Anglian Water PR24 Redetermination

Response to Disputing Companies' Statements of Case Submitted 29 April 2025

PR24: Anglian's response to Disputing Companies' Statements of Case

Anglian is challenging Ofwat's FD due to its flawed balance of risk and return, which jeopardises the Company's long-term financial and operational resilience and its ability to meet the radically different investment proposition the sector faces at PR24 and beyond. Despite recognising the necessity for growth-centric investment, the PR24 FD falls short of ensuring the required funding to address these challenges, or to empower companies to meet their PR24 obligations and secure long-term network resilience for their customers and environment.¹

This submission contains Anglian's comments on the Statements of Case ("SoCs") submitted on 21 March 2025 by other water companies challenging Ofwat's FD at PR24 (the "Disputing Companies").² Given the similar nature of many of the issues raised by the disputing companies and the submission length limitations, Anglian only makes limited comments on the key issues arising across the SoCs. Section 1 contains a high-level summary of the approach of the Disputing Companies on common issues with Anglian's SoC. Section 2 addresses the SoC's approach to certain base model issues. Section 3 considers enhancement, Section 4 focuses on PCs and ODIs, and Section 5 discusses PCDs. Finally, Section 6 explores how the SoCs approach investability, financeability and allowed return.

SECTION 1: APPROACH TO COMMON ISSUES

1. Base Costs - Mains Renewal

Significant concerns on the adequacy of base costs allowances are voiced across each SoC, with all companies identifying, like Anglian, material underfunding at PR24.

Like Anglian (whose SoC explains its own material concerns around the impact of underfunding its critical base programmes, such as maintaining its leading leakage levels in its water-scarce region) SoCs identify the risk of material impacts of underfunding on the ability to implement important work on the ground.³ It is rightly identified that these concerns are amplified by the impacts of underfunding in prior AMPs,⁴ the increasing enhancement and/or performance pressures that have been piled into base⁵ and by the rigidity imposed by PCD and ODI structures (see below).⁶

A common specific concern is that the FD errs in concluding that base funds a mains renewal rate of 0.3% p.a.⁷ Across the SoCs, water companies join Anglian in criticising the FD's approach in formulating a base allowance estimate. Criticisms made by the SoCs include the methodology adopted to calculating the implicit allowance⁸ as well as for wrongly penalising companies for alleged

¹Anglian, §196.

² Namely, for purposes of this submission, Northumbrian Water ("**NW**"), South East Water ("**SEW**"), Southern Water ("**SW**"), and Wessex Water ("**WW**"). Unless specified otherwise, terms are as defined in Anglian's SoC. For completeness, the term "FD" is used to collectively refer to the Final Determinations of the Disputing Companies as well as Anglian's Final Determination.

 $^{^3}$ SEW §1.12. 4.14 and 4.30; WW §8.49, NW, §21, 298, 358.

⁴ SW Chapter 3 §295; NW §§217-218; See also WW 8.5(d).

⁵ SEW §4.13; NW §41; See also WW 8.32(b).

 $^{^{6}}$ SEW §§1.12, 1.17, 4.14, 4.30; WW §8.40; NW §§26, 220. SW Chapter 3, §273.

 $^{^7}$ NW §§353-356; SW Chapter 3 §252; SEW §§4.24-4.25; WW §8.40.

⁸ NW §§332-336; SEW §§4.24-25; SW Chapter 3, §262-269.

under-delivery.⁹ This results in a considerable funding gap, forcing companies to make choices that are not in customers' best interests and do not support long-term resilience.¹⁰

While the precise solutions vary (with NW and SEW identifying an implicit renewal rate of 0.15% p.a. (or less); SW of 0.17% p.a.; and Anglian a rate of no more than 0.2% p.a.),¹¹ there is clear agreement that mains renewal is materially underfunded, and adjustment is necessary.

2. Asset Health

Anglian's critical concerns as to the inability of the FD (and Ofwat's current regulatory approach) to adequately address asset health by underfunding, underutilising and overly-constraining options to address asset health challenges are echoed in other Disputing Companies' SoCs.

