA

(570) Anglian asks the CMA to reset the PCLs, baselines and/or rates as appropriate to maintain the strong incentives to improve performance to which Anglian is already responding. Alternatively, if the CMA agrees that the PCLs impose unacceptable stretch on existing base funding but would prefer to retain the PCLs as they are, Anglian requests adequate funding to close the gaps that the FD has created between its PCLs and the means provided to achieve them. Specifically, Anglian asks the CMA to:

(571) **Leakage**: (i) provide a more proportionate PCL for Anglian by adjusting Anglian's baseline (which is currently based on the PR19 2024/25 PCL) to reflect its outturn performance for 2024/25 (currently forecast to be 180.45 Ml/d in line with the WRMP); and (ii) provide the associated enhancement allowance based on Ofwat's models. For example, if the CMA aligns the baseline to the WRMP, the associated enhancement allowance to meet the PCL from that baseline would be £21.8m.

(572) **Total Pollution Incidents**: (i) accurately reflect Anglian's performance in relation to its asset base by setting a PCL informed either by: (a) relative performance using adjusted sewer length metric which accounts for the number of pumping stations and WRCs each company has relative to its sewer length and the industry median, or (b) relative performance using the weighted average of performance across asset categories. Alternatively, in the event of an unchanged PCL, Anglian would welcome further engagement with the CMA to discuss how much additional base funding would be required to further reduce its total pollutions in line with its PCL; (ii) lower the Total Pollution Incidents rate for underperformance and outperformance payments to £0.605m on a normalised basis (i.e. per incident per 10k km of sewer), to improve proportionality, reflecting Ofwat's and Anglian's customer evidence; and (iii) exclude category 4 incidents from the PCL, or provide for the PCL, underperformance rate and funding to be adjusted in the event that the EA changes its categorisation approach..

(573) **External Sewer Flooding:** apply an industry-standard PCL for external sewer flooding, consistent with Ofwat's approach to internal sewer flooding, by adjusting: (i) the 2024/25 baseline to reflect the median of companies' average performance over the last four

years and (ii) the PCLs for each year of AMP8 by setting them on a glidepath from the revised 2024/25 baseline to the median of companies' own PCLs for 2029/30.[328]

(574) **Water Supply Interruptions**: reflect the latest performance data in setting the PCL by adjusting: (i) the 2024/25 baseline to reflect the median of companies' performance over the last four years and (ii) the PCLs for each year of AMP8 by setting them on a glidepath from the revised 2024/25 baseline to the median of the companies' own PCLs for 2029/30.[329]

(575) **OAM**: remove the deadband introduced at FD and restore the original OAM to provide the median company zero outperformance or underperformance payments and therefore with a fair bet. If the CMA wishes to consider alternative approaches with similar effects, Anglian has proposed a dynamic incentives regime[330] during PR19 and would be happy to present and discuss its ideas.

[328] Including correcting the calculation error in the Excel file with Ofwat's working of the PCLs for external sewer flooding See datafile "Proposed PCLs ESF" (Annex 035). This gives revised PCLs set out in Table 13. See Section 6 above for further detail.

[329] This gives revised PCLs as set out in Table 14. See Section 7 above for further detail.

[330] Anglian Water & Reckon, Comparative performance and incentives for the UK water industry (January 2024), page 3 (See here) (prepared to support Anglian's response to Department for Business and Trade's 'Smarter Regulation: Strengthening the economic regulation of the energy, water and telecoms sectors' consultation (See here).

Chapter G.2
PCDs

1 Introduction

PCDs set out Ofwat's expectations for delivery specifically on activities and improvements funded through expenditure allowances. Ofwat has introduced an extensive suite of PCDs for the first time at PR24, which apply to both enhancement and base allowances.

Anglian supports the introduction of PCDs in principle. Customers rightly expect companies to deliver the outcomes they are funded to deliver.

Ofwat has applied PCDs to c.80% of enhancement expenditure. Ofwat has applied two types of PCDs:

(a) **non-delivery PCDs** (claw-back mechanism returning funding to customers where companies do not deliver the stated benefit by the end of the regulatory period); and

(b) **time-incentive PCDs** (which asymmetrically penalise late delivery and offer limited rewards for on-time delivery). These apply to c.50% of enhancement expenditure.[331]

For PR24, Ofwat has also introduced PCDs to base allowances, including to the sector-wide mains renewal [332] and network reinforcement cost adjustment allowances. PCDs apply to c.46% of the base capex allowance for water networks plus.

The scale of PCDs introduces asymmetric risk into the price control and, if they are too prescriptive, can have unintended consequences which outweigh their purported benefits if adequate mitigations are not put in place. This is compounded by the existence of time incentives that could apply if delivery is delayed to later within AMP8. This is an example of regulatory micromanagement.

Ofwat introduced some changes at FD in light of concerns raised by companies at DD, for example increasing the reward for on-time delivery to reduce the negative skew.[333] However, the FD does not go far enough to mitigate the unintended and unnecessary downside risks. Ofwat has not recognised that the scale of the AMP8 enhancement programmes and shift in focus for the industry to capital delivery is not captured in historical data. Additional adjustments are required to increase flexibility and reduce administrative burden. This would better ensure that the PCD framework is proportionate to providing assurance that customer benefits are being delivered and the regime does not introduce unnecessary inefficiencies, distorted incentives, and suboptimal customer outcomes which ultimately outweigh them.

The PR24 PCDs as currently prescribed also increase risk elsewhere in the FD: This prescription exacerbates the asset health and performance risks arising from base cost underfunding as well as the delivery risk on an enhancement programme of unprecedented scale. In short, without adjustments, the PCDs compromise Anglian's ability to deliver its FD by not reflecting the practicalities of delivery.

Ultimately, even with further adjustments, Anglian recognises that the asymmetric risk which PCDs introduce cannot be mitigated fully at source. The debt markets are already pricing in this risk, as seen in the recent downgrades to the sector by credit rating

[331] Ofwat, PR24 final determinations: Expenditure allowances (February 2025), page 306 (See here).
[332] See Chapter E: Base Costs, Section 3.1 for Anglian's specific concerns, and Section 5 for the request for the CMA, regarding the mains renewal PCD.
[333] Ofwat, PR24 final determinations: Expenditure allowances (February 2025), page 307 (See here).

agencies and the increase in the cost of company bond issuances, and as discussed in more detail in **Chapter H.1 (*Investability and Financeability*)**.[334]

To address these issues, Anglian requests that the CMA amend the PCD framework by:

(i) removing annual time limits and time incentives for delivery across all PCDs;

(ii) removing unnecessarily prescriptive elements in certain PCDs, including (i) amending the mains renewal PCD so that it does not relate to conditions grade 4 and 5, but rather targets those mains at a higher risk of failing or higher incidence of bursts, and (ii) simplifying the smart meter PCD to refer to all meters installed rather than specifying the type of customer meter.

(iii) introducing more proportionate reporting requirements and ex post assessment for certain PCDs such as the scheme specific ones, in line with Ofgem's approach, to allow for greater flexibility;

Anglian also requests that the CMA take into account the residual asymmetric risk that is not fully mitigated at source, when setting the cost of capital.

2 Time incentive PCDs mandate delivery to a fixed timetable over efficient delivery and short-term accountability over long term best value

(576) Anglian supports the introduction of PCDs in principle. Customers rightly expect companies to deliver the outcomes they are funded to deliver[335].

(577) However, it is important not to set PCDs in a way that ignores the commercial and engineering realities of managing a water and sewerage company. Companies need the flexibility to manage their base allowances effectively to address asset health risks and improve performance. Similarly, companies need to be able to use their enhancement allowances flexibly to respond to constant change in statutory drivers[336], the realities of mobilising major investment delivery, and supply chain volatility[337] and to achieve efficiencies which benefit customers. Flexibility is particularly key in AMP8, given the step-change to the scale and type of activity required, so this is the wrong time to unnecessarily constrain such flexibility.

(578) Anglian is particularly concerned about the impact of time incentive PCDs, which apply to around 50% of enhancement expenditure across the sector.

(579) The proposed time incentives are largely arbitrary. They do not directly link to delivery of the WINEP obligations which drive the need for the funding in the first place. Moreover, the EA has a role in ensuring delivery of WINEP, using the Environmental Performance Assessment (EPA) to incentivise delivery and can take enforcement action where companies fall behind. Finally, they duplicate to some extent Ofwat's Delayed Delivery Cash-flow Mechanism which penalises companies who do not spend their allowances.

(580) Time incentive PCDs prevent flexibility in delivery to the detriment of Anglian's ability to drive more efficient outcomes benefiting customs and the environment. They force companies to

[334] S&P Global Ratings, U.K. Water Regulatory Framework Support, Low Financial Flexibility In Coming Regulatory Period Drive Rating Actions (February 2025) (Annex 004a) [CONFIDENTIAL]; Moody's also downgraded its view on the stability and predictability of the regulatory framework in the UK water sector from Aa to A following Ofwat's DD as well as several companies in the sector following the FD publication. Both rating agencies have "downgraded" the way they view Ofwat as a regulator below Ofgem; KPMG, *Estimating the Cost of Capital for PR24*, page 108 (Annex 036).

[335] Anglian, PR24 Anglian Water's Business Plan for AMP8 (2025-2030): Draft Determination Representations, page 12 (See here).

[336] For example, changes to our WINEP programme for AMP8 are already being discussed with the Environment Agency.

[337] For example, the sudden lack of semi-conductors and steel for large diameter pipes during and after the siege of Mariupol in AMP7.

focus on delivering individual components of investment programmes to a pre-specified timetable, with few benefits and significant costs. In particular, this approach:

(i) removes companies' ability to take a holistic approach to project delivery, by phasing delivery of each element in the most efficient way. While it may be more cost efficient to group early-stage activities in a programme together early in the period, with most of the output being "delivered" for reporting purposes in the latter half of the control period, the artificial time constraints encourage companies to schedule their enhancement programme delivery in sequential blocks to meet PCD time limits;

(ii) ignores the realities of mobilising a supply chain to deliver projects of this scale, where time is dedicated at the outset to getting supply arrangements in place to deliver the project as a whole rather than chasing year one delivery targets. Investment is not an abstract activity driven by spreadsheets: it requires boots and machinery on the ground. Sometimes the same people and assets will be needed for two different activities, so they must be done at different times: For example, design resource is likely to be prioritised to areas of enhancement with time incentives potentially to the detriment of other areas. It would be more efficient to programme work sequentially rather than run processes in parallel to meet arbitrary interim milestones. Alternatively, sometimes a team can do two jobs at the same time, in which case it makes sense to schedule things together. PCDs can prevent both such efficiencies;

(iii) limits companies' ability to adopt the optimal and best value solutions in the long term in enhancement projects. For example, the complexity[338] of the PCDs for the Storm Overflows programme means that companies are forced to adopt tried and tested solutions as much as possible, leading to missed opportunities for beneficial changes to overall projects across the sector, to the detriment of customers. This artificial time pressure, if it had existed in previous periods, would have reduced the time available to Anglian to develop lower carbon solutions such as steel rather than concrete storage tanks;[339]

(iv) increases companies' exposure to risk by requiring companies to incur expenditure earlier in a project to meet the delivery profile while exposing them to the risk of not receiving the funding if the PCD is not delivered on time or is delayed due to factors outside of the company's control;

(v) creates perverse outcomes e.g. by potentially exposing companies to time penalties for late delivery even if the prescribed output is no longer required or necessary due to a change of circumstances.

(581) The time incentive unit rates themselves are asymmetric, with the underperformance rates set at three times the outperformance rates. These could either be made symmetric or accounted for when setting the cost of capital, as discussed further below in Section 4 below.

(582) Further risk arises from the lack of flexibility to adjust delivery requirements for changes that are outside the control of the companies e.g. labour shortages. The application of time incentive PCDs across the sector with similar delivery profiles could result in stretched

[338] This is a particularly complex PCD given the scale of the programme, the requirements for hydraulic modelling at site, the fact that the PCD measures a different deliverable to the WINEP obligation, the different solution types.

[339] Over a number of AMPs we have been working to reduce our capital carbon. As of 2023/24 we have reduced this by 64% compared to our 2010 baseline.

supply chains, shortage of labour or increased costs for delivery, thus increasing the risk on companies of not meeting the PCD.

(583) Finally, time-incentive PCDs create overall delivery risk. Anglian identified seven mitigations with its Board as part of ensuring deliverability of its Business Plan.[340] For the reasons outlined above, time incentives work directly against optimising the profile of the plan, removing this mitigation and significantly complicating delivery of the AMP8 programme.

(584) Anglian therefore requests that the CMA remove the arbitrary time incentive aspect of the PCDs, providing more flexibility to companies to deliver the relevant output in the most efficient way and ensuring PCDs operate as intended; a regulatory back-stop to protect customers whilst avoiding the harm of restricting innovation which benefits customers. The existence of time incentives increases the need for in-period reporting during AMP8.

3 Some PCDs are too prescriptive and introduce inefficiency and risk

(585) Anglian is concerned that some PCDs are too prescriptive and unnecessarily restrict how companies deliver programmes of work in AMP8 against the wider customer interest. This will affect the ability of companies to re-prioritise within period and respond flexibly to issues that arise, leading to unnecessary inefficiencies and increased risk. For example, it is inefficient to be unable to reallocate funding between activities where it becomes apparent that such changes are demonstrably in the interests of customers and better reflect changes to external drivers. Having flexibility to react quickly to changing circumstances (such as evolving environmental requirements or broader economic trends) and reallocate resources where appropriate is also important to manage both capital delivery and the overall level of risk faced by companies in AMP8, given the step change in the scale of investment to be delivered in AMP8 and the implications for long term investability.

(586) In previous AMPs Anglian has been able to drive efficiencies which have enabled the business to reinvest these efficiencies to the benefit of customers. For example, Anglian was able to undertake two additional resilience projects in AMP7, one at Morcott Water Treatment Works and another at East Hills Water Treatment Works both in excess of £10m which were funded by shareholders reinvesting efficiencies delivered by the business. Anglian was also able to invest enhancement funding to gain complete coverage of Event Duration Monitors for storm overflows in AMP7.

(587) By contrast, some of the PCDs in PR24 mandate companies to deliver prescribed narrow outputs, rather than optimising better outcomes and efficient delivery overall (with benefits shared with customers through the cost sharing mechanisms).

(588) Specific examples of overly-prescriptive PCDs include:

3.1 Mains renewal PCD[341]

(589) Anglian agrees in principle with the use of a PCD where specific funding has been granted for a specified purpose (and proposed a PCD in its CAC accordingly).[342]

[340] Anglian: PR24 and LTDS Board Assurance Statement, (October 2023), page 35 (See here).
[341] Ofwat, PR24 final determinations: Price control deliverables appendix (February 2025), section 3.1, pages 21-24 (See here).
[342] The PCD also identified the soil type and pipe material to be renewed, which aligns to Anglian's CAC.

(590) However, the PCD proposed in the FD requires Anglian to renew certain mains condition grades. However, this is not the appropriate way to use main cohorts analysis which is intended to give a whole company view of asset health.[343]

(591) The UKWIR guidance, from 2008 is clear that this approach should not be used for capital maintenance planning.[344] The guidance suggests that mains are prioritised for renewal based on serviceability indicators and cost.

"the rehabilitation programme must be determined in accordance with the Capital Maintenance Planning Common Framework, taking account of many Serviceability Indicator measures and of costs. Condition grades themselves are not appropriate for use in capital maintenance planning"

(592) Anglian's understanding of the restrictions in the PCD would force it to prioritise replacing mains that may be in robust asset health. This would not represent value for money, reduce burst risks or improve customer outcomes. In addition, Anglian is currently forecasting to miss its delivery timing targets in certain years of AMP8 due to the PCD's overly restrictive (and counterproductive) design.

(593) The PCD should therefore be amended so that it does not relate to conditions grade 4 and 5, but rather targets those mains at a higher risk of failing or higher incidence of bursts.

3.2 Smart metering PCD

(594) The smart metering PCD specifies the type of customer meter to be installed (e.g. household and non-household) despite there being no distinguishing between these types of meter in the cost model that determines cost allowances. Anglian proposes that this PCD is simplified to count meters installed.

3.3 Lead PCD[345]

(595) In addition to the examples mentioned above, a practical example of the real-world impacts of overly prescriptive PCDs is the Lead Pipe Replacement Programme. This PCD focuses on the number of pipes replaced annually, rather than allowing for risk-based prioritisation. This could lead to prioritisation of meeting the target rather than delivering the most optimal health outcomes.

4 PCDs introduce a new asymmetric risk into PR24

(596) The PCD framework in the FD introduces a new asymmetric risk into the price control. This is a significant and cross cutting issue, which is relevant to all companies, as PCDs cover the majority of enhancement activity and some base activity and non-delivery PCDs cover £35-40bn of totex.

(597) Under Ofwat's PCD proposals, companies will be exposed to increased and more immediate financial consequences from non-delivery of funded activities even if delivery is still expected next period or due to reasons outside of company control. While companies are already exposed to future performance risk in some cases (e.g. through statutory and regulatory

[343] Note Anglian has identified an issue with the element of the PCD that applies to the CAC and a reference to an Anglian query response during the process. We are working with Ofwat to update this element of the PCD. See footnote four of Ofwat, PR24 final determinations: Price control deliverables appendix (February 2025) (See here).
[344] UKWIR, Review of Water Mains Serviceability Indicators and Condition Grading: Volume II - Mains Condition Grading, page 68 (See here).
[345] Defined in Ofwat, PR24 final determinations: Price control deliverables appendix (February 2025), section 7.1 (See here).

obligations, and ODI penalties), the use of PCDs by Ofwat also exposes companies to additional direct revenue risk through clawback of allowances.

(598) Non-delivery PCDs are inherently asymmetric as there is no countervailing opportunity to earn more than the allowed revenue for over-delivery. PCDs therefore restrict the ability to outperform as the levels of risk and reward are not equal. In addition, they present a material risk for the notional company should it fail to deliver part of the programme. A delivery buffer of a "few months from the start of PR29"[346] is provided before clawbacks apply, however the regulatory discretion leaves residual risk for companies as it is unclear how Ofwat would disallow a clawback. Ofwat omitted the risk relating to non-delivery PCDs from its RoRE ranges in the FD.

(599) Based on stakeholder concerns about the asymmetric risk in the DD, Ofwat in the FD recalibrates late delivery incentives to be three times the rate of on-time incentives based on assessing a wider sample of project data. This is a softening from the four times position included in the DD but is calibrated based on PR19 delivery, rather than on a forward looking basis. This change does not go far enough in addressing the downsides that PCDs introduce for companies and customers or adequately mitigate those downsides, and still ultimately entails considerable asymmetric risk for companies.

(600) Ofwat's risk analysis in the FD understates the downside risk exposure implied by PCDs as it does not recognise non-delivery PCDs can result in clawbacks on partially delivered schemes especially given the tendency for large and complex projects to be delivered late.[347]

(601) The widespread coverage of non-delivery PCDs in the FD (80% of companies' enhancement allowances are covered by non-delivery PCD) presents additional risks to companies (which face a material risk of allowances being clawed back via the PCDs), which Ofwat does not account for in its risk modelling. Ofwat assumes non-delivery incentives have no RoRE impact, on the assumption that no costs are incurred in the case of non-delivery. However, in practice there are a number of conditions attached to delivery which are very stringent, and – in some areas – it is unclear how Ofwat is likely to evaluate performance.

(602) The credit rating agencies have already recognised the consequences of the increased risk in the FD on companies' financial resilience and the debt markets are already pricing this risk in, increasing the cost of capital for companies and worsening the terms on which companies can borrow, which in turn could affect the level of investment in the sector. It is therefore crucial to mitigate these risks as far as possible (including by amending certain aspects of the PCDs as requested) in order to ensure financial resilience and secure more efficient delivery for PR24.

(603) Unlike Ofwat, Ofgem recognises that PCDs introduce asymmetric risk and the need to mitigate this risk in the specification and operation of the PCD framework, as explained in Section 5 below.