Concerns are evident in the detailed sections of SW, NW and WW's SoCs that discuss asset health underfunding, with WW also commissioning an Economic Insight report on long-term asset resilience, and NW (who, like Anglian, raised the risks of Ofwat's approach to asset health also in the PR19 redetermination) identifying asset risk management as its SoC's "*most important area*".¹² Each of these SoCs identify persistent capital maintenance underfunding in multiple AMPs, including at PR24, where concerns are also exacerbated by the introduction of PCDs (see further below).¹³

Anglian's concerns as to the impact of underfunding (including on future bill profiles) are also supported by the risks identified in other SoCs. NW identifies the risks of higher costs down the line of deferring asset replacement, while SW warns that not investing can be very costly long-term in the event of asset failure.¹⁴ Risks of poor asset health to resilience, customer service standards and environmental outcomes are also identified.¹⁵

The factors identified as driving poor asset health outcomes and concern as to the lack of material progress in this space since PR19 are similar to those in Anglian's SoC. Key causal factors cited in the SoCs include an over-reliance on historic benchmarking that does not reliably assess the sufficiency of past spend to cover future capital needs of the sector's changing asset base,¹⁶ which is amplified by the high burden for and rejection of CACs,¹⁷ and a framework that can incentivise short-term decisions over empowering long-term resilience investments.¹⁸ Companies likewise raise concerns as to Ofwat's reasoning for refusing base funding for certain asset renewal activities on the basis of avoiding customers paying twice; whilst Ofwat would rightly be concerned to avoid any such double payments, companies rightly flag (per Anglian's SoC) that an assessment of whether allowances have previously been awarded must recognise the backdrop of the applicable regulatory framework of empowering companies to allocate allowances efficiently in accordance with their

⁹ SEW §4.26; NW §§231, 445; SW Chapter 3 §§270, 274-281.

¹⁰ NW §358; SW Chapter 3 §270.

¹¹ NW §356; SW Chapter 3 §269; SEW §4.29. Anglian §321(i). WW SoC does not specify a specific implicit allowance. It is noted that WW refers at footnote 30 to its original CAC (Annex A017) and that a 0.24% rate was estimated on page 11.

¹² NW §19.

 $^{^{13} \}text{ NW } \$\$26, 162, 317; \text{ SW Chapter 2 } \$\$366-372; \text{ WW } \$\$8.1 \text{ and } \$.16, \$.27 \text{ and } \$.40, \text{ and WW Annex A222 } \$6-7 \text{ and } \$12-13.$

 $^{^{14}\,\}rm NW$ §§27, 30, 299; SW Chapter 2 §360.

¹⁵ NW §§19, 27, 310; SW Chapter 2 §391.

¹⁶ SW Chapter 2, §§353, 362, 380; NW §§217-218, 293; WW §§8.32, 8.55 and Annex A22, §§22 and 26-27.

¹⁷ NW §§205, 224; WW Annex A22, §23-25.

¹⁸ WW §8.5.

particular needs,¹⁹ while WW and NW rightly flag that the assessment must be made in the context of the consistent historic underfunding of adequate maintenance activities.²⁰

There is clear agreement that the FD compares unfavourably to other UK regulatory frameworks, which demonstrate clear paths to better protecting resilience, customers and the environment in a sustainable way.²¹

SoCs recognise that the extent of concern in this area has elicited comment and review by external sources, including the ongoing "Cunliffe Review". Anglian agrees with NW as to the importance of still ensuring the right outcome for PR24,²² including as this will help to support resilient price-control outcomes for PR29 and beyond. The specific outcomes requested at PR24 vary (all Disputing Companies request changes to mains renewal as above, while some identify broader funding needs for specific assets or in-period gated allowance mechanisms).²³ However, there is clear alignment on the urgent need for funding to address asset health and replacement activities at PR24 and beyond, with agreement that the Asset Health Roadmap is unable to resolve the concerns.²⁴ The implications of the SoCs are clear – a regulatory step-change is required to ensure long-term resilience, and the CMA is respectfully requested to act to mitigate the harms flowing from the status quo approach.

3. PCDs

While Anglian supports PCDs in principle, certain elements of Ofwat's PCDs are unnecessarily restrictive and introduce unnecessary cost and risk. Similarly, the SoCs make it clear that the PCD regime, as envisaged by Ofwat, results in inflexible, inefficient expenditure,²⁵ is unjustifiably punitive,²⁶ and creates significant asymmetric downside risk²⁷ that limits water companies' ability to effectively attract investment. Further, the PCD regime's administrative burden²⁸ exerts unnecessary pressure on water companies and hinders their ability to operate effectively as businesses.

The SoCs each present varying methods by which the concerns could be alleviated. SEW requests that the CMA generally recalibrates the entire PCD regime,²⁹ NW, SW and Anglian all request specific adjustments to certain PCDs,³⁰ and most Disputing Companies request that structural changes are made to Ofwat's PCD regime, including the elimination or limitation of time-incentive PCDs,³¹ a softening of the penalty system³² and the rebalancing of asymmetric risk.³³ Anglian believes that the remedies it proposes would address the concerns raised by the sector. Reflecting on

²⁷ SEW Chapter 5, section 3.

¹⁹ SEW §4.26; WW Annex A22, §§ 36-37. SW Chapter 3 §§273-274, 294-297. See also NW §231.