(604) KPMG's report[348] on risk for the notional company in the PR24 FD gives the following risk ranges for PCDs. Their analysis, described in detail in the report, is based on broader infrastructure project delivery, cross checked against UK water sector data.

[346] Ofwat, PR24 final determinations: Expenditure allowances (February 2025), page 314 (See here)
[347] KPMG, PR24 Final Determinations – risk analysis for a notional company (24 January 2025), pages 21 and 33 (Annex 002).
[348] KPMG report, PR24 Final Determinations – risk analysis for a notional company (24 January 2025), (Annex 002).

	Worst case	Base case	Best case
Non-delivery PCDs	-0.83%	-0.25%	-0.04%
Time incentive PCDs	-0.22%	-0.08%	0.06%

(605) This clearly shows significant asymmetric risk. Ofwat has not accepted this position and in the FD does not address that the enhancement programme for AMP8 reflects a materially different level of complexity and risk to those previously delivered by the water sector.

5 Comparison with Ofgem approach to PCDs

(606) Ofgem's PCD framework was explicitly introduced with effect from April 2021, as part of the RIIO-2 price controls for electricity and gas transmission and gas distribution. Ofgem's approach was informed by experience and learning from RIIO-1.

(607) At a broad level, Ofwat's approach to PCDs at PR24 (and the terminology itself) has drawn heavily from the approach developed by Ofgem. In particular, Ofgem's broad approach involves: (i) specifying PCDs by reference to three main parameters: (1) the output expected to be delivered, (2) the delivery date of the output, and (3) the amount of totex linked to the output; and (ii) enabling funding to be returned to customers in the event that those outputs are not delivered, are partially delivered or are delivered late.

(608) However, Ofgem's approach recognises that, given the realities of project planning and delivery, the operation of a fair and effective PCD framework needs to go beyond mechanistic provisions to return funding to customers for under-delivery or delayed delivery.

(609) Ofgem's overall approach to PCDs at price control reviews distinguishes between mechanistic PCDs and evaluative PCDs. Ofgem explains these as follows:[349]

> "**Mechanistic PCDs** are set in cases where work is defined by volumes or numbers of units of deliverables, or activities that are typically repeatable and we can set allowances by reference to the unit costs. The output is typically defined by reference to a volume or number of units to be delivered. In such cases, the reporting requirements are relatively light and the adjustments to allowances for non-delivery of work is automatic or largely automatic.
>
> ***Evaluative PCDs** are set in cases where there is some flexibility in the output to be delivered, either in terms of the scope of works, costs, the specifications delivered, or the timing of delivery. The output is typically defined by reference to the specification of work to be delivered. For evaluative PCDs, there are more detailed reporting requirements on licensees, and our approach allows for a proportionate ex-post assessment of PCD delivery in accordance with the methodology specified in the licence and this Associated Document to determine whether an adjustment to allowances is necessary to protect consumers.*"

(610) In the event that PCD outputs are not fully delivered on time, the approach to evaluative PCDs involves Ofgem carrying out a regulatory assessment of what adjustments to totex allowances to make, if any, in the light of information about what was delivered, what expenditure was incurred and the reasons for under-delivery or late delivery. This

[349] Ofgem, Price Control Deliverable Reporting Requirements and Methodology Document Version 5 (20 August 2024), page 9 (See here).

assessment is done under the principles, rules and processes set out in Ofgem's PCD methodology and guidance document.[350]

(611) The more flexible approach for evaluative PCDs helps to mitigate some of the risk that regulated companies may otherwise face in delivering PCD outputs.

(612) As an example of a wider issue, Anglian highlights the arrangements in the scenario where the regulated company does not deliver the full anticipated PCD output because of developments (especially external developments) that mean that either: (a) it is not practical to deliver the planned PCD output; or (b) the delivery of the PCD output is no longer required or no longer cost beneficial (e.g. because of reductions to the expected benefits relative to costs).

(613) In this scenario, a regulated company, operating efficiently, may incur significant costs before it becomes established that it is impractical to deliver planned PCD outputs. Furthermore, in some cases, even where significant costs have been incurred in taking forward an investment project, it may be appropriate to cancel or postpone that project if there is a substantial reduction in the anticipated benefits that it is expected to achieve relative to costs.

(614) This is a scenario for which Ofgem's approach has been designed to provide flexibility, in recognition of the practical issues that can arise. In the case of evaluative PCDs, the adjustments to totex allowances for non-delivery or under-delivery are not mechanistic. If a PCD is not delivered, there is explicit provision for the energy network company to retain allowances for the efficient costs of any work reasonably carried out in the period before the cancellation, scaling down or deferral of delivery.

(615) In contrast, Ofwat's approach leaves regulated companies much more exposed financially to costs that are efficiently incurred before a project is cancelled or scaled back. In its PR24 final determinations Ofwat recognised that not delivering a PCD may be beneficial in some cases, and sought to respond to this issue. However, Ofwat's response to this issue is more limited. It allows for companies to retain a small part of the allowance (6%), to cover development costs, provided that the cost savings to customers from not delivering the PCD exceed a materiality threshold of 1% of relevant totex.[351] Any expenditure incurred beyond the 6% limit, or in cases where the customer savings cannot be shown to meet the 1% of totex threshold, would be borne by investors (subject to cost sharing).

(616) There are other aspects of Ofgem's approach to evaluative PCDs that provides greater flexibility, such as on potential delays to delivery and changes to the delivery solution.

(617) If used in a proportionate manner these types of arrangements could improve customer outcomes and promote innovation and efficiency. While this may involve an increased administrative burden in some targeted areas, reducing the overarching burden would be a beneficial trade off. We think the evaluative approach would be particularly beneficial to the PR24 scheme specific PCDs (e.g. Phosphorous Removal, Storm Overflows and Interconnectors).

[350] Ofgem, Price Control Deliverable Reporting Requirements and Methodology Document Version 5 (20 August 2024) (See here).
[351] Ofwat, PR24 final determinations: Expenditure allowances (February 2025), page 313 (See here).

(618) Further to the evaluative ex post assessment arrangements, Ofgem's approach also involves a targeted role for PCD reopener mechanisms which allow Ofgem to make ex ante adjustments to PCD outputs, delivery dates and associated funding in specific areas.[352]

6 Impact of the administrative / reporting obligations

(619) Anglian believes that the reporting and assurance arrangements in the FD (which have been retained from the DD) create significant new administrative burdens and additional costs for companies (and for Ofwat) not reflected in the FD.

(620) Companies must publish a delivery plan for their PCDs in April/May 2025, and must also commission an independently assured version of that plan by July 2025. Companies will also be required to submit 6-monthly progress reports, covering all of their PCDs, one in October/November and the other in April/May of each year. All PCDs require independent third-party assurance for these reports and the assurance reporting requirements are extensive.[353] Separately, each PCD may have its own bespoke reporting and more extensive assurance arrangement, due to project complexity and associated risks.

(621) In the FD Ofwat explains its reporting requirements are necessary to provide transparency and protect customer interests. However, the reporting and assurance requirements will entail significant administrative costs for companies which are not remunerated through companies' base cost allowances. Anglian forecasts spending at least £10m in AMP8 on complying with Ofwat's reporting and assurance requirements, of which £3m is for assurance alone.

(622) In addition, the requirement for ex ante consent for changes to PCDs is inefficient and inflexible and ill-suited for projects of this nature. Enhancement investments are, by their nature, volatile, as statutory requirements driving the projects change over time and more innovative, efficient solutions which drive the same (or better) outcomes are identified during the course of the AMP. Requiring companies to seek Ofwat consent ex ante for every change will significantly slow down delivery times.

(623) By way of example, even in the two months since the FD was issued, Anglian has already agreed with the EA changes to WINEP schemes which will ultimately need to be reflected in the PCDs.

(624) While Anglian recognises the importance of reporting and assurance, Anglian firmly believes that the objective of providing transparency and protecting customer interests can still be fully achieved with less burdensome requirements and a more proportionate, lighter touch approach to reporting and assurance requirements. The interests of customers would be better served by investing these allowances in tangible benefits to consumers rather than administrative matters.

(625) For example:

(i) **One annual report**: It is not clear what value is added by requiring companies to submit 6-monthly progress reports compared to annual reporting. These reports take up valuable time and resource, both for the companies and Ofwat, and reviewing companies' submissions across all PCDs every 6 months would be extensive and

[352] For example, the SF6 asset intervention Re-opener under the special licence conditions for National Grid Electricity Transmission (National Electricity Transmission Plc, Electricity Transmission Licence Special Conditions (1 October 2024), clause 3.27.7 (See here).

[353] For detail of the assurance reporting requirements see: Ofwat, PR24 final determinations: Expenditure allowances - Assurance requirements for delivery of enhancement schemes appendix (2024), page 18 (See here).

burdensome for Ofwat. Anglian suggests that Ofwat removes the requirement for the October/November report and instead requires companies to submit one report for annually.

(ii) **Lighter touch reporting**: In Ofgem's RIIO-3 methodology decision, Ofgem requires light-touch reporting from companies in relation to mechanistic PCDs. Anglian urges Ofwat to consider similar lighter-touch reporting arrangements for simpler high-volume lower-value PCD outputs such as metering. Even scheme specific PCDs should have the requirements streamlined and made as consistent as possible between PCDs. Granular reporting should only be required for companies or enhancement areas that are 'off-track'. Further details of Ofgem's approach are provided in Section 5.

7 Ofwat duties and request to the CMA

(626) Overall, while Anglian supports the concept of PCDs in principle, it is concerned that Ofwat has not achieved the correct balance between its statutory duties when designing the PCD mechanisms in the FD, as it does not adequately further its consumer and efficiency objectives, as well as secure the financeability for Anglian and other companies. As explained above, the overly prescriptive nature the PCDs, lack of flexibility and significant administrative burden introduce a real risk of inefficient delivery, exacerbating the overall risk levels in the FD, which have not been adequately mitigated. Ultimately, unnecessary restrictions in the PCDs curtail companies' ability to finance and deliver both the capital programmes and performance improvements they submitted in their plans.

(627) Anglian therefore requests that the CMA reduces the rigidity of the PCD framework by:

(i) removing annual time limits and time incentives for delivery across all PCDs;

(ii) removing unnecessarily prescriptive elements in certain PCDs, including (i) amending the mains renewal PCD so that it does not relate to conditions grade 4 and 5, but rather targets those mains at a higher risk of failing or higher incidence of bursts, and (ii) simplifying the smart meter PCD to refer to all meters installed rather than specifying the type of customer meter; and

(iii) introducing more proportionate reporting requirements and ex post assessment for certain PCDs such as the scheme specific ones, in line with Ofgem's approach, to allow for greater flexibility;

(628) Finally, Anglian requests that the CMA take into account the residual asymmetric risk that is not fully mitigated at source, when setting the cost of capital.

Chapter H.1
Investability and Financeability

(629) The FD fails the duty of all price controls to correctly balance risk and return. The failure stems from ignoring the economic reality facing Anglian and the sector. Despite recognising the pressing need for investment in PR24 and future price controls at least until 2050, Ofwat has not properly assessed how Anglian and other companies would be able to finance it. The consequence is an FD that is unable to attract the investment that everyone agrees is necessary.

(i) PR24 is a different, and riskier, investment proposition, as the sector switches to significant, long-term investment and RCV growth. Total expenditure in the sector will increase by 71% in real terms versus AMP7 and continue increasing for 25 years. Anglian's investors will not receive a dividend net of equity injections[354] for over 15 years on a notional basis and, even when they do, the projected dividends will be well below what is appropriate. In parallel, the global infrastructure investment gap means water companies are facing fierce competition to attract investment.

(ii) The sector's increased investment risk means investors are seeking commensurately higher returns. Thames Water's financial difficulties, the prospect of significant regulatory reform, and PR19 outcomes have all increased the sector's risk profile.[355] This is illustrated in the numbers: the sector on average has not earned its cost of capital due to the stretching targets set at PR19; returns have become more volatile; credit rating agencies have downgraded the sector; and the cost of company bond issuances has increased.[356] But the FD downplays this structural shift in risks and its implications for attracting new equity investment in particular.

(iii) The FD's investment risk is further exacerbated by a significant asymmetric downside skew in returns, which means that Anglian on a notional basis is unlikely to make the allowed return. The mitigations built into the FD do not suffice to address the level of risk that the notional company is expected to shoulder.

(630) The notional company under the FD is unlikely to be investable (i.e., able to attract required equity), and thus, financeable (i.e., able to raise debt at the required credit ratings). This is demonstrated by three points.

(631) First, the FD's cost of equity (5.10%, CPIH-real) is manifestly too low to attract equity investment:

(i) Debt-based analyses: the spread between the FD's cost of equity and cost of new debt is too low, and debt-based cross-checks indicate a strict minimum cost of equity of 6.14% to 6.20% (CPIH-real);

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354 Oxera define the implied net dividend yield as the difference between equity required and dividends payable. Where this figure is positive, a net dividend is payable, and investors are net cash flow positive. Where the implied net dividend yield is negative, additional new equity is required, and investors are net cash flow negative. Oxera, *Investability and Financeability in* PR24 (March 2025), page 1 (Annex 001).

355 KPMG, *PR24 Final Determinations – risk analysis for a notional* company (January 2025), pages 11-15 (Annex 002).

356 S&P Global Ratings, U.K. Water Regulatory Framework Support, Low Financial Flexibility in Coming Regulatory Period Drive Rating Actions (February 2025) (Annex 004a) [CONFIDENTIAL]; Moody's also downgraded its view on the stability and predictability of the regulatory framework in the UK water sector from Aa to A following Ofwat's DD as well as several companies in the sector following the FD publication. KPMG, *Estimating the Cost of Capital for PR24*, pages 7-8 (Annex 036). Both rating agencies have "downgraded" the way they view Ofwat as a regulator.; Institute for Energy Economics & Financial Analysis, Green bonds down the drain: What Thames Water's debt crisis could mean for UK sustainable finance (October 2024) (See here).

(ii) Public markets analyses: Market-to-Asset Ratio ("**MARs**") analysis indicates a cost of equity range of 6.13-7.34% (CPIH-real); Multi-Factor Models ("**MFMs**") also support a cost of equity consistent with the results of the MARs analysis;

(iii) Returns expected from other infrastructure investments: an assessment of comparable infrastructure fund discount rates indicates a cost of equity of between 7.12-7.24% (CPIH-real).

(632) Second, the FD also fails to provide Anglian with sufficient revenues on a notional basis to finance its activities:

(i) Anglian is not financeable even with Ofwat's equity injection assumptions, since it would fail to meet the updated S&P FFO/Net Debt ratio and Fitch cash PMICR ratios consistent with a BBB+ rating, and would be barely above Moody's AICR ratio for Baa1, the level assumed by Ofwat.

(ii) In any case, the FD financeability assessment depends on Ofwat's untenable assumption that Anglian would be able to raise £1.5 billion in new equity on a notional basis (in 2022/23 prices). Absent such equity, Anglian is clearly not financeable on a notional basis.

(iii) If the cost of equity were at least 6.25% (CPIH-real) and Anglian's RCV run-off rates were equivalent to PR19, Anglian would achieve the key financial ratios consistent with Ofwat's required Baa1/BBB+ credit rating, and the plan could be financed through retaining almost all dividends.

(633) Third, the significant downward skew and asymmetric risk in PR24 outcomes means that the notional company is unlikely to make the allowed return on an expected basis, let alone a return commensurate with the FD's risks. This corroborates that the notional company is neither financeable nor financially resilient.

(634) The FD's failings have particularly acute consequences for Anglian. The FD assumes the notional company will raise £1.5 billion of new equity during AMP8 (in 2022/23 prices).[357] Yet this is untenable without offering the requisite returns. This is not only Anglian's view. S&P have concluded that the "*amount of raised capital will fall short of Ofwat's assumptions*".[358]

(635) To remedy the FD and ensure the notional company's investability and financeability over AMP8 and beyond, the Redetermination should: (i) revise the WACC, RCV run-off rates and retail margin as set out in **Chapter H.2 (*WACC*)** so that it provides a sufficient return for an investor in the notional company, and confirm that the cost of equity is expected to increase over future AMPs to provide reasonable certainty to investors over the investment time horizon; and (ii) address or mitigate risks in the FD at source where reasonably practicable to do so (see **Chapters E.1-G.2**).

(636) This Chapter sets out (i) the economic factors facing the sector in AMP8 and beyond; (ii) the key questions that the CMA should be asking itself when considering Ofwat's / the CMA's duties; (iii) why the FD is unlikely to be investable and, therefore, financeable; (iv) the consequences for AMP8 and future AMPs; and (v) Anglian's view as to how the CMA should address these issues.

[357] The amount of the investment required for the broader industry is £12.6 billion in AMP8 alone. Ofwat, PR24 final determinations: Aligning risk and return (December 2024), pages 12 and 71 (See here).

[358] S&P Global Ratings, U.K. Water Regulatory Framework Support, Low Financial Flexibility in Coming Regulatory Period Drive Rating Actions (February 2025), page 1 (Annex 004a) [CONFIDENTIAL].

(637) This Chapter relies upon the Oxera Report *"Investability and Financeability in PR24"* (**Annex 001**), the Oxera Report *"PR24 Cross-Checks to CAPM Estimation"* (**Annex 003**), the KPMG Report *"Estimating the Cost of Capital for PR24"* (**Annex 036**), the KPMG Report *"PR24 Final Determinations – risk analysis for a notional company"* (**Annex 002**), and the analysis *Anglian Water - PR24 Risk and Financial Resilience* (**Annex 004**).[359]

8 The investability challenge at PR24

(638) The FD's failings stem from ignoring the key underlying economic drivers of risk and return underpinning the proposition facing investors at PR24.

8.1 The FD means Anglian has a radically different investment profile for AMP8 and the entire regulatory time horizon going forwards (2025-2050)

(639) The FD largely ignores the implications of the scale of the AMP8 investment programme for the returns on equity needed to attract new investment; and fails to consider those entirely for AMPs 9-12. It also ignores the macro-economic climate: equity investment is needed at a time when the need for infrastructure capital has increased globally.

8.1.1 Investors in the notional company will not receive net dividends commensurate with their investment over a 25-year time horizon

(640) Anglian and the sector face expanding enhancement expenditure for the entire investment time horizon for the water industry (10-20 years).[360] The FD entails an enhancement programme of c. £5 billion for Anglian and c. £44 billion for the sector (in 2022/23 prices). The overall totex expenditure for the industry (£104 billion) represents a 71% increase on AMP7. It is also only the start. The companies' LTDS plan for approximately £270 billion of enhancement investment between AMP8 and the end of AMP12. Anglian accounts for around 10% of that.[361] This all recognises that the sector (and Anglian specifically) has a pivotal role to play in supporting the Government's growth mission.[362]

(641) This is a radical departure from the sector's investment profile since privatisation. As set out in **Figure 46**, the sector's capital expenditure is an increasing multiple of that in the prior 25 years. Anglian's programme is particularly transformative: by the end of AMP12, it is expected to more than double its RCV in real terms.[363]

[359] Oxera, *Investability and Financeability in* PR24 (March 2025) (Annex 001); Oxera, *PR24 Cross-Checks to CAPM Estimation* (March 2025) (Annex 003); KPMG, *Estimating the Cost of Capital for PR24* (March 2025) (Annex 036); KPMG, *PR24 Final Determinations – risk analysis for a notional* company (January 2025) (Annex 002). KPMG assisted Anglian to prepare the analysis "*Anglian Water - PR24 Risk and Financial Resilience"* (March 2025) (Annex 004).

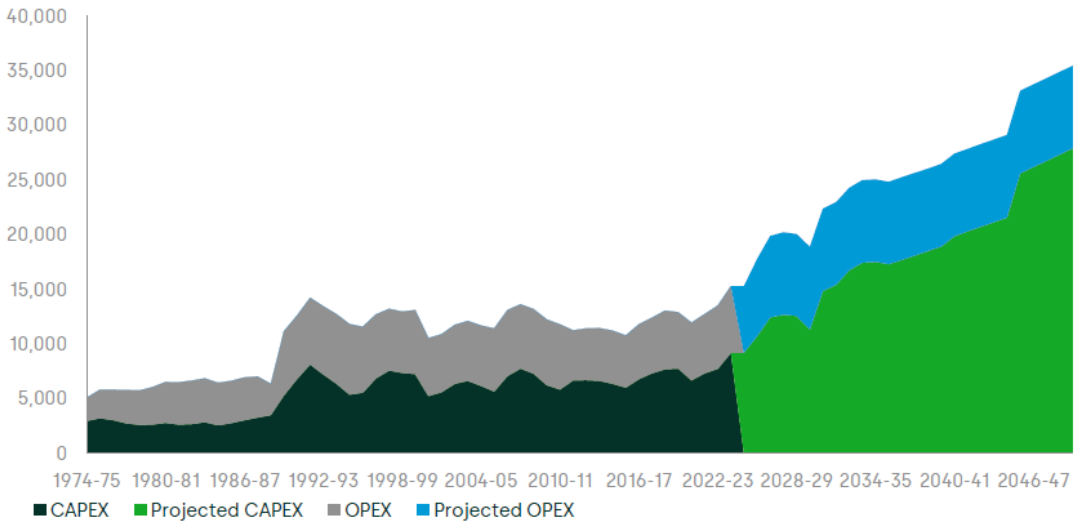
[360] Ofwat, PR24 final determinations: Expenditure allowances (February 2025), pages 5-6 (See here).

[361] Oxera, *Investability and Financeability in PR24*, page 4 (Annex 001).

[362] See for instance HM Treasury, Statement of Strategic Priorities to the National Wealth Fund (March 2025) (See here). This is also recognised in respect of the East of England: see Department for Environment, Food and Rural Affairs and the Environment Secretary (The Rt Hon Steve Reed OBE MP), Press release: water investment to unlock growth in East of England (13 March 2025) (See here).

[363] Oxera, *Investability and Financeability in PR24*, page 5 (Annex 001).

Figure 46: WaSC historical and projected spend (£m, real 2022-23 prices)

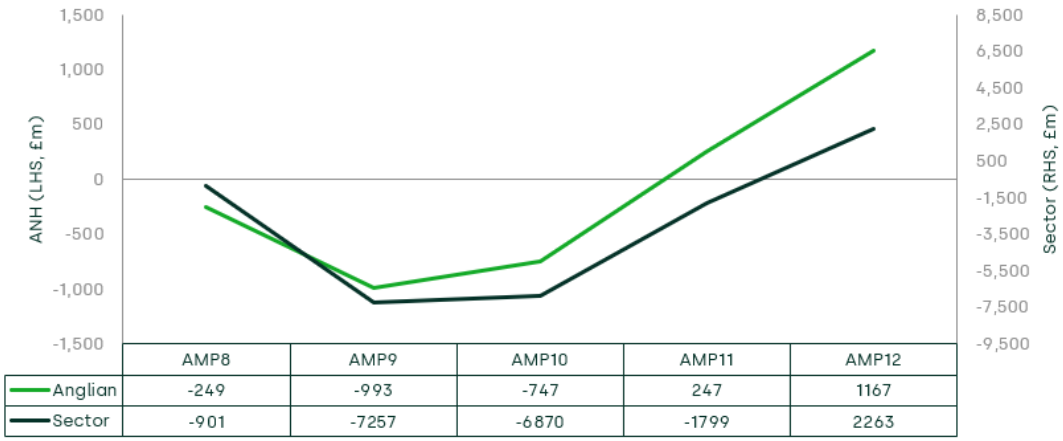


Source: Oxera, *Investability and Financeability in PR24*, p. 3[364]

(642) Anglian's capital needs over AMP8 and AMPs 9-12 fundamentally alter its investment proposition. As set out in **Figure 47** below, investors in the notional company must not only provide new equity and forgo any dividends in AMP8 but will need to do the same in AMP9 (i.e., for a decade). Anglian is expected to raise approximately a third of its opening regulated equity in new equity in AMP8 on a notional basis and its investors would not be net investment cash flow positive until after AMP10 (i.e., 15 years).[365] Even then, its investors would receive a dividend yield on notional regulated equity of below 2% p.a. in AMP11 and AMP12 (i.e., 25 years). Any de-gearing required to reduce the assumed notional gearing of 60% at AMP7 to the AMP8 assumption of 55% would reduce the net dividend yield further. These payback periods are incompatible with the time horizons of even the longest-term investors. This is in stark contrast with the FD's stipulation that the time horizon for investment in the sector is 10-20 years.[366]

[364] Note to chart: Expenditure forecast based on PR24 Final Determinations for AMP8 and LTDS forecast enhancement capex for the following periods. For AMP9 onwards maintenance capex is assumed equal to the RCV run-off rate. Opex forecast is based on the Price Control Financial Models up to 2030, and is then assumed to remain constant thereafter.
[365] Oxera, *Investability and Financeability in PR24*, page 8 (Annex 001).
[366] Ofwat, PR24 final determinations: Allowed return appendix (March 2025), page 34 (See here).

Figure 47: Cumulative net dividends, Anglian and sector (WaSCs only), no de-gearing (£m real, 2022-23 prices)



	AMP8	AMP9	AMP10	AMP11	AMP12
Anglian	-249	-993	-747	247	1167
Sector	-901	-7257	-6870	-1799	2263

Source: Oxera, *Investability and Financeability in PR24*, p. 9[367]

(643) The practical consequence is that Anglian is no longer an attractive investment proposition on a notional basis: investors are being asked to forgo realising a return on investment for a quarter of century with no clarity over when or if they will achieve appropriate returns. Ofwat is effectively assuming that investors in water companies should accept returns commensurate with low risk and predictable cash distributions to investors, for an investment which will not generate cash returns for a very long period of time. Moreover, Ofwat fails to engage with the issue, asserting that "*the levels of investment growth in 2025-30 and beyond provide significant opportunities for investors*".[368] Ofwat does not expand on what these opportunities are. The "opportunity" offered by the FD is investing substantial amounts of new equity at below the return that is available elsewhere, in a sector subject to significant downside risk.

8.1.2 The macro-economic climate is driving higher returns due to competition for infrastructure capital

(644) The macro-economic climate has shifted significantly and sharply towards higher returns. This is most obviously due to the significantly higher interest-rate environment versus the environment which has prevailed since 2008.[369] The other change driver is significantly increased demand for infrastructure capital due to a prevailing worldwide infrastructure investment gap, which is driving higher returns.[370] **Figure 48** below illustrates the supply-demand imbalance and hence the challenge to attracting investment.

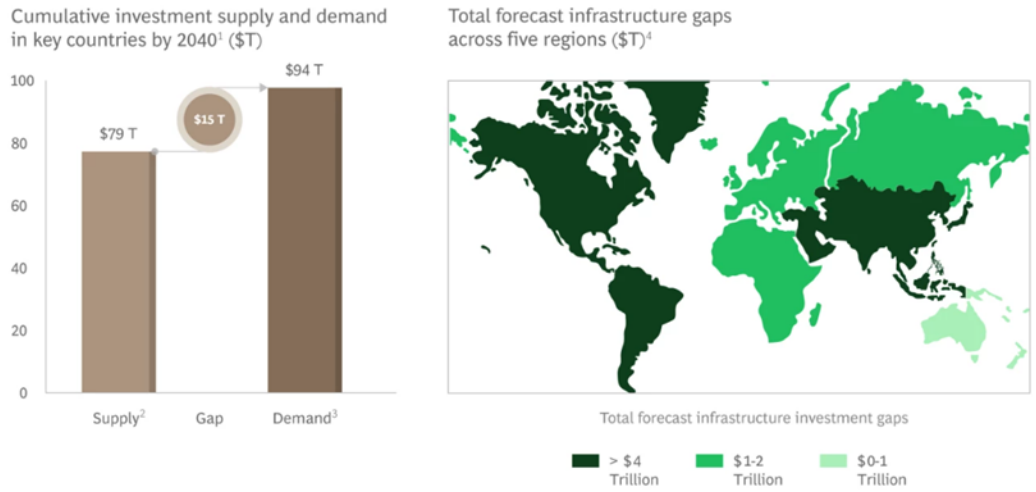
[367] Note to chart: Anglian shown on LHS axis. Sector refers to WaSCs only. We assume no de-gearing of the notional company in this scenario.

[368] Ofwat, PR24 final determinations, Aligning risk and return (December 2024), page 35 (See here).

[369] House of Commons Library, Interest rates and monetary policy (March 2025) (See here); Bank of England, Financial Stability in Focus: Interest rate risk in the economy and financial system (July 2023) (See here).

[370] BCG, Uplift in Demand, Shortfall in Supply: Can the UK Deliver on Its Infrastructure Investment Ambitions? (February 2025) (See here); European Investment Bank, Investment report 2024/25, Innovation integration and simplification in Europe (March 2025) (See here). The report notes the "*consensus on the need for a sharp increase in investment*" (p. 50) and flags a number of key areas of interest. The gaps identified amount to at least 3% of 2023 GDP, when taking GDP growth into account. BCG also suggests there is a $96 trillion required investment in infrastructure worldwide, with $15 trillion funding gap to meet infrastructure needs (See BCG, Public Sector: Infrastructure webpage (See here).

Figure 48: The cumulative gap between infrastructure supply and demand is expected to reach $15 trillion by 2040



Source: BCG[371]

(645) The lower attractiveness of the UK's water sector for private infrastructure investment is also impacting the availability of private investment capital, particularly given the existence of multiple alternative options for the deployment of their capital.[372] Ofwat itself recognises that "*investor sentiment towards the water sector is currently low*".[373] Water companies are, thus, having to fiercely compete for infrastructure capital with their peers in other sectors, such as energy, both in the UK and globally.[374]

8.2 The risk profile of the water sector has increased significantly since PR19 and is driving higher expected returns

(646) As S&P recently highlighted, the water sector is "*riskier than electricity transmission networks*".[375] Sir Jon Cunliffe also recently remarked: "*it would be very difficult to say now that we have [...] a sector in which the investors, who need to finance the huge investment we need going see [sic] as a stable and predictable long term investment*".[376]

(647) There are a number of reasons for the increased risk in the sector:

8.2.1 The price control process has exposed water companies and their investors to significant and increasing downside performance and volatility

(648) The increased risk to investors can be seen over both the long term (since privatisation) and short term (AMP7). This has shifted investors' risk perception of the sector. The long-term risk is set out in **Figure 49** below, which shows that sector returns on regulatory equity (RoRE) have consistently decreased since privatisation whilst their volatility has increased.

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371 BCG, Bridging the Gap: Leveraging the Transformative Power of Private Sector Partnerships to Build the Infrastructure of Tomorrow (November 2024) (See here).

372 Global Infrastructure Investor Association, Response to Ofwat's PR24 Draft Determinations (See here), referring to an "*unattractive investment proposition*"; BCG, Reshaping British Infrastructure: Global Lessons to Improve Project Delivery (February 2024) (See here) shows that, on unit costs, the UK spends more than Germany, France and Spain, as well as a wider grouping of countries across the EU.

373 Ofwat, PR24 final determinations: Aligning risk and return, Allowed return appendix (March 2025), page 84 (See here).

374 This is recognised by Ofwat itself in the FD, which cites "*for instance an April 2024 Barclays investor survey that rated UK water as the riskiest utility sector and the UK as the riskiest European country*". Ofwat, PR24 Aligning risk and return, Allowed Return Appendix, page 62 (See here). See also KPMG, *Estimating the Cost of Capital for PR24*, page 22 (Annex 036).

375 S&P Global Ratings, U.K. Water Regulatory Framework Support, Low Financial Flexibility in Coming Regulatory Period Drive Rating Actions (February 2025), page 4 (Annex 004a) [CONFIDENTIAL].

376 Sir Jon Cunliffe's address on the Water Commission's Future Plans (27 February 2025) (See here).

The picture for investors is thus very different to the returns typically associated with utility infrastructure assets.

Figure 49: Trends in the return on regulatory equity over time

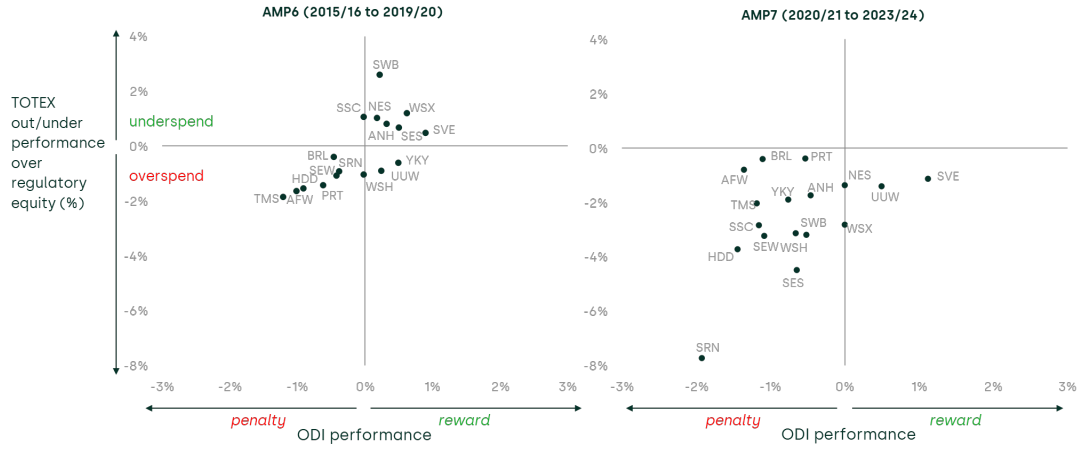
Source: Oxera, *Investability at PR24, Final Report for Water UK* (August 2024), p. 26[377]

(649) The reduction in returns and increase in volatility has, moreover, become particularly pronounced at AMP7, driven by the mis-calibration of the incentives regime and overall FD package. The sector as a whole has been affected by significant RoRE underperformance on totex (190bps) and ODIs (69 bps), with both metrics of underperformance reaching their peak in FY23 and FY24 (a risk which Anglian identified in its PR19 submissions).[378] Penalties from failing to meet Ofwat's ODI regime are also not attributable to a lack of investment by the median company. As **Figure 50** illustrates, the sector has both overspent and received significant penalties in AMP7. The issue is, thus, traced back to the regulatory settlement in PR19, which failed to strike a fair balance of incentives.

[377] Notes to chart: we show the 'return on capital employed' value reported in Ofwat's financial performance and expenditure reports up to AMP6. From AMP6 onwards we use the Return on Regulatory Equity as reported in Ofwat's Monitoring Financial Resilience reports. AMP6 based on the data underpinning Ofwat (2020), 'Monitoring financial resilience report', December, p. 12. AMP7 based on the average Return on Regulatory Equity reported across the three AMP7 Monitoring financial resilience reports to date and the values reported in companies' 2023/24 APR within table 1F.17 (RoRE). Allowed return on equity deflated in RPI-real basis for consistency across regulatory periods. The regulatory allowance shown in each AMP represents the Ofwat's CoE allowances. For AMP7, we show the PR19 Final Determination allowance, although we note that several companies received a CoE allowances in excess of this through a Small Company Premium (PRT and SSC), and the four companies that appealed the PR19 Final Determination also received a higher CoE allowance.

[378] KPMG, *PR24 Final Determinations – risk analysis for a notional company*, pages 11-12 (Annex 002).

Figure 50: AMP7 sector average operational performance



Source: *Oxera analysis*

8.2.2 The regulatory framework has weakened the protection of investors

(650) The risks for the sector have been exacerbated by regulatory changes beyond the price control process which have introduced greater risk for equity holders. The changes by the Water (Special Measures) Act 2025 and recent modifications to the ring-fence conditions of companies' licences have, for example, increased uncertainty for investors. Moody's specifically highlighted the May 2023 licence modifications, which enable intervention *"where companies do not link their dividend payments to operational performance*", as a factor enhancing the challenges facing the sector.[379]

(651) The regulatory regime and the uncertainty over its future are further harming investor ability to assess risk and have a direct impact on its cost of capital. S&P identified the "abrupt" shift in capital investment requirements between price control periods as undermining regulatory stability.[380] It downgraded its view of the regulatory framework due to a weakening in regulatory and financial stability as well as regulatory independence and insulation.[381] Moody's have done likewise. Such concerns are exacerbated by the Cunliffe review, which may of course recommend far-reaching reform with an uncertain impact for investors.

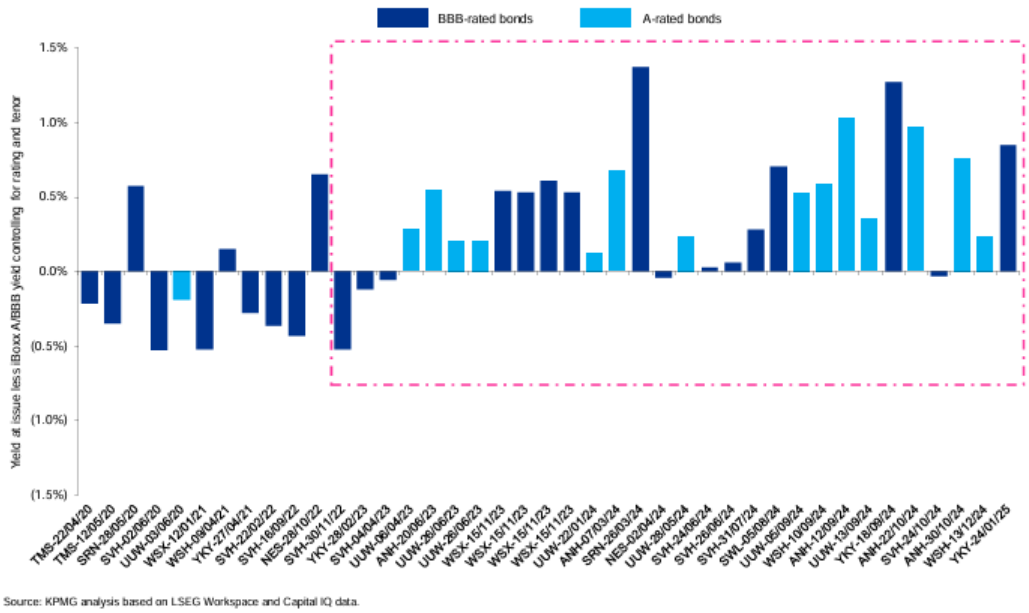
8.2.3 Thames Water's restructuring has increased the perceived riskiness of the water sector

(652) Thames Water's well-publicised challenges have also affected investor perceptions of the sector. The "Thames Premium" is well illustrated by the contagion sparked in debt pricing for the sector once Thames Water's financial difficulties became clear.[382] Bonds issued after November 2022 consistently underperform, with almost all new bonds issued at a cost above the iBoxx benchmark: suggesting that the benchmark will become increasingly unachievable

[379] Moody's, Anglian Water Services Ltd., Update following downgrade to Baa1 negative, page 4 (Annex 037) [CONFIDENTIAL].
[380] S&P Global Ratings, U.K. Water Regulatory Framework Support, Low Financial Flexibility in Coming Regulatory Period Drive Rating Actions (February 2025), page 3 (Annex 004a) [CONFIDENTIAL].
[381] S&P Global Ratings, U.K. Water Regulatory Framework Support, Low Financial Flexibility in Coming Regulatory Period Drive Rating Actions (February 2025), page 4 (Annex 004a) [CONFIDENTIAL].
[382] Institute for Energy Economics & Financial Analysis, Green bonds down the drain: What Thames Water's debt crisis could mean for UK sustainable finance (October 2024) (See here), discussing how Thames Water's rating downgrade has "dragged down the creditworthiness of the wider UK corporate green bond market"; Anthropocene Fixed Income Institute, Rebuilding confidence in the UK water sector (February 2025) (See here).

for water companies.[383] The FD recognises this by introducing an uplift on iBoxx on the cost of new debt but fails to draw the wider conclusion for the sector's overall risk profile.[384]

Figure 51: Trend of yield at issue spreads to rating- and tenor-matched iBoxx for AMP7 issuances (tenor 10+ years)



Source: KPMG analysis based on LSEG Workspace and Capital IQ data.