²⁰ NW §§270-271; WW §205.

 $^{^{21}}$ NW §§29, 198; WW SoC §8.47 and Annex A22, §39.

 $^{^{\}rm 22}$ NW §pg. 4 and para.11.

²³ NW, §321; SW Chapter 2, §390; WW §8.57.

²⁴ NW section 4.2.3.4; SW Chapter 2 §§354, 388.

 $^{^{25}}$ NW §§26 and 42; SEW §1.12(c); WW §1.39(a); SW Chapter 5, section 2.

 $^{^{26}}$ SEW §1.18; WW §1.41; SW Chapter 5, section 2.

²⁸ SW Section 5.3; WW's DDR WSX-002 – Price Control Deliverables §1.1.

²⁹ SEW §4.18.

³⁰ SW section 7.5; NW §§492, 516 and 522.

³¹ SW §148.

 $^{^{32}}$ SW section 7.7; WW's DDR WSX-002 – Price Control Deliverables \$1.1.

³³ NW §407; SW section 7.7.

the SoCs, Anglian observes that two-sided PCDs (i.e. where allowances can increase where more outputs are delivered) could help reduce risk asymmetry. Anglian provides a further remedy to address uncertainty of future growth forecasts through a specific STW growth PCD adjustment.

4. Frontier Shift

All SoCs show that, on any reasonable basis, the 1% p.a. target set in the FD is too high. The SoCs, supported by the analysis of Economic Insight, evidence the errors made, including the need to challenge status-quo assumptions³⁴ and reflect the realities of persisting UK productivity trends,³⁵ the lack of evidence for water-sector outperformance vs. the wider economy,³⁶ and the stretch already included in the FD package.³⁷

Anglian and NW propose a 0.8% target whilst SEW, WW and SW propose 0.5%.³⁸ While the precise solutions vary, the SoCs are united in showing 1% is not supportable. The CMA should be mindful that the 0.8% Anglian proposes is stretching in light of the weak evidence for meaningful sector productivity growth.

5. Outturn Adjustment Mechanism

Anglian supports Ofwat's use of an OAM and believes a well-calibrated OAM can mitigate risks associated with sector-wide outperformance or underperformance given the uncertainty in forecasting future performance and potential for miscalibration. However, Anglian considers that Ofwat has erred in including a deadband whereby the median company could still be in penalty if sector-wide average performance remains within the deadband range, despite targets being fundamentally miscalibrated in PR24 for the sector as a whole.³⁹

This concern is echoed by others, including SEW, NW, and SW, who argue that the deadband undermines the OAM's purpose⁴⁰ and introduces unacceptable downside risks.⁴¹ The deadband hampers a mechanism intended to drive efficiency and mimic competitive pressures. Eliminating the poorly justified deadband would allow companies to improve service delivery and better protect customers against unexpected outperformance.

6. Investability, Financeability and Allowed Return

The Disputing Companies agree that the FD is unlikely to be investable. It ignores the radically changed investment needs, deteriorating profile of sector returns in AMP8 and beyond, and preponderance of evidence illustrating the need for a cost of equity of at least 6.25% (CPIH-real) to

³⁴ SEW §§4.83-4.84; NW §§411-412; WW Annex A119 §20.

 $^{^{35}}$ NW §412; SW Chapter 2 §§287, 295, 298; SEW §4.87, 4.90, WW Annex A119 §1, 6.

 $^{^{36}}$ SEW §§4.86-4.95; NW §413; SW Chapter 2 §§287-303, WW Annex A119 §1 and 7-8.

³⁷ NW §415; SW Chapter 2 §305.

 $^{^{38}}$ NW §414. SEW §4.96; WW Annex A119 §1; SW Chapter 2 §314.

³⁹ Anglian §67.

⁴⁰ NW §531; SW §67.

⁴¹ NW §534; SW§272; WW Annex A5 §1.32; Anglian §575.

attract necessary new investment.⁴² They also agree that Ofwat is wrong that the FD is financeable, whether or not it attracts the assumed equity.⁴³

As outlined in all the SoCs, Ofwat's miscalibration of the cost of equity stems from ignoring the compelling range of evidence for a higher cost of equity, adopting a CAPM which systematically underestimates each of its constituent elements, and failing to adequately "aim up".⁴⁴ While more specific, the Disputing Companies are also in broad agreement on the FD's shortcomings in respect of calibrating the cost of debt as well as the flaws in the key assumptions underpinning the FD's financeability assessment.⁴⁵

Consistent with the commonality of concerns with the Allowed Return, the Disputing Companies are proposing broadly similar solutions, namely the CMA should set WACC commensurate to sector risks; and address the FD asymmetry either "at source", where possible, and / or through additional "aiming up". Anglian has also proposed that the CMA provide a clear indication to investors on the long-run cost of equity as a means to attract investment in AMP8 and beyond.⁴⁶

SECTION 2: APPROACH TO BASE MODEL ISSUES

Anglian included rigorously efficient costs in its PR24 Business Plan, aligning with Ofwat's base models in full.⁴⁷ While Anglian's SoC does not specifically challenge the base model mechanisms, SW and SEW's SoCs raise modelling points that merit comment.