Source: KPMG, *Estimating the Cost of Capital for PR24*, p. 124

8.3 The FD contains significant additional asymmetric risk in both the incentives regime and the base cost allowances

(653) The FD is also wrong that it provides a "fair bet" for investors. This misrepresents the level and negative skew of risk exposure. Both the FD's performance and incentives regime and its approach to base costs mean there is a greater risk of underperformance and hence lower outturn returns. As set out in **Chapters E.1 and E.2 (*Base Costs and Asset Health*)**, the FD's approach to base costs and asset health means it is underfunded. PCDs are not only inherently asymmetric but also poorly calibrated and, by unnecessarily restricting companies' ability to manage their base and enhancement programmes, expose companies to a real risk of penalties and overspend rather than constituting base line performance standards (see **Chapter G.2 (*PCDs*)**). The same holds true for ODIs as set out in **Chapter G.1 (*ODIs*)**.

(654) The compounding and interdependency of Totex underfunding, restrictive PCDs and challenging ODIs have the cumulative effect of exposing the notional company to significantly greater and asymmetric risk than set out in the FD, especially considering the sector's performance in FY21-FY24.[385] **Table 15** illustrates the overall spread of risk in terms of the RoRE.

[383] KPMG, *Estimating the cost of capital for PR24*, page 123 (Annex 036).
[384] Ofwat, PR24 final determinations: Aligning risk and return, Allowed return appendix (March 2025), pages 95-98 (See here). Ofwat merely applies a benchmark adjustment of 30bps.
[385] KPMG, *PR24 Final Determinations – risk analysis for a notional company*, pages 15-18 (Annex 002).

Table 15: Notional WaSC RoRE risk ranges: Ofwat FD compared to the KPMG report

Notional WaSC[51]	Ofwat FD risk ranges			KPMG risk ranges		
	Worst-case	Base-case	Best-case	Worst-case	Base-case	Best-case
Totex	-2.83%	0.00%	2.83%	-2.79%	-1.48%	0.07%
Retail	-0.30%	0.00%	0.30%	-1.21%	-0.20%	0.78%
ODIs + MeXes	-1.91%	-0.22%	1.48%	-1.55%	-0.49%	0.51%
Financing	-0.70%	0.30%	1.30%	-1.92%	-0.08%	1.66%
Revenue & Other	-0.05%	-0.03%	0.00%	-0.08%	-0.03%	0.00%
RoRE (additive)	**-5.79%**	**0.06%**	**5.90%**	**-7.56%**	**-2.27%**	**3.03%**

Source: FD: PR24 final determinations: RR04-PR24-RoRE, KPMG risk analysis.

Source: KPMG, *PR24 Final Determinations – risk analysis for a notional company*, p. 29

(655) This is a particularly acute risk for Anglian in relation to ODIs. **Table 16** presents the downside risk exposure for the notional company operating in the Anglian region. As set out in **Chapter G.1 *(ODIs)***, the calibration of the ODI package, combined with the characteristics of Anglian's region, mean that the notional company suffers a significant downside skew in relation to its FD ODI targets.

Table 16: RoRE Risk exposure of a notional company operating in the Anglian Water region

	Notional company operating in Anglian region			Decomposed P50 totex risk	
	P10	P50	P90	Design	Calibration
Totex	-2.44%	-1.24%	0.02%	-0.28%	-1.04%
Retail	-1.21%	-0.20%	0.78%	0.00%	-0.20%
ODIs & MeXes	-1.89%	-0.89%	0.08%		
Financing	-1.90%	-0.09%	1.70%		
Revenue	-0.05%	-0.03%	0.00%		
RoRE (simulated)	**-4.96%**	**-2.45%**	**0.07%**	**-1.34%**	**-1.11%**

Source: *Anglian Water - PR24 Risk and Financial Resilience*[386]

(656) The FD ignores these issues. Ofwat's risk analysis simply derives the base-case risk by reference to the mid-point between worst-case and best-case to support its assertion that risk implied by the FD is broadly balanced. Ofwat also downplays the downside risk exposure arising from totex, ODIs and PCDs and does not reflect the most recent information on sector performance.[387]

(657) The FD also wrongly dismisses the risk which accompanies the uplift in capital expenditure. As S&P have already concluded, there are "*significant execution risks associated with the massive capital investment increase*".[388] Ofwat claims that its FD contains a range of "*targeted amendments*" that "*aim to support companies to deliver the step increase to the*

386 KPMG assisted Anglian to prepare this analysis.
387 KPMG, *PR24 Final Determinations – risk analysis for a notional company,* pages 21-22 (Annex 002).
388 S&P Global Ratings, U.K. Water Regulatory Framework Support, Low Financial Flexibility in Coming Regulatory Period Drive Rating Actions (February 2025), page 1 (Annex 004a) [CONFIDENTIAL]

financing and investment requirement" in AMP8.[389] There is, however, no analysis of the sufficiency of such measures. It is instead simply a list of measures that Ofwat claims will mitigate the sector's risk exposure. The proposed protections in the FD do not, nor could they be expected to, control for all of the associated risk (and reward).[390]

9 Framework for investability and financeability

(658) Ofwat fails to properly discharge its duties by ignoring the long-term consequences of the FD and the wider economic environment facing the sector. Protecting the interests of future customers, the sector's financeability, resilient infrastructure, and growth for the sector requires the price control to attract sufficient investment on a notional basis to finance companies' plans in light of the risk associated with the FD (i.e., the price control must be "investable" and hence financeable in both the short and long term).[391] An FD which delivers insufficient investment harms future consumers, undermines the development of resilient infrastructure and undermines economic growth.

(659) Assessing whether the price control is investable and financeable means testing whether companies will be able to attract and retain the equity capital that is needed to deliver the desired investment.[392] This requires that investors, current and future, have a reasonable prospect of recovering their capital, plus a competitive return, paid out in an acceptable profile over time.[393] It also requires that the FD provides the notional company with sufficient revenues to maintain an investment grade credit rating in light of the overall regulatory settlement.

(660) To meet these criteria, any assessment needs to test whether:

(i) the FD assumptions underpinning the necessary equity investment and sufficiency of distributions to investors are robust, not only for AMP8 but also the long term, and the allowed return is supported by a correctly calibrated CAPM and comprehensive additional cross-checks;

(ii) the FD allows Anglian on a notional basis to achieve a rating comfortably above the BBB/Baa2 cash lock-up threshold. Specifically, this means verifying whether companies can maintain a solid investment grade rating (Baa1/BBB+ as issued by the major credit rating agencies Fitch, Moody's, and S&P));[394] and

(iii) the FD is a "fair bet" based on an unembellished view of the overall balance of risk and return for investors.

(661) The intensity of the assessment should also be proportionate to the investment needs and broader risks affecting the sector: the greater the consequences of low investment, the more

[389] Ofwat, PR24 final determinations, Aligning risk and return, (December 2024), page 15 (See here).
[390] CMA, PR19 Final Report (March 2021), para. 9.1274 (See here): "*The nature of water infrastructure means that there are additional challenges in measuring water asset health effectively. We therefore do not agree that long term planning mechanisms address these risks entirely*".
[391] *Cf.* CMA, PR19 Final Report (March 2021), paras. 9.1236 and 9.1240 (See here).
[392] *Cf.* Ofgem, RIIO-3 Sector Specific Methodology Decision – Finance Annex (July 2024), para. 3.230 (See here). See also Sir Jon Cunliffe's address on the Water Commission's Future Plans (27 February 2025), Sir Jon Cunliffe's address on the Water Commission's Future Plans: "*Water company owners […] need to be rewarded, fairly, for bearing those risks. And while there can never be absolute certainty and standards and society's expectations will change, investors, in water company equity and debt, need to be able to trust that the regulatory system through time will be generally stable and predictable*".
[393] Oxera, *Investability at PR24, Final Report for Water UK* (August 2024) (See here).
[394] Ofwat, Creating tomorrow, together: Our final methodology for PR24 (December 2022), page 119 (See here). *Cf*. Ofgem, RIIO-3 Sector Specific Methodology Decision – Finance Annex, para. 3.228 onwards (See here).

careful the FD should be to protect against it.[395] Ofgem has, for example, proposed to conduct a specific assessment of equity investability in RIIO-3 to "*signal and ensure*" that it recognises the "*challenges that the sector could face in this and future price controls*" in light of the expanding investment needs of the energy sector.[396] These are factors which apply to PR24.

10 The FD is unlikely to be investable and is not financeable

(662) The FD is unlikely to be investable and is not financeable, as: (i) it rests on a series of untested and flawed assumptions which market evidence demonstrates is insufficient; (ii) its financeability assessment is incorrect under updated guidance from rating agencies and rests on a flawed assumption of equity injections; and (iii) it is not a "fair bet": investors in the notional company cannot even expect to make the allowed return.

10.1 The FD does not provide a cost of equity which is capable of attracting the investment needed for the notional Anglian to finance its business

(663) The FD's cost of equity is contradicted by the balance of evidence. The FD relies on its CAPM cross-checked against its MARs analysis. It does not place weight on other cross-checks. Ofwat also contends that the sector is attractive since, in particular, the FD sets the return on equity point estimate "*towards the top of [Ofwat's] range*" and maintains a dividend yield of 4% "*irrespective of the level of RCV growth*" (increasing the dividend yield from 2% in the DD).[397]

(664) Ofwat's amendment to the dividend yield does not by itself make the FD financeable. Ofwat has simply increased the equity injections to achieve it: increasing the hypothetical dividend yield does not improve investability when investors pay for it themselves. Furthermore, as set out in **Chapter H.2 (*WACC*)**, Ofwat's unquestioning reliance on its CAPM ignores the significant risk that it underestimates the cost of equity in these circumstances where there is significant change.

(665) Most tellingly though, the insufficiency of the FD's cost of equity is evident when the FD is cross-checked against a range of market evidence, which supports a cost of equity of at least 6.25% (CPIH-real), with some evidence for a cost of equity beyond 7%.[398]

(i) Section 3.1.1 sets out that the equity and debt spread based on current market data for water company bonds supports a minimum cost of equity of 6.20% (CPIH-real);

(ii) Section 3.1.2 sets out that a correctly calibrated MARs analysis supports a cost of equity of 6.13–7.34% (CPIH-real), which is corroborated by MFM analysis;

(iii) Section 3.1.3 sets out that infrastructure fund comparisons support a cost of equity of 7.12-7.24% (CPIH-real); and

(iv) Section 3.1.4 sets out why Ofwat's analysis of investor statements is partial and fails to contextualise the statements cited.

[395] In *Phoenix Natural Gas Ltd price determination* (See here), the CC undertook a detailed assessment of the various risks affecting the company (FD-related and broader regulatory and financial uncertainties), as well as their impact on the rate of return. See Chapters 7 and 8,

[396] Ofgem, RIIO-3 Sector Specific Methodology Decision – Finance Annex (July 2024), para. 3.242 (See here).

[397] Ofwat, PR24 final determinations: Aligning risk and return, Allowed return appendix (March 2025), page 76 (See here).

[398] The FD also makes a number of errors in its assessment of its cross checks as set out in Oxera's Report, *PR24 Cross-Checks to CAPM estimation* (Annex 003).

(666) This section 3.1 is supplemented by Oxera's Report, *PR24 Cross-checks to CAPM Estimation*.

10.1.1 Market yields on water company debt imply a cost of equity of at least 6.20%

(667) It is axiomatic that the cost of equity must be higher than the cost of debt. However, the FD gives no weight to the narrowness of the spread between the cost of equity and cost of new debt nor to evidence from debt-based cross-checks which demonstrate the lack of spread (isolated from the effects of gearing and inflation).[399] While recognising that the equity-debt premium has narrowed, Ofwat claims this is because of its "'fixed-TMR' approach" and that there was no evidence to suggest the spread was too low. Ofwat's conclusion is erroneous, as shown by debt-based cross-checks addressed in the Oxera Report, *PR24 Cross-checks to CAPM estimation*.[400] Ofwat fails to recognise that, whatever way the equity-debt premium is expressed, it is too low to attract equity.

(i) The spread between debt and equity is manifestly too low

(668) The FD conclusions suffer from a number of errors, set out in more detail in Oxera's Report, *PR24 Cross-checks to CAPM estimation*. But most importantly they ignore market reality. As illustrated in **Figure 52**, there is no material spread between the cost of equity and the market cost of debt. Contrary to Ofwat's assertions, the cause is irrelevant. The salient question is whether the cost of equity is sufficient to attract the necessary investment. The data illustrates that much higher spreads have been necessary in the past. Yet Ofwat offers no explanation for why equity investors would tolerate a negligible premium for holding equity over debt, with the potential for an even more negative picture in the future.

Figure 52: Spreads of cost of equity determinations relative to selected cost of debt benchmarks (CPIH-real)

Source: Oxera, *PR24 Cross-checks to CAPM estimation*, p. 10[401]

(669) The picture is even starker through a simple comparison of the unlevered cost of equity and cost of new debt (using only the parameters of the FD). The unlevered cost of equity, i.e.

[399] Ofwat, PR24 final determinations: Aligning risk and return, Allowed return appendix (December 2024), page 65 (See here).

[400] Oxera, *PR24 Cross-Checks to CAPM estimation*, pages 7 onwards (Annex 003).

[401] Note to chart: iBoxx yields deflated to CPIH-real terms assuming 2% long-run inflation. Historical RPI-real determinations have been converted to CPIH-real using the long–term wedge as stated by the Office for Budget Responsibility (OBR). We have reflected the changes in the long-term wedges over time. The respective wedges used for PR04, PR09 and PR14 are 0.49%, 0.49%, and 0.69% respectively. For the years before the Bank of England started targeting CPI, we use the 2.5% RPI target.

equity return assuming no gearing, and based on solely FD parameters, shows a negative result over the cost of new debt of -0.32%, i.e., the cost of equity is lower than the cost of new debt.[402] The FD is, in short, asking investors to receive a lower return for holding greater risk: offending the basic principle of finance that the cost of equity is higher than the cost of debt.

(ii) Analysis of debt risk premia suggests a minimum cost of equity of 6.20% (CPIH-real)

(670) Building on the unlevered cost of equity analysis to consider debt risk premia demonstrates that the minimum cost of equity should be at least 6.14-6.20% (CPIH-real). This assessment constitutes an important cross-check for the cost of equity to avoid under-investment from cycle to cycle. It uses the principle that the cost of equity must exceed the cost of debt but controls for inflation and gearing.[403] To provide a robust assessment, Oxera have excluded outlier performers (Thames Water and Southern Water as the riskiest, and Severn Trent and United Utilities as top performers). Otherwise, as illustrated below, the analysis is skewed by their relative performance vis-à-vis the median company.

Table 17: Implied cost of equity based on one-month average debt risk premium (CPIH-real)

	Ofwat FD with market update[1]	Oxera estimates
Sector average (excl. TMS and SRN)	5.68%	5.87–5.93%
UU and SVT	4.85%	5.03–5.09%
Sector average (excl. TMS, SRN, UU and SVT)	5.96%	**6.14–6.20%**

Source: Oxera, *PR24 Cross-checks to CAPM estimation*, p. 17[404]

(671) This extension to debt-based cross-checks also exposes an inherent weakness in Ofwat's CAPM analysis, namely that reliance on Severn Trent and United Utilities, excluding Pennon information, as well as the betas of other water companies (as they are not listed), for estimating the sector beta is likely to significantly underestimate the sector's cost of equity. Oxera's analysis is further corroborated by KPMG's inference analysis of water bonds in its report, *Estimating the Cost of Capital for PR24*. KPMG's inferred cost of equity range is 6.50% to 6.73%.[405]

10.1.2 MARs analysis support a cost of equity range of 6.13-7.34% (CPIH-real), with a reasonable estimate at the upper end of the range

(672) A robust MARs analysis also supports a significantly higher cost of equity of 6.13 -7.34%. MARs analyses the ratio of the market value of companies to their RCV (i.e., whether their value is at a premium or discount to RCV). It relies on public trading data and is thus based on the market value of the three listed water companies: Pennon, Severn Trent, and United Utilities. **Table 18** below sets out an updated version of the MAR analysis for each of the companies.

[402] Oxera, *PR24 Cross-checks to CAPM estimation*, page 12 (Annex 003).
[403] The test has been recognised by the CMA as "conceptually sensible" in CMA, PR19 Final Report (March 2021), para. 9.1389 (See here).
[404] Note to chart: Implied cost of equity range for Ofwat's FD parameters are calculated based on one-month average DRPs and RfR up to 31 January 2025. Oxera estimates are based on the Oxera CAPM range assuming a RFR of 2.31% (CPIH-real) and TMR range of 7.0–7.5% (CPIH-real).
[405] KPMG, *Estimating the Cost of Capital for PR24*, page 97 (Annex 036).

Table 18: Adjusted MARs-inferred cost of equity results

	Low	High
Indicative CoE		
United Utilities	4.97%	6.30%
Severn Trent	3.75%	5.52%
Pennon	6.13%	7.34%
Average	**4.95%**	**6.38%**

Source: Oxera, *PR24 Cross-checks to CAPM estimation*, p. 23[406]

(673) Oxera's Report, *PR24 Cross-checks to CAPM estimation*, provides a detailed critique of Ofwat's MARs analysis, showing how it also underestimates the cost of equity by relying on a limited sample set of upper quartile companies and being susceptible to investor expectations about outperformance of these specific companies.

(674) Updated to January 2025, the MARs range for the cost of equity is 4.95-6.38% (CPIH-real), averaged across the three WaSCs. The FD's point estimate of 5.10% is, thus, at the bottom of the MARs range. However, the analysis, more critically, ignores the obvious divergence in the MARs analysis between the companies: Severn Trent and United Utilities have material premia over RCV, whereas Pennon does not. While all three are top performers in the sector (all three have recorded historical returns outperformance, indicating that the average is inherently skewed), Pennon would be more reflective of the sector median, rather than Severn Trent or United Utilities. As such, the MAR analysis should use Pennon as the cross-check (or at least give it significantly greater weight): supporting a cost of equity of between 6.13-7.34% (CPIH-real).

(675) Ofwat's suggestion that its MARs analysis could overstate the cost of equity, since share prices "*will likely not have absorbed further targeted amendments to the PR24 risk and return package*", has also proven incorrect.[407] The MARs analysis, updated until the end of January, demonstrates the estimated range for the cost of equity has not decreased. Conversely, Oxera's MARs analysis is also supported by KPMG's MFM, which also uses data from publicly traded companies to estimate the cost of equity. The analysis estimates, in particular, that Pennon's cost of equity is approximately 7.69% (see KPMG's report, *Estimating the Cost of Capital for PR24*).[408]

10.1.3 Expected returns for listed infrastructure funds indicate a cost of equity significantly in excess of 7% for the notional company

(676) Oxera's analysis of discount rates for infrastructure funds with significant investments in regulated industries, suggest an implied cost of equity range of 7.12-7.24% (CPIH-real) at 55% gearing. The analysis is particularly salient at PR24, since the investment needs of water companies coupled with the global infrastructure gap means that water companies are competing for capital with a range of infrastructure investments in other regulated industries.

[406] Note to chart: Cut-off date of 31 January 2025.
[407] Ofwat, PR24 final determinations: Aligning risk and return, Allowed return appendix (March 2025), page 69 (See here).
[408] See KPMG, *Estimating the Cost of Capital for PR24*, pages 93-95 and Appendix 4 (Annex 036) for a detailed rebuttal of Ofwat's and Professors Mason, Robertson and Wright's findings.

Table 19: Cost of equity implied by infrastructure funds cross-check (CPIH real)

	Discount rate (nominal)	NAV adjusted discount rate (nominal)[1]	Fund inflation assumption	Implied fund CoE	Fund gearing	Implied re-levered CoE
HICL LN Equity	8.10%	11.28%	2.40%	8.67%	66%	7.24%
INPP LN Equity	8.70%	11.51%	2.25%	9.06%	69%[2]	7.12%

Source: Oxera, *Investability and Financeability in PR24*, p. 30[409]

(677) The analysis of HICL and INPP provides a market-based estimate of the likely range of the cost of equity. 64% of HICL's portfolio is held in the UK and includes Affinity Water, HS1 and Southmead hospital. 72% of INPP's assets are in the UK with the two largest investments being Cadent (which owns four of the UK's eight gas distribution networks) and Thames Tideway.