1. APH should not be excluded from base models

FD water base cost models use (i) average pumping head ("**APH**"); and (ii) booster pumping stations per length of mains ("**PS/L**") to account for regional topographic differences in separate models which Ofwat then triangulates. SW's SoC argues for excluding APH models due to insufficient APH data quality, although it accepts the stronger engineering justification for using APH relative to PS/L.⁴⁸ The CMA should reject the suggestion that the APH models should be dropped.

Ofwat has rightly taken the decision that APH should be included in water cost models at PR24. In terms of data quality, Anglian notes that, while Anglian does not have full visibility of the data and efforts of other companies in this regard, it notes that Ofwat has found that data quality for APH since PR19 has significantly improved, and Anglian has previously provided Ofwat with analysis showing that the historical data can be robustly relied upon.⁴⁹ Moreover, and of particular importance, the relationship between APH and a key factor impacted by topography (energy consumption) shows that APH data is reliable throughout the historical period.

⁴² Anglian §§667-680. See also: NW Appendix 1 §176; SW Chapter 7 §§307-393; SEW Annex H §61.

⁴³ SEW §§7.25-7.30 and Annex H §20; NW Appendix 1 §199; SW Chapter 1 §§228-239.

⁴⁴ WW §10.12; NW Appendix 1 Section 7 §§151-156, §§158-160, §§166-168; SEW §§6.14-6.28; SW Chapter 7 §§129-193 and §§295-422.

⁴⁵ NW Appendix 1 Section 7 §208; WW §10.12. SEW §§6.32-6.39.

⁴⁶ Anglian §713.

⁴⁷ Anglian p. 52.

⁴⁸ SW Chapter 2, §67, 78.

⁴⁹ See Ofwat, PR24 FD, Expenditure Allowances, Base Cost Modelling Decision Appendix (2024), §23. (See <u>here</u>), and Anglian, Cost Adjustment Claims, Comments on Modelling, (2022) §4-7 (See <u>here</u>).

An important part of SW's case is the alleged poor correlation between APH and power costs, especially in recent years.⁵⁰ However, power costs depend on: (i) volume of power used; and (ii) unit price. While (i) is influenced by topography, (ii) varies by company hedging strategy and market fluctuations (as recognised by Figure 26 of SW's SoC). Accordingly, a strong relationship between power *costs* and either APH or PS/L is not necessarily expected, especially during market turbulence.

However, when removing price and hedging distortions by focusing on volumes, there is a clear difference between APH and PS/L in explaining power-used, as shown in **Figures 1** and **2** below.

Figure 1: Power use vs APH in 2024





Source: Anglian and Oxera analysis

Further, **Table 1** shows that this difference between the two variables in explaining power use (as expressed by R squared) exists across the entire FD model period.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Water Network + power vs N+ APH	0.88 6	0.79 2	0.805	0.83 0	0.74 6	0.83 6	0.80 1	0.82 1	0.81 1	0.71 2	0.65 5	0.74 2	0.87 9
Water Network + power vs. PS/L	0.02 8	0.02 5	0.046	0.06 3	0.07 3	0.09 5	0.03 7	0.05 3	0.04 2	0.05 3	0.04 6	0.04 9	0.00 2
Total Water power vs. Total APH	0.76 3	0.74 2	0.791	0.83 6	0.79 5	0.88 9	0.82 1	0.77 1	0.79 3	0.76 7	0.68 8	0.76 5	0.89 0
Total Water power vs. TWD APH	0.51 8	0.41 3	0.455	0.42 7	0.33 7	0.51 2	0.41 2	0.50 6	0.49 6	0.49 4	0.43 1	0.45 1	0.64 4

Table 1: R squared of power used vs APH and PS/L over time

⁵⁰ SW Chapter 2 §62-63.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Water power vs. PS/L	0.00 6	0.00 3	0.008	0.01 6	0.01 4	0.03 5	0.02 2	0.02 7	0.03 1	0.04 5	0.04 0	0.05 1	0.00 0

Source: Anglian analysis

Topography is included in cost models as a driver due to the need to pump water around the region, and the data above clearly demonstrates two facts. First, there is a strong relationship between power used and APH. Second, PS/L displays little or no relationship with power consumed. If anything, the evidence, therefore, calls into question models that include PS/L for topography, a point Anglian made at PR19 in its response to Ofwat's April 2023 modelling consultation and its PR24 Business Plan.⁵¹ Anglian, therefore, retains its long-held position that APH should be the only driver and that models using PS/L should be removed.

For completeness, Anglian notes the FD uses Treated Water Distribution ("**TWD**") APH in both the TWD and total water cost models (Line 4 in **Table 1**). As it has previously argued, Anglian maintains that Ofwat should use only *total APH* in the total cost models. Although **Table 1** shows a strong level of fit for water power vs. both TWD APH and total APH, the former is markedly inferior to the latter.

Finally, if an additional driver to APH is to be used to triangulate models, pumping station *capacity* rather than *number* is a more relevant variable to capture pumping related costs.⁵² Per Anglian's Business Plan, capacity is a more intuitive driver from an engineering perspective, as it captures the greater costs for larger pumping stations.⁵³ Per **Figure 3** below, PS capacity also has a stronger correlation with power use than PS number (see **Figure 2** above) when both variables are normalised by mains length (consistent with both Ofwat's PR19 and PR24 FD modelling suites). A regression of energy use against PS capacity/L gives an R squared of c. 0.4 — substantively better than number of PS/L (c. 0.0) (although still substantially lower than for APH (c. 0.9)).

Figure 3: Power vs Pumping station capacity



Source: Anglian and Oxera analysis

⁵¹ Anglian, Base cost modelling consultation response, (2023) §1 (See <u>here</u>). Anglian ANH45 Cost Adjustment Claims - Comments-on modelling (2022) §3 (See <u>here</u>).

⁵² This would be consistent with Ofwat's wastewater cost modelling, which uses associated pumping capacity rather than simply the number of water recycling centres.

⁵³ Anglian's biggest and smallest pumping stations have 4,736kW vs. 1kw capacity respectively. The FD approach using PS/1 assumes the stations meet identical requirements to pump and transport water. Using PS capacity /l recognises their huge workload and cost difference.

2. PS/L should not be included in models, including as a network complexity driver

SEW's SoC argues for the addition of PS/L in the same models as APH which SEW suggests would negate perceived Omitted Variable Bias in the models.⁵⁴

SEW's economic report elaborates that Booster Pumping Stations (**BPS**) may better capture costs associated with operating, maintaining and replacing a large number of network assets, and appears to be characterised as potentially capturing costs associated with "network complexity" in parts of SEW's case.⁵⁵

Anglian does not consider PS/L should be included in the models. To the extent that this intends to capture asset numbers and their operation / maintenance costs, **Tables 2-4** below show that such stations only account for a minority share of non-infrastructure ("**non-infra**") asset numbers and capital maintenance ("**CM**") expenditure. Anglian agrees with Ofwat's FD statement that: "*Network configuration is complex, and focusing on the number of boosters in addition to TWD APH ignores other aspects of network complexity such as service reservoirs, water towers, and the degree of interconnectivity within a network."⁵⁶*

Table 2: Treated Water Distribution non-infra asset types

Asset class	Number of assets	% of 2024 Anglian non-	
		infra CM	
Booster Pumping Stations	5,270	7%	
Service Reservoirs	3,897	270/	
Water Towers	448	27%0	

Source: Anglian Analysis

Table 3: Pumping Statio	n maintenance costs a	is a share of non-infra	and total CM
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	PS Share of	non infra CM	PS Share of total CM			
	ANH	Industry	ANH	Industry		
2001	7%	6%	4%	4%		
2006	3%	7%	2%	4%		
2011	6%	5%	3%	3%		
2020	7%	N/K	3%	N/K		
2024	7%	N/K	3%	N/K		

Source: Anglian analysis

Table 4: Service Reservoir & Water Tower maintenance costs as a share of non-infra and total CM

	Service Reservoir &	Water Tower	Service Reservoir & Water Tower			
	Share of non int	fra CM	Share of total CM			
	ANH	Industry	ANH	Industry		
2001	8%	8%	5%	5%		
2006	8%	7%	6%	4%		

⁵⁴ SEW SOC, §4.19.

⁵⁵ SEW SOC, Oxera, March 2025. Base cost adjustments and coset adjustment claims, §§4-5, 7, 22-23, 28.

⁵⁶ PR24 FD: Expenditure allowances - base cost modelling decision appendix (December 2024), §§23-24 (See here).

2011	3%	6%	2%	3%
2020	12%	N/K	7%	N/K
2024	27%	N/K	11%	N/K

Source: Anglian analysis

PS/L is therefore an incomplete measure of the scale / cost of TWD non infrastructure assets, representing less than 5% of aggregate capital maintenance expenditure. A variable capturing such a small share of the associated costs cannot credibly resolve any bias associated with any omitted variable. As such, SEW's arguments for including PS/L in models with APH should be rejected.