10.1.4 The FD's assessment of investor sentiment is partial and fails to contextualise the statements on which it relies

(678) The FD contends that equity analyst expectations support a range for the cost of equity between 5-5.6% and relies on the fact that 28% of respondents in the Barclays investor survey consider Ofwat's cost of equity allowance appropriate.[410] The FD's analysis takes the analyst expectations out of context and is highly selective.[411] This is in keeping with observations in the cross-check analyses, which illustrate that Severn Trent and United Utilities in particular are outliers which skew the assessment of the cost of equity.

(679) The FD's reliance on a statement in a report by Morgan Stanley that the declining spread between regulated returns and bond yields may be offset by the change in CAPEX growth is also misplaced. The report caveats the statement by stating that there is a *"strong onus on the regulator to present a regulatory framework going forward that continues to support value-accretive growth"*.[412] But the FD omits to mention this.

(680) The investor reports do not, in short, provide the support for Ofwat's approach to the cost of equity, let alone its proposed cost of equity of 5.10%.

10.2 Anglian is not financeable on a notional basis under the FD nor is it financially resilient for future AMPs

(681) The FD also wrongly concludes that Anglian will be financeable on a notional basis. Ofwat's impractical assumption is that investors would make a sizeable equity injection into Anglian on a notional basis whilst receiving negative net dividends over AMP8 (and AMP9 as well, as set out above). This Section is supplemented by Oxera's Report, *Investability and Financeability in PR24*.

[409] Note to chart: 1. The share price of HICL and INPP of 31 January 2025 were £112.4 and £113.0, respectively. 2. INPP gearing was reported as c. 68% excluding senior and mezzanine debt. Adjusting for senior debt of 1%, this implies a gearing of 69%. See INPP (2024), H1 2024 results presentation, September, pp.28–32, accessed: https://www.internationalpublicpartnerships.com/media/zizlu22p/inpp-hy-resultspresentation-2024-vf.pdf. Conducting the analysis based on the Ofwat FDs parameter estimates of RfR of 1.52% (CPIH-real) and TMR of 6.83% (CPIH-real) implies a re-levered cost of equity range of 6.88–7.05% (CPIH-real).

[410] Ofwat, PR24 final determinations: Allowed return appendix (March 2025), page 79 (See here).

[411] See for more detail Oxera, *PR24 Cross-checks to CAPM estimation*, pages 31-32 (Annex 003).

[412] Morgan Stanley, Final Determination Presents Opportunity for Sustained Re-Rating (November 2024) (Annex 038) [CONFIDENTIAL].

(682) The financeability assessment in the FD is flawed for the following reasons:

(i) Anglian is not financeable on a notional basis and lacks financial resilience to plausible downside scenarios;

(ii) Ofwat's financeability assessment relies, in any case, on an assumption of significant new equity investment which is untenable for the reasons set out in Section 3.1; and

(iii) The final section sets out that a cost of equity of 6.25% and increasing the RCV run-off rate will enable the financeability of Anglian on a notional basis in AMP8.

10.2.1 The FD is not financeable irrespective of whether Anglian can attract new equity

(683) The FD is premised on the notional company targeting a credit rating of BBB+/Baa1 on the basis that this "*provides a reasonable level of headroom within the investment grade category*".[413] However, the outcome of the FD leads to the opposite scenario. The design of the FD results in a negative RoRE risk exposure in the base-case scenario, considering: (i) the underfunding for the industry; (ii) the high downside risk and unachievable base-case performance for ODIs; and (iii) the asymmetric design of PCDs.[414] This in reality leaves limited headroom for companies to downside scenarios.

(684) The response of the credit rating agencies to the increased risk in the sector is clear. S&P has tightened their guidance since the FD to require that a BBB+ rating typically means maintaining a 11-14% ratio of funds from operations to total debt (FFO/Net Debt). Moody's has in parallel increased the AICR range for Baa1 to between 1.6x to 1.8x from a previous range of 1.5x to 1.7x. Fitch has similarly increased its AICR range to 1.7x to 2.0x from a previous range of 1.6x to 1.9x. We therefore consider the point estimates to target for Baa1 to be 1.7x for Moody's and 1.8x for Fitch.

(685) As shown in **Table 20** below, the consequence is that Anglian would fall materially below S&P's FFO/Net Debt ratio, would be below Fitch's AICR ratio, and would be on the verge of falling below Moody's AICR ratio on a notional basis without any changes to Ofwat's assumptions and its modelled equity injections.

Table 20: Anglian notional key financial ratios under Ofwat's FD model

Key financial ratios	2025-26	2026-27	2027-28	2028-29	2029-30	AMP8 average
Adjusted cash interest cover ratio (AICR)	1.71	1.71	1.71	1.71	1.71	1.71
Funds from operations / net debt (FFO/Net Debt)	9.29%	9.40%	9.39%	9.44%	9.66%	9.45%
FFO/Net Debt (Ofwat approach)	10.23%	10.31%	10.30%	10.33%	10.49%	10.34%

Source: Oxera, *Investability and Financeability in PR24*, p. 15[415]

[413] Ofwat, PR24 final determinations: Aligning risk and return, Risk and return appendix (December 2024), page 58 (See here).

[414] *Anglian Water, PR24 Risk and Financial Resilience*, page 3 (Annex 004).

[415] Note to chart: In this table, we present both the "Ofwat approach" and "alternative approach" (the latter as denoted in Ofwat's FD model for the FFO/Net Debt metric). The "alternative approach" is the metric relied upon by S&P in making its ratings decisions as it removes from FFO the impact of indexation of linked-linked debt – therefore we present this metric only from this point forwards.

(686) There is, as such, a high risk that, on a notional basis, Anglian would be downgraded below BBB+ and / or Baa1.[416] The FD reliance on S&P's and Fitch's previous guidance to conclude that the notional company was (just) financeable no longer holds. There is also a low prospect of credit rating agency discretion: S&P has stated that it is less likely to exercise discretion where a company falls below key metrics such FFO/Net Debt.[417] The FD's assessment of financeability is thus wrong that the notional company will be able to raise funds at a BBB+/Baa1 rating. Absent this assumption, the FD is no longer financeable.

(687) Furthermore, the FD's financeability assessment wrongly assumes that 90% of the opening index-linked debt is linked to RPI. This overstates the headroom for the notional company under the AICR credit metric by c. 0.1x. Given that for AMP8 companies will not have any RCV linked to RPI, it is not internally consistent to assume that the notional company will run this level of basis risk for such a large proportion of their index linked debt, with a material mismatch between assets (linked to CPIH) and debt (linked to RPI). Anglian has undertaken material derivative transactions during 2024 to reduce this risk and subject to market availability would expect to continue reducing the residual risk in AMP8. This further weakens the FD's financeability assumption.

(688) The risk is even starker when assessing the consequences of downside scenarios (i.e. the financial resilience of the notional company). The sector's ODI performance in AMP7 suggests that the likelihood for downside risk outweighs the likelihood of outperformance. KPMG have, for example, modelled ODI penalties of £290 million over the period to test the impact of "*plausible but severe downside events"* on Anglian's financial resilience on a notional basis. This would result in credit metrics consistent with a rating below or at Baa3/BBB- at Moody's and S&P and below investment grade at Fitch, which would result in cash lock-up.

10.2.2 The FD is manifestly unfinanceable absent equity injections and full retention of earnings (i.e., no dividends)

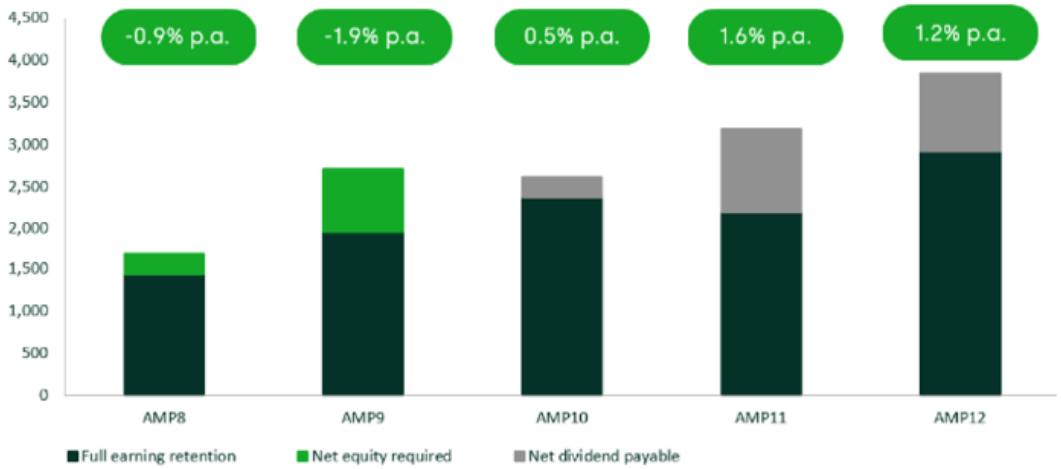
(689) The FD's financeability assessment is, in any case, fundamentally flawed because it rests of the premise that the WACC is sufficiently attractive for investment. However, far from Ofwat's assumed dividend yield of c. 4% over AMP8, the reality is that investors in the water sector would only receive net positive cash flows partway through AMP10, i.e., c. three AMPs or c. 15 years after the initial AMP8 investment. Anglian's investors would not receive a reasonable dividend yield on their investments even by AMP12. No reasonable investor would accept this, no matter how long-term focused they are, especially considering what the current profile in the sector signals for future risks. The picture is similar for the sector, as shown in Oxera's Report, *Investability and Financeability in PR24*.[418]

[416] *Anglian Water, PR24 Risk and Financial Resilience*, page 7 (Annex 004).

[417] S&P Global Ratings, U.K. Water Regulatory Framework Support, Low Financial Flexibility In Coming Regulatory Period Drive Rating Actions (18 February 2025), page 5 (Annex 004a) [CONFIDENTIAL]: "*Although we maintain the majority of the sector in the excellent business risk profile category, we consider that the use of the medial volatility table (see: "Corporate Methodology," published Jan. 7, 2024) better reflects our risk perception for most companies in the sector*". See also KPMG Report, Estimating the Cost of Capital for PR24, Appendix 3 (Annex 036) for an analysis of S&P's approach.

[418] Oxera, *Investability and Financeability in PR24*, page 8 (Annex 001).

Figure 53: Anglian equity profile and implied net dividends, no de-gearing (£m real, 2022-23 prices)



Source: Oxera, *Investability and Financeability in PR24*, p. 10[419]

(690) Absent the assumption of equity investment, Anglian is not financeable on a notional basis: if Ofwat's modelled equity injection is removed, even with no dividend payments, Anglian's notional AICR metric falls below Moody's and Fitch's Baa1 threshold by Years 4 and 5 of AMP8 and its notional FFO/Net Debt ratio is below the S&P threshold of 11-14% from the start of AMP8, as shown in **Table 21**.

Table 21: Anglian notional key financial ratios under Ofwat's FD model, assuming no equity injections, and no dividends paid

Key financial ratios	2025-26	2026-27	2027-28	2028-29	2029-30	AMP8 average
Adjusted cash interest cover ratio (AICR)	1.74	1.74	1.72	1.69	1.66	1.71
Funds from operations / net debt (FFO/Net Debt)	9.69%	9.64%	9.41%	9.21%	9.23%	9.41%

Source: Oxera analysis.

Source: Oxera, *Investability and Financeability in PR24*, p. 15

(691) Furthermore, the picture only worsens over future AMPs. As explained in Oxera's Report, *Investability and Financeability in PR24* and in **Chapter H.2 *(WACC)***, Anglian's AICR is likely to deteriorate over future AMPs on a notional basis towards 1.5x based on the FD settlement and RCV growth expected under the LTDS. This challenge demonstrates the importance of ensuring investability not just at AMP8 but also signalling that the regulatory framework will incentivise investment at future AMPs.

10.2.3 A cost of equity of at least 6.25% and the application of PR19 RCV run-off rates would enable Anglian's financeability in AMP8 on a notional basis

(692) Oxera's report *Investability and Financeability in PR24* has used the cost of equity and debt which Anglian puts forward in **Chapter H.2 *(WACC)*** to test whether its proposed allowed

[419] Note to chart: Callouts show the average implied net dividend on a per annum basis, for each year of the respective AMP. We assume no de-gearing of the notional company in this scenario.

return is sufficient for financeability. As shown in **Table 22** below, having also set its RCV run-off rates at an equivalent level to PR19, Anglian would maintain AICR and FFO/Net Debt ratios consistent with BBB+ and Baa1 credit ratings with a modest buffer to be able to accommodate downside scenarios.

Table 22: Anglian notional key financial ratios under Ofwat's FD model, with adjusted specifications

Key financial ratios	2025-26	2026-27	2027-28	2028-29	2029-30	AMP8 average
Adjusted cash interest cover ratio (AICR)	1.76	1.76	1.76	1.76	1.76	1.76
Funds from operations / net debt (FFO/Net Debt)	11.52%	11.40%	11.34%	11.40%	11.65%	11.47%

Source: Oxera, *Investability and Financeability in PR24*, page 18[420]

(693) Under these financeability specifications, investors would receive a net dividend during AMP8 which, albeit small, would support the investability case for Anglian in AMP8.

10.3 The FD does not provide a "fair bet" for investors versus the level of risk

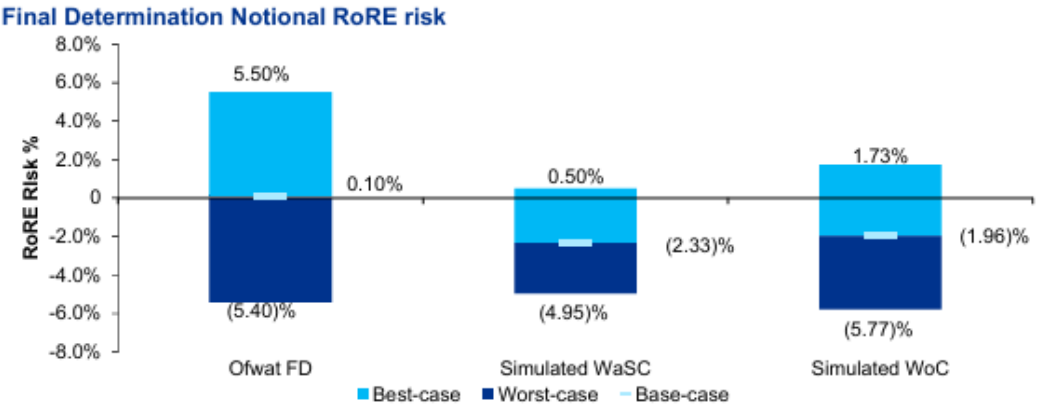
(694) The FD imposes a downward skew which further exacerbates Anglian's financeability challenge. A regulatory "fair bet" ensures a reasonable balance of risk and reward and is crucial to ensuring the water sector constitutes an attractive proposition for investors. Investors must believe that the downside risk from underperformance is balanced against potential upside if the company performs well. Ofwat claims that the "*risk range, taking account of all relevant factors in the calibration of the risk and return package, is balanced at -5.4% to +5.5%*".[421] This miscalculates both the level and negative skew of risk exposure in the FD.

(695) As set out in more detail in Chapters **G.1 (*ODIs*) and G.2 (*PCDs*)**, the FD has a significant downside skew, which means that the notional company is unlikely to make the allowed return and hence have the assumed cash flows and credit metrics. Ofwat ignores the multiple sources of negative skew, which entail that investors in an efficient company are unlikely to make the allowed return. KPMG's analysis, *PR24 Final Determinations – risk analysis for a notional company*, annexed to this Statement of Case finds that the notional company risk exposure under the FD implies outturn equity returns substantially below the notional allowed equity return in the base-case. This is shown in **Figure 54** below, which compares risk ranges for a notional WaSC and WoC to Ofwat's view of risk.

[420] Note to chart: We assume an allowed cost of equity of 6.25%, cost of debt of 3.71%, no retail margin adjustment, PR19 FD run-off rates, all index-linked debt is CPIH-linked, and a gearing cap of 55% p.a. We then solve for the equity injection needed.

[421] Ofwat, PR24 final determinations: Aligning risk and return, Risk and return appendix (December 2024), page 10 (See here).

Figure 54: Simulated risk ranges for the notional company based on the PR24 FD



Source: PR24 final determinations: Aligning risk and return – appendix page 10, KPMG risk analysis

Source: KPMG, *PR24 Final Determinations – risk analysis for a notional company*, p. 28

(696) The materiality of the P50 downside skew would have adverse consequences for the credit rating of a notionally financed Anglian Water. Forecast credit metrics on this basis would fall significantly below thresholds consistent with a Baa2/BBB credit rating for a notionally financed company. Any rating at or below Baa2/BBB with a negative outlook would result in a cash lock-up under Condition P of Anglian Water's licence.

(697) In this scenario – with equity returns below the required level and the prospect that dividends are even unlikely over a longer-term horizon – it is not reasonable to assume that new equity would be forthcoming to deleverage from the AMP7 regulatory assumption of 60% to the AMP8 of assumption of 55% or to support the large AMP8 investment programme.

(698) To solve this, the FD could have either recalibrated the incentives and targets "at source" or made use of mechanisms to eliminate negative skew "in the round", such as "aiming up" further on the cost of equity allowance or through asymmetric risk allowances.[422] The UKRN Guidance on the Cost of Capital ("**UKRN Guidance on the Cost of Capital**") makes clear that asymmetry in incentives and targets should be corrected "at source" where possible, but must be corrected regardless. The FD does neither and leaves the notional company unlikely to be financeable irrespective of the other flawed assumptions underpinning the analysis.

11 Not correcting the allowed return will harm Anglian, its customers and the wider UK economy

(699) The FD fails to ensure that the water sector is an attractive investment proposition, whether in this AMP or future AMPs. The risks from this are exacerbated by the (i) worldwide infrastructure investment gap which creates significant competition for funding amongst infrastructure companies, (ii) lower attractiveness of the UK as a destination for private infrastructure investment, and (iii) existence of multiple alternative options for the deployment of their capital.[423]

[422] Oxera, *Investability at PR24, Final Report for Water UK* (August 2024), page 11 (See here).

[423] Institute for Public Policy Research, Rock bottom low investment in the UK economy (June 2024) (See here); Global Infrastructure Investor Association, Q4 2024 Pulse Survey: Political uncertainty on investors' minds in latest global investment survey (See here), noting that "*The apparent unpopularity of regulated water in the European market is almost entirely driven by the UK's privatised water sector*".

11.1 The FD will harm Anglian's investment programme and financial resilience

(700) The FD will not only significantly impact Anglian's ability to deliver its investment programme over multiple AMPs; it will also jeopardise its operational and financial resilience over the long run.

(701) The credit rating agencies have already recognised the consequences of the FD on companies' financial resilience. S&P have concluded that the "*amount of raised equity will likely fall short*" which, in turn, means companies will be compelled to raise debt. Were the FD to result in further negative reactions by rating agencies, including downgrades, this would automatically trigger an increase in companies' overall cost of capital, worsening the terms on which companies would be able to borrow.[424]

(702) In turn, a higher cost of capital for companies could affect the level of investment, as investors will be unwilling to put money in to deliver specific and large new investments and / or may seek to remove capital.[425] A low-investment environment would affect company performance over multiple AMPs.[426] This undermines the whole regulatory regime, which is conditioned on companies constantly having sufficient incentives to improve.

11.2 FD will harm other regulated sectors by raising financing costs

(703) The FD and the CMA's Redetermination also have consequences for the UK's regulated sectors, many of which, notably energy, are facing similar challenges.[427] Not only are the issues arising for economic regulation similar, but the duties (e.g. financeability or growth) and methodologies (e.g., CAPM) employed by regulators also have a high degree of commonality. This explains why the CMA's Redetermination will be a benchmark for the regulatory approach to ensuring investors will receive a fair return on UK regulated assets. A failure to deliver now will be to the long-term detriment of UK regulated companies' customers, the environment, and the economy.