Anglian notes that where other regulators have sought to capture the costs associated with managing a large and complex asset base, they have sought to develop indices that capture the whole asset base rather than picking an arbitrary (and small) asset category as a proxy, such as Ofgem's RIIO-2 Modern Equivalent Asset Value (MEAV) and Composite Scale Variables (CSV).⁵⁷

3. CMA should continue to use five-year data for industry energy cost adjustments

SW seeks a company-specific adjustment to its energy costs for its particular circumstances. One SW proposal is to use a longer time period to calculate the share of company energy costs.⁵⁸ While individual company circumstances may justify tailored approaches, for the industry as a whole CEPA / Ofwat's five-year period is appropriate. As CEPA argues, more recent years are more reflective of current energy consumption requirements. More generally, placing greater weight on more recent, relevant data is an approach that Anglian considers generates more accurate cost allowances, as per Anglian's SoC with respect to implicit mains renewal funding.⁵⁹

4. CMA should exclude sewage treatment model that fails to capture economies of scale

SW proposes removing the sewage treatment model that uses "load treated in bands 1-3" to control for economies of scale on the grounds that: (i) such a discrete variable is inferior to a continuous variable, requiring decisions on band boundaries that must be arbitrary as it cannot reflect the full detail of real world data; and (ii) its lack of statistical significance, which is contrary to Ofwat's modelling principles.⁶⁰

Anglian has long advocated that Ofwat's wastewater cost modelling makes insufficient allowance for the substantial differences in sewage treatment unit cost between STWs of different sizes. While Anglian was pleased that Ofwat introduced two scale economies variables in PR19, it has argued that Ofwat should go further and employ just the single continuous variable, Weighted Average Treatment Size ("WATS"). For example, in Anglian's response to Ofwat's 2023 base modelling consultation,⁶¹Anglian wrote: "We strongly encourage and favour the use of the WATS variable as it

⁵⁷ In RIIO-ED2, Ofgem noted that "*MEAV* is one of the most significant cost drivers in our cost assessment and [...], is used across all three of our totex models. *MEAV* is calculated for each DNO and is the product of asset volumes and costs and helps explain the size and scale of DNOs' networks. Typically, a larger network will have a higher MEAV and a higher totex allowance requirement to manage and operate that network". Ofgem, RIIO-ED2 Draft Determinations – Core Methodology Document (2022, See here), §§7.114. Anglian (and other Disputing Companies) have more generally called for a material step-change in funding for asset health maintenance, as per Section 1 above. ⁵⁸ SW Chapter 2, §§326-328, 346.

⁵⁹ Anglian §2.20.

⁶⁰ SEW, 46 and 26-28, 32.

⁶¹ See Anglian Base Modelling Consultation Response (2023) (See <u>here</u>). Anglian also discussed SW economies of scale in its response to the CMA's provisional findings in PR19 and its PR24 CAC to Ofwat on lack of large works (2023) (See <u>here</u>).

accounts for different thresholds and, most importantly, accounts for the continuous relationship between unit costs and the size of STWs. We do not consider that arbitrary thresholds, imposing 'steplike' change in unit costs, represent an appropriate alternative when a continuous relationship is now available." Consistent with Anglian's long-held views, Anglian therefore fully agree with SW's case.

<u>SECTION 3: OFWAT'S COST ASSESSMENT FOR PHOSPHORUS REMOVAL</u> <u>ENHANCEMENTS</u>

Anglian highlighted in its SoC that it is supportive of the enhancement allowances made in the FD in the round.⁶² The overall allowance granted in the FD is reflective of the significant challenge Anglian applied to its own plan to ensure cost efficiency, following lessons learned from the PR19 redetermination of its totex assessment. It does not agree with every individual aspect of the enhancement cost assessment, but given this 'in-the-round' position, Anglian has not made representations on individual enhancement cost assessments (with the exception of leakage allowances, where Anglian considers that a clear error has been made). Anglian focuses its response here on P-removal allowances as a specific area which has been raised in other companies' SoCs. Anglian considers that there is additional information, specifically in this area of enhancement, not raised in other companies' SoCs which is relevant.

In its SoC, WW raises concerns about the adequacy of Ofwat's cost assessment for phosphorus removal ("**P-removal**") enhancements. Having raised similar issues regarding the inadequacy of the P-removal enhancement at PR19, Anglian provides further context on the development of the P-removal enhancement cost assessment approach since PR19.

1. Suitability of econometric models for P-removal

P-removal schemes are generally consistent across the industry in terms of their technical solutions, such as chemical dosing, filtration, and settlement. Furthermore, these solutions are common across a wide variety of sites, making P-removal suitable for cost modelling, unlike – for example - resilience investments which encompass a wide range of interventions and therefore require deep-dive assessments. The use of econometric models is an efficient way to assess these schemes because it allows Ofwat to compare costs across companies on a like-for-like basis.

The use of econometric models encourages companies to identify cost-effective solutions, thereby promoting innovation and efficiency within the industry. By applying a consistent cost modelling framework, Ofwat helps prevent inefficient or unnecessary cost decisions that could arise from individual companies' specific design choices. Moreover, econometric modelling is an essential tool for ensuring that allowances are set on a fair and consistent basis. If companies were allowed to claim higher allowances for their P-removal schemes based solely on local site factors, without evidence of systemic cost drivers across sites, there would be a risk of unequal treatment within the industry based on judgement of the available evidence. Ofwat's modelling approach ensures that all companies are subject to the same cost assessment.

⁶² Anglian SOC §396.

2. P-removal models assessment at PR19

At PR19, Ofwat's P-removal allowances were set on an overall company basis (rather than site level allowances) and cost driver data was limited to total population equivalent served by water recycling centres with a P-removal investment, the number of P-removal investment sites, and the number of sites with a consent level below 0.5mg/l.

In the PR19 Redetermination, Disputing Companies raised a number of concerns with this cost modelling approach, including: (i) the very limited number (10) of data points; (ii) the limited number of cost drivers; (iii) the lack of recognition of different costs for different consent levels, other than above or below 0.5mg/l; (iv) lack of recognition of the impact on previous investments and/ or existing consent levels at sites; (v) sole reliance on forecast costs; and (vi) lack of reflection of the regulatory driver of the P-removal investment, such as WFD / UWWTD (however Ofwat and the CMA considered this to be a theoretical constraint with limited real cost impact).

Having considered these concerns, the CMA expanded on Ofwat's approach at PR19 to also include models that reflected the number of sites with consent level below 1mg/l, and whether a site had previous P-removal investment as relevant cost drivers.

3. P-removal cost assessment approach in PR24a. Development of P-removal models since PR19

After PR19, Ofwat's cost assessment model for P-removal improved significantly, addressing each of the challenges faced at PR19 and set out above. In particular: (i) by using site level data, Ofwat has substantially increased the number of data points to assess P-removal cost from 10 to over 1,300, significantly improving the robustness and reliability of the model compared to PR19; (ii) the number of cost drivers has increased to reflect more closely the factors that drive costs on site. In addition to population equivalent and number of sites (considered through setting site-level allowances), the model now includes: (iii) a cost driver for the consent level ("enhanced consent") that accounts for greater investment requirements, the lower the permit. This removes the need to set threshold levels at which additional costs are required. It also includes an additional variable to reflect the latest view on the technically achievable limit (TAL) of 0.25mg/l, reflecting that meeting/exceeding this level of P-concentration will come with a step change in costs; (iv) a cost driver for the existing consent level for each site. This reflects that for the same level of new consent, investment requirements are likely to be lower where there is an existing consent (and the tighter the historic consent, the lower the investment requirement to meet the requirements of the new consent level); and (v) both historical and forecast costs to inform forecast cost allowances. Using historical actual P-removal enhancement costs in AMP7 from companies' APRs, the cost model no longer relies only on forecast costs that are subject to different companies' cost estimation approaches. Anglian provided further comments on Ofwat's approach to modelling P-removal in its DD Representation submission.⁶³

⁶³ Anglian, Comments on Enhancement Modelling, PR24 Draft Determination Representations (2024) (See here), pp. 4-5.

b. Supplementary approaches – bespoke adjustments to the cost models

A further development to the P-removal cost assessment approach post PR19 is the inclusion of tools to address investments not appropriately assessed via the cost models (at PR19, these were assessed via the single cost modelling approach). These include: (i) transfer schemes; (ii) schemes with permits below the Technically Achievable Limit (TAL); (iii) schemes with no change in consent; (iv) schemes with enhanced permits >2 mg/l; and (v) outlier schemes identified using Cook's Distance.

4. Challenges raised in PR24 SoCs

Anglian agrees with Wessex that each Water Recycling Centre has unique characteristics, and the specific conditions of each location can influence the cost of phosphorus removal. It also agrees that at an individual site level, Ofwat's P-removal cost model will not take these site idiosyncrasies into account. Importantly, however, these idiosyncrasies are reflected in the modelled cost allowance in aggregate (i.e., within each company's overall P-removal enhancement allowances). The econometric models used by Ofwat are designed to incorporate a broad range of data points that reflect these variations. These data points include: (i) <u>Historical costs</u>: These provide actual expenditure across c. 590 schemes in AMP7, which naturally captures the complexities and idiosyncrasies of individual sites; and (ii) <u>Company-submitted future estimates</u>: These are tailored to each site and consider expected site-specific challenges across 737 forecast schemes.