11.3 FD will harm Anglian's customers and ultimately UK consumers

(704) A properly calibrated price control needs to have inter-generational fairness at its heart; this is enshrined in legislation, which recognises that consumers are not just existing but also future consumers.[428] The PR24 FD marks a paradigm shift in regulatory approach by requiring significant and long-term investments that will transform the water sector. This, however, will largely depend on the availability of capital to deliver these investments.

(705) The consequences of a price control that dis-incentivises investment will be extremely costly for the sector, customers, and the environment. The notional company is likely to face significant challenges in financing its investment programme already during AMP8. This will in turn affect its performance levels, long-term resilience and stifle future innovation and growth. The impact of these challenges on current and future customer bills and service quality are likely to be significant.

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[424] This is also evidenced by the FD's projection that United Utilities' gearing will be above 55% by the end of AMP8. Ofwat, PR24 final determinations: Aligning risk and return - Risk and return appendix, page 85 (See here).

[425] CMA, PR19 Final Report (March 2021), para. 9.1268 (See here).

[426] This has been recognised by the CMA in PR19. See CMA, PR19 Final Report (March 2021), para. 9.1273 (See here), stating "[…] *the cost of capital today may have a knock-on impact on investment planning during AMP7 that will be actioned (or not) in subsequent price controls […] If overall water asset health deteriorates as a result, this may lead to higher required investment (and so higher investor returns) in future periods. […] the current cost of capital can have a direct impact on the level of future investment and the future costs to customers*".

[427] See for instance Ofgem RIIO-3, Sector Specific Methodology Decision, Finance Annex (July 2024), para. 1.6-1.7 (See here), which discusses the step-change in infrastructure investment requirements across GB to build out a zero carbon, more flexible and more secure energy system at pace.

[428] Section 2(5A) of the WIA91.

12 The CMA needs to provide a "fair bet" to ensure Anglian's investability and financeability in PR24

(706) Ofwat's WACC would be inadequate even to fund the notional company that meets the targets set by the FD, let alone where the FD's high levels of asymmetric risk mean that there is an expectation that the notional company will likely materially underperform and hence not receive the allowed return.

(707) Of the increased risks in the FD, some are closely tied to Ofwat's and the Government's policy choices for the sector. It is, for example, difficult to entirely mitigate the increased risk that stems from significantly increased investment in the sector over AMP8 and future AMPs through additional funding or sharing mechanisms. Conversely, other risks, such as base cost pressures and ODIs, should be mitigated "at source" by providing efficient levels of funding or revising the relevant thresholds respectively.

(708) Two changes are necessary to correct the FD:

(i) First, the Redetermination should revise the WACC, RCV run-off rates and retail margin as set out in **Chapter H.2 (*WACC*),** so that it provides a sufficient return for an investor in the notional company, and confirm that the cost of equity is expected to increase over future AMPs to provide reasonable certainty to investors over the investment time horizon; and

(ii) Second, the Redetermination should address or mitigate risks in the FD at source where reasonably practicable to do so (See **Chapters E.1-G.2)**.

Chapter H.2
WACC

(709) In light of the challenges identified in **Chapter H.1 (*Investability and Financeability*)**, this Chapter sets out the changes that need to be made to the WACC to appropriately compensate investors in the sector. Neither the cost of equity nor the cost of debt is correct. The real cost of equity for the notional company is at least 6.25% (CPIH-real). The true cost of efficiently incurred debt is at least 3.71% (CPIH-real). On this basis, the WACC should be 4.86% (CPIH-real).

(710) Ofwat's approach to determining the WACC has depressed the cost of capital on each of its underlying parameters, despite its assertion it has recognised the need for additional financing by selecting a point estimate at the top of its range.[429] To do so, the FD ignores the CMA's approach at PR19 in several aspects; selectively applies the UKRN Guidance on the Cost of Capital; and overlooks the methodological weaknesses in its own CAPM, whilst simultaneously dismissing evidence that challenges its conclusions.[430] The FD does not provide any solution to the financeability challenge faced by the sector, other than assuming substantial (and ever-increasing) equity injections (which may not be forthcoming).

(711) The FD WACC, therefore, fails to account for three key factors: the step change in capital investment and the increased risk profile of the sector; the sharp shift to a higher interest rate environment; and increased competition for infrastructure capital in the UK and globally. The cumulative effect is a WACC detached from the market reality it is intended to estimate.

Cost of equity

(712) Properly calculated, the cost of equity should be 6.25% (CPIH-real). Several key aspects of the cost of equity in the FD require correction in this Redetermination:

(i) First, Ofwat dismissed entirely the wide range of evidence set out in **Chapter H.1 (*Investability and Financeability*)**, which demonstrates that the cost of equity is too low, whilst simultaneously ignoring the weaknesses of its CAPM. The CMA should critically assess the entire body of evidence to establish the cost of equity.

(ii) Second, Ofwat wrongly calibrated the CAPM parameters, which means that its own CAPM significantly underestimates the cost of equity (irrespective of its inherent weaknesses). Correctly calibrated, the CAPM produces a range of 5.52 - 6.25%, the top end of which is consistent with the wider body of evidence on the cost of equity, including cross-checks.

(iii) Third, the cost of equity should be at least 6.25% (i.e., the top of the corrected CAPM range) for the following reasons: the level of investment needed in AMP8, the fact that the beta and TMR are likely to underestimate the cost of equity, the inherent downward skew of Ofwat's chosen implementation of CAPM in a high-interest rate environment and an inherent downside skew in returns.

[429] Ofwat, Reference of the PR24 final determinations: Introductory submission to the CMA, page 4 (See here).

[430] For instance, the CMA previously recognised the case for applying a convenience yield in the Risk-Free Rate, which Ofwat decides against, citing "*insufficiently strong evidence to accurately calibrate an adjustment at our 10-20 year CAPM horizon*." Ofwat, PR24 final determinations: Allowed return appendix, page 16 (See here). Similarly, Ofwat's approach on "aiming up" diverts from the CMA's approach in PR19, which supported "aiming up" to (i) promote short- or long-term investment in the water sector, and address the risk of an exit of capital if the cost of equity is set too low; (ii) reflect structural asymmetry in the overall determination, specifically around the definition of ODIs; and (iii) take into account a cross-check on market data and financeability ratios.

(713) The corrected cost of equity assumes that the price control addresses all asymmetric downside risk "at source", insofar as possible. It also requires that the price control recognise that the sector's long-term capital needs indicate the cost of equity will need to be towards, and potentially above, 7% in future AMPs to ensure Anglian's long-term debt and equity investability.

Cost of debt

(714) Properly calculated, the cost of debt should be 3.71% (CPIH-real). There are likewise a number of key areas of the cost of debt which this Redetermination should adjust:

(i) the cost of embedded debt is calculated by arbitrarily excluding certain debt instruments and placing weight the "actual-notional" benchmark. These factors disconnect the notional company assumed in the allowance from the reality of the sector's financing, leading to an average company being underfunded relative to its actual cost;

(ii) the cost of new debt needs to be adjusted to ensure the notional company is able to issue debt at the cost implied by the allowance. This adjustment is necessary because it is unlikely that the notional water company will achieve and maintain the target rating set out in the FD across all three rating agencies, given the revised views from rating agencies on regulatory and business risks in the sector;;

(iii) several flaws need to be corrected in the FD calculations for the share of new debt and cost of carry; and

(iv) the transition to full CPIH indexation should be implemented in a manner that is NPV neutral and, therefore, does not expose companies to the uncontrollable basis risk that otherwise occurs.

RCV run-off rate

(715) The RCV run-off rate has to match the rates at PR19 if the notional company is to maintain a Baa1/BBB+ credit rating.

Retail margin

(716) The retail margin adjustment has to be removed to properly compensate the appointee.

(717) The table below summarises where changes need to be made to the parameters of the WACC. This also takes into account evidence from cross-checks.

Table 23: The WACC parameters

Parameter	Ofwat PR24 FD[431]	Minimum estimates[432]
Risk-free rate	1.52%	2.31%
Notional equity beta	0.59–0.65	0.76
Total market return	6.68–6.98%	7.5%
Cost of equity	4.58–5.07% (point estimate: 5.10%)	6.25%
Cost of embedded debt	2.77%	2.94%

[431] Ofwat, PR24 final determinations: Allowed return appendix, pages 6-7 (See here).
[432] Referring to Oxera, *PR24 Cost of equity estimation* (March 2025) (Annex 036b) in respect of the cost of equity; Oxera, PR24 Cross-checks to CAPM estimation (March 2025) (Annex 003) in respect of the cross-checks; KPMG, *Estimating the Cost of Capital for PR24*, page 138 (Annex 036) in respect of the cost of debt.

Parameter	Ofwat PR24 FD[431]	Minimum estimates[432]
Cost of new debt	3.74%	4.37%
Share of new debt	24%	28%
Additional borrowing costs	0.15%	0.37%
Overall cost of debt	3.15%	3.71%
Retail margin adjustment	0.06%	N/A
Wholesale WACC	3.97%	4.86%

(718) This Chapter sets out (i) the framework that the CMA should apply when considering the cost of capital; (ii) the main errors in the cost of equity, cost of debt, and retail margin in the FD are wrong; and (iii) how the CMA can address these issues. It is important to note that the views on the cost of capital in this Chapter are premised on the assumption that the CMA will address the broader risks in Ofwat's FD in full.

(719) The Chapter is supplemented by Oxera's Report: "*PR24 Cost of equity estimation*" (**Annex 036b)** and KPMG's Report: "*Estimating the Cost of Capital for PR24*" **(Annex 036)**.[433]

1 Framework for WACC

(720) The allowed return is the weighted average of the costs of equity and debt for the notional company (the WACC). The WACC compensates investors of equity and debt capital for the risk of investing in the regulated activities. The CMA clarified the framework for assessing the allowed return at PR19, while the UKRN has also published guidance on setting the cost of capital (UKRN Guidance on the Cost of Capital).[434] The CMA has also assessed aspects of estimating the cost of capital in a number of regulatory appeals and redeterminations, most recently in the *H7 Heathrow Airport licence modification appeals*.[435]

(721) The WACC assumes that the balance of risk and reward is symmetric, i.e., the expected return is equal to the allowed return. The weighting is based on the relative proportions of equity and debt financing for the notional company. The FD assumes a gearing of 55% (i.e., 55% of the notional company's capital would be debt finance and 45% would be equity finance), which is lower than that applied in PR19.

(i) The cost of equity is the return required for the marginal investor to purchase equity in the water sector in the relevant AMP. The cost of equity is not directly observable. UK regulators have accordingly consistently employed capital asset pricing models (CAPM) as the "primary tool" for estimating the cost of equity, supplementing it with a range of evidence to "cross-check" the conclusions as well as identify a point estimate in the range of the cost of equity from CAPM.

(ii) The cost of debt is the expected return for new and existing debt and is calculated as a weighted average of these two factors. Both can be calculated using predominantly observable variables. The UKRN Guidance on the Cost of Capital states that two approaches are common: estimations based on regulated companies' balance sheets and estimations based on benchmark indices. The Guidance

[433] Oxera, *PR24 Cost of equity estimation* (March 2025) (Annex 036b); KPMG, *Estimating the Cost of Capital for PR24* (March 2025) (Annex 036).
[434] CMA, PR19 Final Report (March 2021), Chapter 9 (See here): UKRN guidance for regulators on the methodology for setting the cost of capital (March 2023).
[435] CMA, *H7 Heathrow Airport licence modification appeals*, Final Determinations (October 2023) (See here).

provides that new debt is typically estimated by reference to suitable bond indices and cross-checked against company data.

(722) The WACC compensates investors for the future price control period (i.e. it is forward-looking). Ensuring a clear evidence basis for the WACC is a necessary condition of proper economic regulation in any price control. The WIA91 does not permit the FD to set an allowed return where there is a material prospect that the notional company is unlikely to achieve the allowed return in light of the detrimental effects of the sector failing to attract sufficient investment.

(723) Robust verification of the cost of equity is particularly important at PR24. The need for Anglian and other companies to raise significant new equity means that investability is critical. Furthermore, the CAPM is less apt for a period which marks a significant break to prior AMPs since it is heavily reliant on historic performance to predict expected future return; it is, therefore, all the more critical that the allowed return is sufficient given the financing needs in the price control (and beyond).

2 The cost of equity in the FD should be revised

(724) The cost of equity in the FD is too low, failing to reflect the significant forward-looking risk in the sector.[436] As set out in **Chapter H.1 *(Investability and Financeability)***, the market evidence demonstrates that the FD cost of equity does not adequately compensate investors even if the FD were a "fair bet", let alone for the level of downside skew of risk in the overall FD package.

(725) The FD's determination of the cost of equity more specifically fails because it: (i) ignores the balance of evidence; (ii) applies the wrong parameters in its CAPM; and (iii) fails to appropriately "aim up".

2.1 Ofwat has applied its CAPM uncritically whilst dismissing evidence which called its conclusions into question

(726) First, the FD uncritically relies on a CAPM modelling approach which ignores its limitations in a high-interest rate environment in a sector undergoing significant economic change. The CAPM and, in particular, Ofwat's calibration of the CAPM, is heavily reliant on longer-term historical data. As set out in Oxera's Report, Investability and Financeability in PR24, it is thus prone to underestimating the cost of equity when there is significant change in economic and / or sectoral conditions, which would otherwise drive the cost of equity materially higher.[437] Absent careful calibration and interpretation, it cannot provide a meaningful forward-looking estimate of the cost of equity. This risk is exacerbated by the FD's "through the cycle" approach to the TMR, which now sets the cost of equity too low relative to high interest rates, and its dismissal of the risk that the beta underestimates the cost of equity for sectors for which the beta is less than 1 (i.e., for sectors with a return less than the total market return, such as water)and regression attenuation bias (which is well documented in academic literature). Both of these points are addressed specifically below.

(727) Ofwat's uncritical approach to its CAPM is in contrast to its assessment of evidence that calls into question its conclusions. As set out in **Chapter H.1 (*Investability and***

[436] Contrary to e.g. Ofwat's own statement, in its Application for Permission to Intervene in Energy Licence Modification Appeal (23 April 2021), page 5 (See here) that "*judgements on the total market return should be informed by evidence and expectations that are relevant for the period of the determination, including for example, forward looking approaches, particularly as market returns for the period of the control are expected to be lower than historical evidence".*

[437] UKRN guidance for regulators on the methodology for setting the cost of capital (March 2023), page 19 (See here).

Financeability), the FD dismisses entirely the relevance of asset risk premia – debt risk premia, MFM, and inference analyses on the grounds of alleged methodological weaknesses.

(728) The FD is thus driven by a contradiction in its approach to evidence: alleged methodological weaknesses are sufficient to dismiss the relevance of some evidence entirely but weaknesses in its own evidence do not undermine its explanatory relevance at all. A balanced and critical approach to the strengths and weaknesses of evidence on the cost of equity would have recognised that the evidence in the round supported a significantly higher cost of equity.

2.2 The FD's CAPM parameters are wrong and mean it significantly underestimates the cost of equity

(729) Second, the FD also makes a number of errors in calibrating the CAPM parameters used for the FD, which mean it significantly underestimates the cost of equity. Anglian relies upon the Oxera Report, *PR24 Cost of equity estimation* **(Annex 036b),** supplemented by KPMG's Report, *Estimating the Cost of Capital for PR24,* to support this section of the Chapter. The following are the main points that the CMA should redetermine for the cost of equity. The full set of points and underlying evidence is set out in the Reports.

2.2.1 Risk-free rate should include a convenience yield to properly calculate the CAPM cost of equity

(730) The risk-free rate ("**RFR**") corresponds to the return on a riskless asset. Ofwat estimates the RFR by reference to the one-month average yield of the 20-year RPI index linked gilt (ILG) with a cut-off date of 30 September 2024, then converting to CPIH-real terms.[438] It rejects that ILGs may underestimate the RFR, thereby disregarding that such instruments benefit from an additional premium due to their "money-like" safety and liquidity ("**convenience yield**"). This is intuitive: UK government bonds are not simply riskless but also possess extremely high liquidity, provide a valuable source of collateral, and many financial institutions including banks, insurers and pension funds are required to hold UK government bonds to comply with regulatory requirements. Ofwat does not dispute the principle but rejects the application of a convenience yield because there is "*insufficiently strong evidence to accurately calibrate*" it, based on Ofwat's 10-20 year CAPM horizon.[439]

(731) In choosing not to apply a convenience yield, Ofwat departs from the methodology used by the CMA in its PR19 re-determination, in which the CMA explicitly acknowledged the presence of a convenience yield and estimated the RFR by reference to the average of the yields on ILGs and AAA-rated non-government bonds.[440] Considering this precedent and in particular the fact that it is not open for Ofwat to adopt an FD which risks depriving the notional company of sufficient funds to finance its functions, Ofwat needs a clear justification for disregarding the convenience yield.

(732) However, Ofwat fails to justify how it has rejected the existence of a convenience yield, apart from to claim that it could have "placed weight" on 10 Year ILGs as well as 20 Year ILGs which would have depressed the RFR by approximately 0.3%. Ofwat's reasoning is flawed because it fails to account for duration-matching when making yield comparisons. As the Oxera Report, *PR24 Cost of equity estimation*, demonstrates, once duration-matched, one can observe a consistent positive spread between AAA bonds and gilts whether over a 1-

[438] Ofwat, PR24 final determinations: Aligning risk and return, Allowed return appendix (March 2025), page 18 (See here).
[439] Ofwat, PR24 final determinations: Aligning risk and return, Allowed return appendix (March 2025), page 18 (See here).
[440] CMA, PR19 Final Report (March 2021), para. 9.162 (See here).

month, 1-year, or 5-year observation period. A higher estimate of the RFR is also supported by the nominal gilts cross-check, showing that, on average, the nominal gilt approach suggests yields 1.11% higher than Ofwat's ILG-based estimate.[441] This analysis suggests that Ofwat's methodology systematically understates the RFR.

(733) Oxera estimates a convenience yield based on methodological improvements to the CMA PR19 estimation approach, applying updates to Ofwat's one-month average of the yields on a 20-year inflation-linked gilt, compared to AAA-rated non-government bonds to determine the duration-matched spread, with a new cut-off date of 31 January 2025. This results in a convenience yield estimate of 0.24%, taken from the 5-year average spread. Combining the convenience premium with the underlying RFR calculation based on the inflation-linked gilts results in a RFR estimate of 2.31% (CPIH-real). The KPMG Report, Estimating the Cost of Capital for PR24 also provides evidence for the existence of a convenience yield that corroborates Oxera's findings and rebuts Ofwat's and CEPA's analysis in the FD.[442]

2.2.2 The Total Market Return does not correctly reflect returns for PR24

(734) The TMR represents the expected real return that the marginal investor would expect from holding a diversified portfolio of assets. It is used to calculate the equity risk premium: the premium above the RFR that investors demand to invest in such a portfolio.

(735) The FD derives a range for the TMR using "ex post" and "ex ante" historical approaches. The historical "ex ante" approach uses long-run historical data to estimate forward-looking expectations, incorporating the "DMS Decompositional" and "Fama-French DGM" approaches based on analysis of the Dimson, Marsh & Staunton ("**DMS**") dataset. The FD dismisses the use of forward-looking approaches based on current market data on the grounds that they are subjective.

(736) The FD falls short in a number of respects in calculating the TMR. These stem from a failure to properly test whether its approach to TMR properly reflected the likely returns in the period in light of the significant economic change in circumstances.

(i) The "fixed TMR" approach underestimates the TMR in periods of high interest rates

(737) The FD ignores the weaknesses of its "fixed TMR" or "through the cycle" approach to TMR in circumstances where the sector needs to attract new equity in a high-interest rate environment. As Ofgem has highlighted in RIIO-3, setting the TMR "*is a particularly difficult challenge in RIIO-3, as any new investors into the sector will require current returns to match the market cost of equity. While we normally consider likely returns on a 'through cycle' basis, this may cause issues if there is a disconnect with our 'through cycle' estimate and current market required rates of return*".[443]

(738) While this is an established approach in setting the TMR and can provide fair levels of compensation for investors over the long run, the TMR is ultimately not fixed over time. Therefore, a "through the cycle" approach could either under- or over-compensate investors at any one point in time.[444] This is also recognised by UKRN, which highlights that regulators should not keep TMR constant.[445] In fact, during a period of high real interest rates, a

[441] Oxera, *PR24 Cost of equity estimation*, page 16 (Annex 036b).
[442] KPMG Report, *Estimating the Cost of Capital for PR24*, pages 31-32 and Appendix 1 (Annex 036).
[443] Ofgem, RIIO-3 Sector Specific Methodology Decision – Finance Annex, (July 2024), para. 3.265 (See here).
[444] Oxera, Investability at PR24, Final Report for Water UK (August 2024), page 9 (See here).
[445] UKRN guidance for regulators on the methodology for setting the cost of capital (March 2023) pages 19–20 (See here). "*However, it is important to recognise that depending on the macroeconomic environment, this largely 'through-the cycle'*

"through the cycle" approach is likely to understate returns required by investors, meaning that the CAPM-estimated return on equity will be lower than the actual return required by equity investors to invest in the sector.

(739) Ofwat simply ignores this reality and assumes that long-term investors would invest even when expected returns are below the cost of capital, in the expectation that "the tide will turn".[446] Ofwat's assumption is neither rational nor consistent with Ofwat's duties, which on balance require a focus on the companies' abilities to finance their functions and serve current and future consumers in the long term. Unavoidably, this exposes the sector to a cost of equity lower than necessary to finance its functions. Ofwat instead defends its option of a "fixed TMR" that would be less volatile and that "*intervening on one side of the interest rate cycle to 'correct' this through adjustments to the allowed return but not the other would not deliver a balanced outcome for customers over the long term*".[447]

(740) Ofwat's approach also falls foul of regulatory consistency: whilst previously setting TMR in the same direction as (falling) interest rates, the FD's "fixed TMR" now means it is insensitive to the current period when interest rates have been sharply increasing. This is bound to create dis-incentives for investors looking to invest in the sector. Even had Ofwat over-stated the TMR in previous price reviews, this is not a relevant factor for AMP8 or any future price review: the reality is that the sector has entered a new macro-economic period, which requires appropriate calibration of the approach to the TMR to attract new investment.

(741) As clearly illustrated in Oxera's report, over-reliance on the 'fixed' TMR policy approach has a high risk of being disconnected with the current market environment and, thus resulting in a cost of equity that is too low to ensure the investability of the regime. This is consistent with the UKRN Guidance on the Cost of Capital. Therefore, it may be reasonable to set the TMR closer to the historical precedents that occurred in an interest rate environment similar to what currently faces the sector.

(ii) Ofwat has not maintained a consistent TMR: it has declined from 8.26% at PR04 to 6.83% at PR24

(742) Ofwat more practically has not applied its alleged regulatory policy. As illustrated in **Figure 55**, Ofwat has reduced the TMR over the last five price controls by nearly 1.5%. It cannot therefore dismiss evidence that the TMR is higher than at PR19 on the grounds that this offends a "through the cycle" approach which it has failed to apply. Its claims that its TMR has declined because of methodological changes and changes in market data rather than interest rates are in this regard untenable. It cannot be that market evidence can justify a decrease but market evidence now pointing to an increase in the TMR is dismissed.

approach could either overstate or understate returns required by investors in a specific price determination. In the low interest rate environment following the 2008 Financial Crisis, such an approach likely overestimated the TMR expected by the market. This is in part because there is empirical evidence of a positive relationship between real interest rates and real returns on equity".

[446] The Oxera Report, *PR24 Cost of equity estimation*, pages 31 onwards (Annex 036b) contains a detailed rebuttal of the assumptions underpinning Ofwat's "through the cycle" approach.

[447] Ofwat, PR24 final determinations: Aligning risk and return, Allowed return appendix (March 2025), page 27 (See here). Ofwat noted that "*a Fixed-MRP approach with greater interest rate sensitivity would have led to a more volatile and lower TMR in all periods that we have considered, including 2025-30*".

Figure 55: Historical TMR determinations and underlying gilt yields

Source: Oxera, *PR24 Cost of equity estimation*, p. 34[448]

(iii) The TMR should place more (or sole) weight on *ex post* data to calculate the TMR and should be adjusted to reflect historic TMR rates

(743) A correctly calibrated TMR should rely on *ex post* data rather than seeking to give equal balance to Ofwat's *ex ante* estimation approaches. The latter suffer from two methodological weaknesses: (i) *ex ante* approaches contain subjective revision of historical periods of "good" and "bad" luck; and (ii) Ofwat's adjustments for alleged serial correlation in historical returns are flawed. More simply, Ofwat's inclusion of such subjective changes contradicts its approach to forward-looking approaches based on current market data. While Ofwat has dismissed the relevance of such analyses on the grounds that they require subjective adjustment, it incorporates subjective changes to its own *ex ante* approaches.[449]

(744) Oxera's estimate of the ex post arithmetic average TMR with annual holding periods implies a TMR estimate of 6.96% (CPIH-real), based on the latest available DMS data up to 2023. This is rounded by Oxera in estimating its low case TMR of 7.0% (CPIH-real). Additionally, since the historic TMR has been significantly above approximately 8% in periods of higher interest rates (comparable to current rates), Oxera sets the upper bound for the TMR estimate at 7.5% (CPIH-real). This ensures that the TMR reflects the trend towards higher market returns that are common in higher interest rate environments. It also ensures that the fixed TMR policy is applied consistently over periods: being allowed to adjust moderately up as well as down with the interest rate environment.

2.2.3 The beta does not reflect the increased level of risk associated with the water sector

(745) Beta within the CAPM framework reflects an asset's (or a portfolio of assets') exposure to systematic (or common) risks relative to the broader market. The beta is, in more practical terms, the CAPM parameter which reflects the sector-specific aspects of the cost of equity. The FD calculates a notional equity beta range of 0.59-0.65 (i.e., the risk profile and associated return for the water sector is lower than the total average).

[448] Note to chart: Historical RPI-real determinations have been converted to CPIH-real using the long–term wedge as stated by the Office for Budget Responsibility (OBR). We have reflected the changes in the long-term wedges over time. The respective wedges used for PR04, PR09 and PR14 are 0.49%, 0.49%, and 0.69% respectively. For the years before the Bank of England started targeting CPI, we use the 2.5% RPI target.

[449] This is also corroborated by KPMG's Report, *Estimating the Cost of Capital for PR24*, page 53 (Annex 036).

(746) Ofwat not only disregards the limitations of its own comparator set (which, even including the three listed companies, is likely to understate the risk for the notional company). It also sets an equity beta of 0.65 at the upper bound, which is barely higher than the 0.71 equity beta (equivalent to 0.64 equity beta re-levered at 55% gearing) adopted by the CMA in its PR19 redeterminations. This is in stark contrast to the much higher risk in the sector.[450]

(747) There are a number of fundamental and methodological challenges with the FD's beta. This Chapter focuses on the most material ones, but Anglian refers to the Oxera and KPMG Reports, which contain a detailed rebuttal of Ofwat's approach on beta.[451]

(i) The beta should include Pennon to properly reflect the cost of equity in the water sector

(748) The FD places weight on two listed companies, namely Severn Trent and United Utilities, and excludes Pennon Group based on (i) there being no "*'clean' Pennon data*" for the estimation windows adopted and (ii) "*concerns about the stability of Pennon's gearing data*".[452]

(749) The exclusion of Pennon is logically incoherent:

(i) First, in a comparator set comprising just two listed companies, the inclusion of Pennon helps address the skew that stems from United Utilities and Severn Trent being comparably stronger-than-average performers, which means the beta otherwise underestimates the returns for the water sector. The UKRN Guidance on the Cost of Capital and, indeed, Ofwat have recognised the relevance of Pennon in establishing the beta.[453]

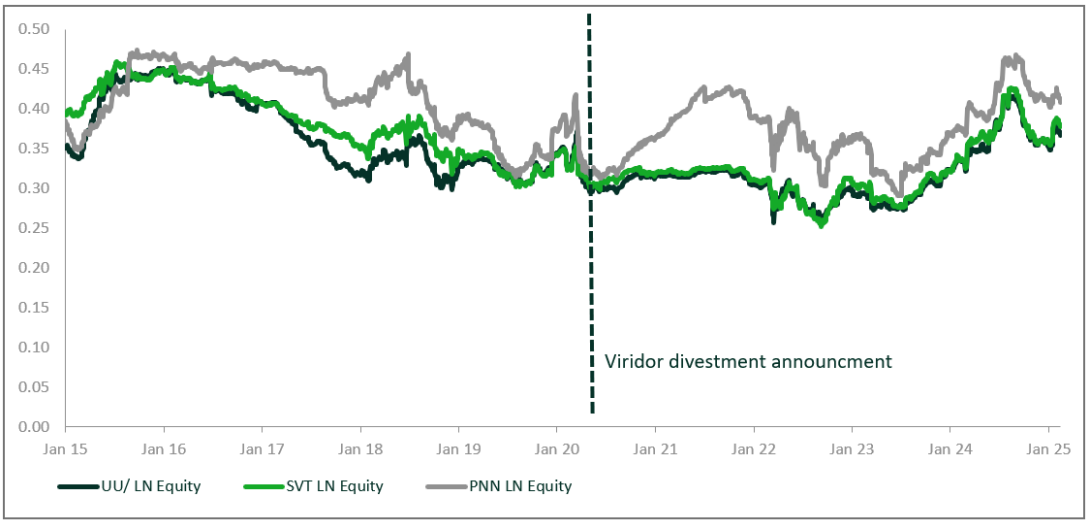
(ii) Second, Pennon has been a "pure play" water company since 2020/2021, meaning there is now four years of "clean data" to refer to.[454] The FD's concern that the data for Pennon covers too short a time period does not justify its exclusion. It is possible to either rely on beta estimation windows shorter than 5 years or to adjust for the alleged distortion and simply excluding it ignores the weaknesses from relying solely on United Utilities and Severn Trent.

(iii) Third, market evidence shows that Pennon's beta has been, if anything, lower prior to the sale of Viridor. This suggests that Ofwat's concern that the Viridor business risk may have artificially inflated the Pennon beta is misplaced. **Figure 56** below demonstrates that, despite the sale of Viridor, Pennon's beta has been trending upwards; in other words, its market movements would be relatively more closely aligned with those in the sector than either of United Utilities or Severn Trent.

(750) As set out in **Figure 56** below, Pennon's beta is likely to be more consistent with the sector's level of risk. Despite the sale of Viridor which, based on assumptions at the time, would reduce its risk profile, Pennon's beta has in fact trended upwards, consistent with the perception of risk in the sector.

[450] Oxera, *PR24 Cost of equity estimation*, page 23 (Annex 036b).
[451] KPMG, *Estimating the Cost of Capital for PR24*, pages 74-77 (Annex 036); Oxera, *PR24 Cost of equity estimation*, page 20 onwards (Annex 036b).
[452] Ofwat, PR24 final determinations: Aligning risk and return, Allowed return appendix (December 2024), page 5 (See here).
[453] UKRN, Guidance for regulators on the methodology for setting the cost of capital (March 2023), page 23 (See here), Ofwat, PR24 final determinations: Aligning risk and return, Allowed return appendix (December 2024), page 42 (footnote) and page 53 (See here).
[454] Pennon's disposal of Viridor was completed in July 2020 (See here).

Figure 56: Comparison of 2-year asset beta movement (Severn Trent, United Utilities and Pennon)



Source: Oxera analysis based on Bloomberg data.

Source: *Oxera Report, PR24 Cost of equity estimation,* p. 25

(751) A similar comparison between Pennon and Severn Trent/United Utilities is provided by KPMG and indicates that (i) there has been a trend of divergence between 10-year betas since around 2019, and (ii) the differential has not reduced following the sale of Viridor, which suggests that Viridor may not have been a material driver of the beta differential.[455]

(752) All these factors reinforce the conclusion that the inclusion of Pennon is conducive to a more robust assessment of the forward-looking risk in the sector. This is, moreover, consistent with regulatory precedent.[456] Indeed, Pennon is likely to be the most representative of all of the three listed companies. Severn Trent and United Utilities are upper quartile performing water companies: their beta accordingly incorporates their outperformance and hence is a poor proxy for the sector's outperformance.[457] This strongly suggests the FD beta range is likely to be lower than the beta of the notional company.

(ii) The beta should use short as well as long-term estimation windows of historic data to act as a better proxy for the AMP

(753) The FD relies solely on longer-run estimation windows of five and ten years to calculate the beta and excludes shorter-term data, particularly 2-year estimation windows. This deviates from Ofwat's PR19 approach of using 2-year and 5-year betas. This is inconsistent with the evidence that points to a significant increase in risk of the sector since PR19 and ignores the implications of PR24 for the relative risk associated with the sector and wider economic change. The purpose of the beta assessment is to determine a forward-looking estimate.[458] Thus, Ofwat's PR24 decision to disregard 2-year betas in PR24 is not credible, as it signals that the regulatory approach to beta estimation has become less sensitive to recent data

[455] KPMG Report, *Estimating the Cost of Capital for PR24*, pages 63-64 (Annex 036). The KPMG Report also provides a detailed rebuttal of CEPA's / Ofwat's points in the FD (see pages 67-68).

[456] Ofwat itself recognises in the FD that "*Pennon will become an increasingly relevant datapoint*" and uses Pennon data in its MARs cross-check. Ofwat, PR24 final determinations: Aligning risk and return, Allowed return appendix (March 2025), page 53 (See here). See also UKRN guidance for regulators on the methodology for setting the cost of capital (March 2023), page 23 (See here).

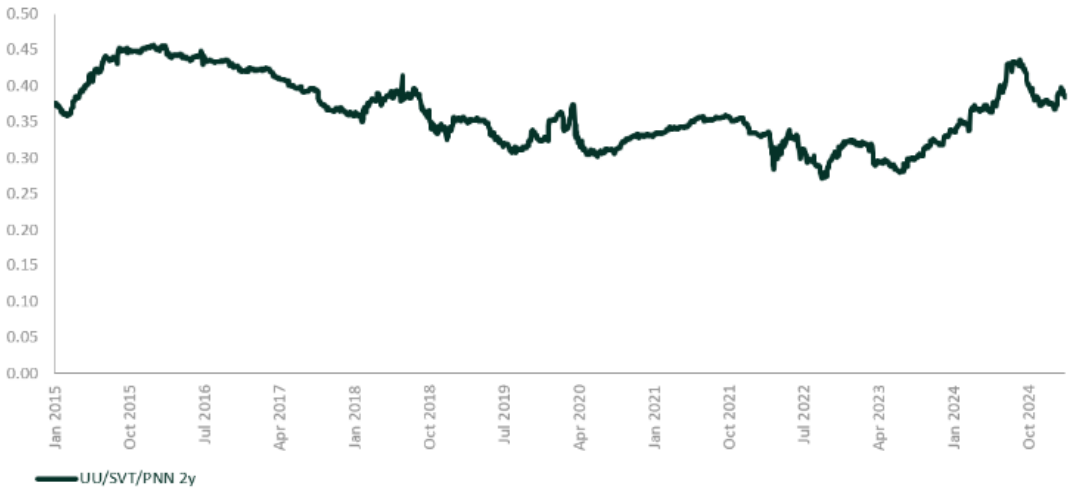
[457] See for instance KPMG Report, Estimating the Cost of Capital for PR24, pages 61-63 (Annex 036), showing that Severn Trent and United Utilities have historically outperformed the industry

[458] CMA, H7 Heathrow Airport Licence modification appeals (October 2023), para. 6.69 (See here).

than in PR19. Reliance on longer periods alone, to the total exclusion (not just applying less weight) of shorter periods fails to take into account such risks.

(754) This is particularly pertinent at PR24 since is occurring at a time when the sector's risk profile has increased, and the FD has signalled a significant policy shift towards greater investment. As illustrated in **Figure 57**, the 2-year beta has been significantly more responsive to these changes: precisely what is needed to capture a forward-looking view of the relative returns of the water sector versus the total market return.

Figure 57: Asset beta movement over time (2-year, average of Severn Trent, United Utilities and Pennon)



Source: *Oxera Report, PR24 Cost of equity estimation,* p. 22

(755) The FD's concern that the two-year beta exhibits greater volatility and a degree of mean reversion does not outweigh their relevance in PR24 given the deficiencies of longer-term betas in assessing the forward-looking risks at a significant economic break point. The use of shorter-term betas, in contrast, facilitates a more forward-looking approach in these circumstances and reflects more closely the shifting risk profile of the sector, without being suppressed by past betas reflecting a different, more stable environment. It is also in keeping with the approach taken by the CMA in previous redeterminations and regulatory appeals and by Ofwat itself in PR19.[459]

(iii) The beta should "aim up" to reflect the key issues associated with the estimation procedure

(756) Oxera's beta analysis incorporating Pennon and updated to 31 January 2025 provides a range of 0.69 – 0.76. The downward skew in Beta means, however, that the top of the range should be used for the purposes of the CAPM:

[459] In CMA, PR19 Final Report (March 2021), para. 9.465 (See here), the CMA referred to a range of periods (2-year, 5-year and 10-year). In CMA, Energy licence modification appeals 2021 (October 2021), Vol 2A, paras. 5.489-5.492 (See here), the CMA considered that 2-, 5- and 10-year periods are all appropriate timeframes when estimating long-run beta within regulatory frameworks and noted that the CMA had used these timeframes in its own determinations of beta estimates. In CMA, NATS En-route Limited (NERL) Price Determination (July 2020), para. 13.85 (See here), and CMA, Bristol Water plc price determination (2015), table 10.3 (See here), the CMA used 2- and 5-year data.

(757) First, it is well established that the beta methodology is likely to underestimate returns for the water sector.[460] This is because CAPM beta estimates are likely an underestimate of the required return for regulated utility companies due to both (i) the 'low beta anomaly' effect observed for companies with low equity betas and (ii) regression attenuation bias, which implies a negative bias in beta estimates more generally.

(758) Second, the listed company data set is likely to underestimate the sector beta (and hence underestimate the cost of equity) since two of the three listed companies are significant outperformers. The inclusion of Pennon is therefore imperative to ensure the beta estimation is more likely to represent the median company.

(759) Third, the Beta data set will not account for the scale of the investment programmes. As explained by Oxera, the fixed costs of future investments will increase operational gearing and translate into a higher beta.[461] KPMG also presents analysis of the impact of the increase in capital intensity on the Beta in its report, Estimating the Cost of Capital for PR24. The report explains how the increased capex intensity at PR24 should translate into an increase in beta.[462] This is also intuitive: water companies' capex programmes entail that their betas should reflect more elements of the risk associated with the construction of infrastructure.

2.3 Setting the point estimate for the cost of equity to reflect parameter uncertainty, CAPM weaknesses, long-term challenges, and asymmetric risk

(760) At PR19, the CMA found that it was appropriate to aim up within the CAPM range due, in particular, to: (i) the substantial uncertainty over the level of WACC; (ii) the uncertainty around the optimal level of investment that may be required, now and in the future; and (iii) the risk of investors' exiting the sector and wider societal benefits of investment in infrastructure being lost.[463]

(761) The FD includes "aiming up" of approximately 0.27% to reflect investor sentiment and the scale of the capital programmes under the FD.[464] This is, however, far from sufficient to accurately reflect the risks associated with parameter uncertainty within CAPM. By comparison, the CMA included "aiming up" of 0.25% on the mid-point of the cost of equity at PR19, a price control with much lower levels of investment and perceived regulatory uncertainty. The FD also fails to address the higher cost of equity indicated by all of the cross-checks, the weaknesses in CAPM in the current economic environment and the longer-term investability challenges.

(762) To address these challenges, Anglian submits the following:

2.3.1 The cost of equity should be at least 6.25% to reflect parameter uncertainty and the inherent downward skew in CAPM

(763) The point estimate for the cost of equity should be 6.25%, i.e. the top of the CAPM range, for three reasons:

(764) First, it reflects the balance of evidence for CAPM itself:

[460] See Oxera, PR24 Cost of equity estimation, pages 20-21 (Annex 036b), for an analysis of regression attenuation bias.
[461] Oxera, PR24 Cost of equity estimation, page 27 (Annex 036b).
[462] KPMG Report, *Estimating the Cost of Capital for PR24*, pages 72-76 (Annex 036), also rebutting Ofwat's / CEPA's points.
[463] CMA, PR19 Final Report (March 2021), para 9.1269 (See here).
[464] Ofwat, PR24 final determinations: Allowed return appendix, page 84 (See here).

(i) CAPM is inherently likely to underestimate the cost of equity in the current high-interest rate environment, making it necessary to use the minimum 6.25% point estimate; and

(ii) both the TMR and the beta should be set at the top of their respective ranges since both have a downward skew (i.e. the evidence strongly supports that both parameters should be set at the top of their respective ranges).

(765) Second, a point estimate of 6.25% would be at the bottom of the range indicated by the cross-checks on the cost of equity. As demonstrated in **Figure 58** below, it would be just above the range estimated by Oxera's debt-equity spread analyses, which set a minimum for the cost of equity, and significantly below both Oxera's MAR-inferred cost of equity and its analysis of the cost of equity for comparable infrastructure investments.

Figure 58: Summary of cross-check ranges against Oxera's estimated CoE range (CPIH-real)

Parameter/ cross-check	Cost of equity
Oxera's estimated CoE range	5.53–6.25%
Oxera debt-based cross-check lower bound	6.14–6.20%
Oxera's MARs-inferred CoE	6.13–7.34%
Oxera's infrastructure fund cross-check	7.12–7.24%

Source: Oxera analysis contained within Oxera (2025), PR24 Cross-checks to CAPM estimation, 21 March.

Source: *Oxera analysis*

(766) Third, such aiming up is needed to address the inherent downside asymmetric risk in the overall FD in relation to PCDs which cannot be corrected at source and hence must be addressed in the cost of capital.

2.3.2 If the asymmetric risk identified in the SoC is not addressed, the Cost of Equity should "aim up" further

(767) The minimum cost of equity point estimate set out above assumes that all downward asymmetry in returns is addressed at source. As explained in detail in this Statement of Case, the FD entails material asymmetric risks, arising from the mis-calibrated design of the building blocks of base costs, asset health, enhancement costs, and ODIs / PCDs.

(768) As set out in the UKRN Guidance on the Cost of Capital, downside asymmetric risk should, in principle, be addressed "at source". A price control should only "aim up" to address asymmetric risk where it is not practicable to and indeed requests in the relevant Chapters, that these risks are addressed "at source" by the Redetermination. Absent correction of all asymmetric risk "at source", the cost of equity point estimate should be increased further.

2.3.3 The CMA should set an expectation that the cost of equity is likely to increase in future price control periods

(769) Finally, while the proposed point estimate of at least 6.25% (CPIH-real) at AMP8 reflects a reasonable balance of the totality of evidence, there is significant evidence that the cost of equity is already trending towards 7% in future price control periods.

(770) First, the "high" end of the range for the cost of equity indicated by the Pennon MAR analysis and the cost of equity for comparable infrastructure investments is significantly in excess of

7%. The Pennon analysis is particularly salient, since it more closely reflects a performer closer to the median in the water sector and thus is a superior bellwether for the cost of equity whereas Severn Trent and United Utilities are skewed by their consistent historic outperformance.

(771) Second, an assessment of debt financeability across AMPs 8 - 12 demonstrates that the notional company will need to attract more equity in the future to maintain its key rating agency credit metrics. Anglian's AICR will be below the BBB+/Baa1 threshold before the start of AMP9 and is likely to deteriorate over future AMPs on a notional basis below 1.6x based on the FD settlement and RCV growth expected under the LTDS. Ofwat does not provide any solution to that challenge, other than assuming substantial (and ever-increasing) equity injections (which may not be forthcoming). In order to achieve an AICR of 1.7x through to AMP12, Oxera finds that a cost of equity of nearly 7% would be required from AMP9 through to future AMPs.

Table 24: Notional Anglian economic-form analysis of AICR to AMP12

	AMP8 average	AMP9 average	AMP10 average	AMP11 average	AMP12 average
Economic-form AICR	1.70	1.59	1.52	1.50	1.50

Source: Oxera, *Investability and Financeability in PR24*, p. 16[465]

(772) Third, the cost of equity does not address the long-term investment needs of the notional company. In particular, CAPM's reliance on historic performance means it does not adequately capture the adjustment to the cost of equity needed where the time horizon for investors to see appropriate returns is more than 25 years and is, furthermore, inherently uncertain.

(773) To give investors sufficient certainty to invest equity in AMP8, the price control should, therefore, set an expectation that the cost of equity is likely to increase based on the current levels of investment anticipated for future AMPs as well as prevailing market conditions. This addresses the uncertainty facing investors in circumstances where they are being expected to contribute significant equity not only in AMP8 but in future AMPs.

3 The Cost of Debt should be revised

(774) The FD underestimates the cost of debt for the notional company due to conceptual, methodological, and technical shortcomings in the arguments and analysis underpinning the estimates. The Section relies upon the KPMG Report, *Estimating the Cost of Capital for PR24* **(Annex 036)**, which contains a full explanation of the points that the CMA should address in its redetermination of the cost of debt.

3.1 The notional company – as proxied by a company incurring the average costs for the sector – cannot recover its efficient costs

(775) The FD estimates the cost of embedded debt ("**CoDE**") at 4.82% in nominal terms, based on projected debt costs for WaSCs and large WoCs over AMP8. The key issues with Ofwat's approach are as follows:

[465] Note to chart: Economic-form modelling calculated based on Ofwat FD allowance updated for market data as of 31 January 2025.

3.1.1 The FD arbitrarily excludes certain debt instruments and, thus, assumes an unachievable notional structure

(776) The FD is wrong to exclude all swaps except cross currency swaps as "*not essential for estimating the cost of debt for an efficient company operating under a notional financial structure*".[466] The FD contends that its did so because "*companies use swaps for a variety of reasons, not all of which reflect the behaviour of an efficient company with a notional structure*".

(777) The FD's approach is contrary to the substantive test for evaluating the cost of embedded debt: are such instruments part of the debt incurred by an efficient company operating under a notional financial structure? The majority of the sector routinely uses swaps, since they are an effective tool for managing financial risk.[467] Excluding them from companies' debt mix would also mis-state the real debt costs of an efficient company. The FD fails to engage with the counterfactual: what would have happened to companies' balance sheets assuming they had not engaged in prudent risk management or had implemented the same prudent risk management objectives without swaps?

(778) The FD's approach is also contrary to the CMA in PR19, which "[…] *included all debt costs, including those 'non-pure' costs previously disputed in Ofwat's balance sheet approach, negating much (but not all) of the disagreement on the correct measurement of actual debt costs*".[468] The FD rationale for deviating from the CMA's approach and excluding swaps is also untenable. Companies may incur any form of debt for real-world reasons that do not reflect the behaviour of the hypothetical efficient or notional company, as it would not face similar situations. The FD's approach is accordingly arbitrary.

(779) The FD also contradicts itself in its overall approach. Derivatives have to be used if the companies are to manage the basis risk that Ofwat has created between RPI-linked embedded debt and companies' CPIH-linked RCV and revenues. However, the FD contends that companies must bear both the basis risk and the costs of prudently managing it through derivatives. The shift to CPIH is a regulatory policy: the FD thus transfers the cost of Ofwat's policy decision onto the companies. Companies are thus in a "catch 22" situation: exposed to a factor outside of the companies' control which Ofwat contends they should not be funded to manage.

3.1.2 The "actual-notional" approach is methodologically flawed and underfunds the sector's actual cost

(780) The FD's "actual-notional" model risks understating the actual cost of debt. The "actual-notional" benchmark is intended to adjust only for the debt mix, aligning it with the notional company assumptions. However, it does not solely adjust a company's portfolio to reflect the notional debt mix; it also alters the weighted-average timing of issuance within the company's portfolio.

(781) The weakness of the actual-notional approach is that it fails to control for the different timing of debt issuance and the associated pricing. Companies inevitably enter into fixed and index-linked instruments at different times and prices depending on the prevailing rates. By simply applying the notional debt mix comprising 67% fixed rate debt and 33% index linked debt to the instruments on the balance sheet, the model risks resulting in a lower overall cost of

[466] Ofwat, PR24 final determinations: Aligning risk and return, Allowed return appendix (March 2025), page 90 (See here).
[467] KPMG, *Estimating the Cost of Capital for PR24*, page 114 onwards (Annex 036).
[468] CMA, PR19 Final Report (March 2021), para. 9.552 (See here).

embedded debt insofar as the mix of balance street instruments mean the actual-notional calibration gives artificial weight to instruments issued at a lower cost.[469]

(782) The implication is that Ofwat's "actual-notional" cost is over simplified and does not fulfil the purpose for which it was designed. To correct for this, the "actual-notional" cost should be excluded from the balance sheet calculation.

3.2 The cost of new debt underestimates the real premium of the sector over the iBoxx A/BBB 10+ index

(783) The FD calculates the cost of new debt based on the iBoxx A/BBB 10+ index plus a 0.3% uplift on the index and a CPIH assumption of 2.0%. This equates to a cost of new debt of 3.74% in real terms. The allowance is indexed with an end of period reconciliation at PR29.

(784) The allowance should be a fair and achievable estimate of the cost of debt likely to be incurred by a notional company. However, the 30bps uplift provided in the FD is not sufficient to render the allowance achievable given the worsening credit quality for the notional company. It is unlikely that the notional water company will achieve and maintain the target rating set out in the FD across all three rating agencies, given the revised views from rating agencies on regulatory and business risks in the sector.

(785) The level of uplift on the iBoxx A/BBB 10+ index underestimates the notional company's ability to issue debt at the same cost implied by the benchmark index:

(i) A like-for-like comparison of the yield on new water bonds with iBoxx yields on the same day, starting from November 2022 (i.e., the most representative issuances), shows that the average yield difference for Baa1/BBB+ water company bonds from 1 November 2022 to 31 January 2025 is 46bps. A limitation of this analysis is the scarcity of new issuances since the publication of the PR24 FD, meaning the yield-at-issue data may not accurately reflect current spreads for water company debt. Consequently, more recent secondary market data is also considered to inform the quantification of the adjustment to the benchmark index.

(ii) An analysis of secondary market spreads for Baa1 water bonds suggests an uplift of around 0.3% (based on a company-level median). The spread for Yorkshire Water, with a hybrid credit quality between Baa1 and Baa2, is 26bps higher and likely closer to the notional company.

(786) Anglian accordingly submits that there should be an upward adjustment range of 30-50bps with a point estimate of 40bps, 10bps higher than the FD value.[470]

3.3 The share of new debt is based on incorrect inputs and is internally inconsistent

(787) The FD has calculated a share of new debt of 24% based, in particular, on an assumption of RCV growth of 5%.

(788) KPMG's Report, *Estimating the Cost of Capital for PR24*, sets out the full set of methodological errors. The most material is that the RCV growth assumption for the notional company is understated. The FD's own financial models support RCV real growth of 5.7 (real) or 8.1% (nominal). The harmful effects of the error are clear: the significant increase

[469] KPMG, *Estimating the Cost of Capital for PR24*, page 113 (Annex 036).
[470] KPMG, *Estimating the Cost of Capital for PR24*, pages 121-127 (Annex 036).

in the cost of debt means that understating the proportion of new debt means that the notional company is bearing the incremental cost of such new debt.

(789) Adjusting for the incorrect inputs and internal inconsistencies, whilst retaining the rest of the methodology unchanged, increases the estimate to 28% for WaSCs and large WoCs..[471]

3.4 The FD does not correctly calculate the costs of carry and liquidity

(790) The FD has calculated a cost of carry of 0.07% and liquidity of 0.03% (i.e., a total of 0.1%). The cost of carry is the cost of issuing debt ahead of need and is calculated as the spread between cost of new debt and the deposit rate earned on the cash proceeds from the debt issuance, over the duration of the pre-financing period. Liquidity cost is the cost of maintaining requisite liquidity facilities. Efficient companies incur such costs as part of risk management and treasury.

(791) As set out in the KPMG Report, *Estimating the Cost of Capital for PR24*, the FD applies a flawed model with outdated inputs, makes assumptions that are disconnected from actual liquidity requirements and management practices and makes a number of methodological errors which underestimate the cost of liquidity and carry. Applying an appropriate model and incorporating the correct inputs, notably updating the values used at DD, result in a cost of carry between 0.17%-0.26% and liquidity at 0.04%.[472]

3.5 The FD should not have excluded basis risk

(792) The FD makes no allowance for the basis risk between RPI and CPI indexation. AMP8 sees the water sector transition to full CPIH indexation, replacing the 50% RPI and 50% CPIH indexation applied at the beginning of AMP7.

(793) As set out in the KPMG Report, Estimating the Cost of Capital for PR24, there is a material and volatile wedge between RPI and CPI, CPI and CPIH as well as RPI and CPIH. The accelerated transition to full CPIH indexation implemented at PR24 exposes companies to new risks and costs, including basis risk from the mismatch between RPI-linked debt and CPIH-linked RCV, and the higher cost of less liquid CPIH debt.

(794) KPMG estimates the cost of managing this basis risk at 6bps, based on bank pricing evidence. This aligns with Ofgem's RIIO-2 methodology, which provided a 5bps allowance for energy networks. The higher estimate for water companies reflects the greater prevalence of index-linked debt in their portfolios.

4 The RCV run-off rates applied should be revised

(795) In PR19, Ofwat required companies to indicate in their Business Plans their proposed RCV run-off rates, explaining any proposed departure from “natural” rates (a term which was not defined by Ofwat). Anglian, supported by Reckon LLP, determined the “natural” RCV run-off rate for the four wholesale price controls.[473] However, to limit the customer bill impact during AMP7 (while still maintaining sufficient credit metrics), the Company proposed slightly lower run-off rates in its Business Plan, which were adopted by Ofwat and the CMA.[474] Anglian

[471] KPMG, *Estimating the Cost of Capital for PR24*, pages 127-128 (Annex 036).
[472] KPMG, *Estimating the Cost of Capital for PR24*, pages 128-132 (Annex 036).
[473] Reckon, Evidence on the natural rate of RCV run-off: report for Anglian Water (See here).
[474] CMA, PR19 Final Report (March 2021), para. 10.127 (See here).

signalled in the PR19 Business Plan that it envisaged RCV run-off rates would need to return to "natural" rates in AMP8.[475]

(796) In PR24, Ofwat reduces the RCV run-off rates further. First, in its Final Methodology, Ofwat provided guidance on upper limits of acceptable RCV run-off rates, with the additional requirement that run-off rates should not exceed those used at PR19.[476] Anglian complied with that guidance in its Business Plan, resulting in RCV run-off requirements lower that those used at PR19 for two of the four price controls. Second, the DD reduces the RCV run-off rates further, presumably to lower bills increases whilst still appearing to attain an FFO/Net debt average of 10.00% across AMP8.

(797) Whilst Anglian did not challenge these interventions from Ofwat in its Business Plan or DD Representations, the subsequent changes in required credit metrics from rating agencies, in particular the FFO/Net debt ratio favoured by S&P, now require a change to the RCV run-off rate to enable the notional company to achieve a BBB+/Baa1 rating and thus remain financeable. Anglian believes that an NPV-neutral adjustment to the RCV run-off rates is the fairest way to achieve this for customers. Therefore, the CMA should increase the RCV run-off rates to their PR19 levels to achieve the required level of financeability for the notional company (as measured by FFO/Net debt), undoing Ofwat's changes in PR24.

5 The retail margin adjustment should be removed

(798) Ofwat remunerates the financing costs of the retail control with a retail margin covering the cost of financing fixed assets and working capital and providing compensation against systematic risk. To avoid double-counting compensation for undiversifiable risk in both the allowed return on capital (at the appointee level) and the retail margin, Ofwat makes a retail margin adjustment to the former, based on the retail margin revenue minus the revenue attributable to the return on fixed assets and working capital. The FD sets a retail margin of 1.5% (increased from the DD), and a retail margin adjustment based on this margin of 0.06%.[477]

(799) Ofwat's approach to the adjustment is, however, internally inconsistent: either the retail business is part of an integrated appointee, in which case the whole capital base should be funded in line with the appointee WACC (at a minimum); or it is standalone, in which case, its financing cost would be much higher, considering its lack of RCV. Further, the adjustment assumes that (i) the risk of the retail business exceeds that of the wholesale business; and (ii) these additional risks are fully priced in the retail margin. These assumptions are not substantiated by evidence.[478]

6 The CMA needs to correct the WACC to ensure Anglian's investability and financeability in PR24

(800) On the assumption that the areas of risk explained in the Statement of Case are addressed "at source", the CMA should make the following adjustments to the WACC to correctly calibrate the WACC and ensure Anglian's investability and financeability.[479]

[475] See Anglian, Our Plan 2020-2025 (See here).
[476] Ofwat, Creating tomorrow, together: Our final methodology for PR24, page 118 (See here).
[477] Ofwat, PR24 final determinations: Aligning risk and return, (December 2024), page 29 (See here).
[478] KPMG, *Estimating the Cost of Capital for PR24*, pages 83-86 (Annex 036).
[479] The cumulative impact of these changes is estimated by Anglian to be 10.62% (Yr 5 on Yr 5) before inflation, assuming the other building blocks raised in this Statement of Case are separately addressed.

6.1 The cost of equity should be adjusted to reflect the broader risks in the sector

(801) For the reasons set out in the preceding sections, a number of parameters of the CAPM model should be recalibrated as follows:

(i) Beta: the CMA should (i) include Pennon; and (ii) put more weight on recent market data by using short as well as long-term estimation windows of historic data. This results in an equity beta range of 0.69 to 0.76;

(ii) TMR: the CMA should re-calibrate the TMR to (i) rely on ex-post data rather than include subjectively adjusted ex-ante data and (ii) reflect the TMR rates that have prevailed in high-interest rate environment. This results in a TMR range of 7 – 7.5% (CPIH-real);

(iii) RFR: the RFR should be updated for more recent market data and factor in the convenience yield. This results in a RFR of 2.31%.

(802) The cumulative effect of these changes is a cost of equity between 5.53 – 6.25% (CPIH-real). For the reasons set out above, including evidence from Oxera's cross-checks referred to in **Chapter H.1 (*Investability and Financeability*)**, the price control should: (i) "aim up" to the top of the range (6.25%); and (ii) confirm that the cost of equity is expected to increase over future AMPs to provide reasonable certainty to investors over the investment time horizon.

(803) Insofar as all asymmetric risk is not addressed "at source" in the redetermination, a further aiming up beyond 6.25% should be included.

6.2 Correct calibration of the cost of embedded and new debt

(804) For the reasons set out in the preceding sections, the cost of embedded and new debt should be as follows:

(i) CoDE: the CMA should (i) take into account all debt costs, including derivatives; and (ii) resolve the flaws in the estimate arising from Ofwat's "actual-notional" approach. This results in a CoDE estimate of 2.94%;

(ii) Cost of new debt: the CMA should apply an upward adjustment range based on secondary market evidence and the recent adjustments in the iBoxx index. This results in a cost of new debt range of 4.27-4.47%;

(iii) Share of new debt: the CMA should correct the errors in Ofwat's estimate, in particular the RCV growth assumption. This results in an estimate of 28%;

(iv) Cost of costs of carry and liquidity: the CMA should correct the errors in Ofwat's modelling. This results in an estimate of 0.29-0.44%;

(v) Basis risk: the CMA should make allowance for the basis risk between RPI and CPI indexation.

(805) The cumulative effect of these changes is a cost of debt between 3.60-3.81%. The mid-point estimate is 3.71%.

6.3 RCV run-off rates

(806) The RCV run-off rate for the notional company should be increased to the levels at PR19.

6.4 Retail margin adjustment

(807) Using the appropriate working capital balance and financing rate reduces the retail margin adjustment to less than 1bp. Therefore, Anglian considers that no adjustment should be applied.