For scheme level models such as P-removal, it would not be expected that each individual site will be allocated an allowance that reflects site level idiosyncrasies. What is important is that the aggregate level of site-specific factors are reflected in the aggregate P-removal allowance. The variance in P-removal costs between sites within a company, or even across companies, is already accounted for by the model's comprehensive data set. While no model can fully replicate every unique condition, these inputs help ensure that site-specific factors are reflected in the overall cost assessment process. By leveraging extensive sector-wide data, this methodology strikes a balance between generalising industry-wide cost trends and acknowledging the individual challenges of particular sites.

Anglian comments on the concerns raised by WW on Ofwat's approach in Annex A15 of WW's SoC.

a. Relationship between scheme size and efficient costs

WW highlights in its table A15-1 a comparison of modelled costs versus companies' requested costs for different works size bands. The table shows a general trend of smaller sites having a smaller cost challenge than larger sites. Breaking this data down further demonstrates this trend is only observed in the historic cost models, not the forecast cost models (this is expected given the significant difference in the weight that these respective models place on population equivalent when setting allowances). This suggests there is no apparent bias towards smaller sites in the forecast model. The trend is observed in historical cost data. This implies that historical data suggest population equivalent is a smaller cost driver for P-schemes than companies' forecast data would suggest.

Figure 4: Relationship between p.e. and allowances (forecast models)



Figure 5: Relationship between p.e. and allowances (historic models)



Figure 6: Difference in allowance between forecast models and historical models



Source: Anglian analysis

Anglian therefore does not consider that the relationship between size and estimated efficient costs shows a fundamental flaw in the cost models, and that less weight should be placed on them. Rather, it shows that regulatory judgement is required to set the right weighting between the historic and forward-looking models. The benefits of using forecast data are well-trailed (by WW in paragraphs 9.63-9.75 of its SoC) and in Ofwat's FD (Expenditure allowances enhancement cost modelling appendix, page 82) and therefore Anglian supports a weighting of forecast modelling of at least 50%.

b. Relationship between permit level and cost

WW references evidence previously presented by Anglian at PR19 in favour of using a breakpoint of 1mg/l in the P-removal model.⁶⁴ To clarify, this submission was made in relation to a very different P-removal model. In Ofwat's P-removal model at PR19, the relevant breakpoint was the only way in which enhanced permit levels were reflected in the P-removal model. At PR24, the P-removal model includes permit level as a cost driver variable, more granular site-level data for both historical and future P-consent levels, and a squared variable to show the relationship is not linear.⁶⁵

Anglian agrees that at a site level there will be discontinuities where a threshold level is likely to prompt a different approach to meeting P-consent levels. However, it is not as simple as a single

⁶⁴ WW, Annex A15, para 1.13.

⁶⁵ Ofwat, Ofwat PR24 P-removal enhancement model, (2024) (See here).

consent level at every site. This is demonstrated in Anglian's Business Plan,⁶⁶ which showed the threshold varies from 0.3-1mg/l depending on a number of factors including population equivalent, existing consent level and whether there is existing tertiary treatment.

Therefore, Anglian does not consider using breakpoints to be necessary from an engineering perspective. It has been raised that multiple break points could be used, however this would (i) resemble a variable similar to the variable used in the FD, but in a more complex multi-variable format and (ii) overlap significantly with the variable used in the FD, which already reflects the non-linear increase in costs of meeting tighter permit levels.

c. Possible impact of regulatory drivers on efficient P-removal costs

WW has indicated that regulatory drivers may impact P-removal costs. Anglian does not recognise this as a key driver of its own P-removal costs.

5. Overall view on the P-removal cost assessment approach

The PR24 P-removal cost assessment marks a significant improvement over the approach taken at PR19, addressing the key concerns raised at that time. Further to this, the refined PR24 methodology for cost assessment overall, tackles company-specific variations through targeted adjustments founded on concrete evidence.

For instance, modelled allowances can be adjusted to accommodate external influences or geographical constraints affecting multiple schemes. This is demonstrated by Anglian's PR24 interconnector scheme, which is forecast to incur higher costs due to the necessity of using cost-efficient yet more expensive steel for pipeline construction.⁶⁷ This illustrates the potential for implementing precise adjustments without compromising the cost assessment process' overall effectiveness. An approach similar to this would be appropriate for companies such as WW that consider their P-removal allowances insufficient based on company-specific exogenous factors.

By integrating robust econometric modelling with bespoke evaluations for unique scenarios, this approach ensures companies are assessed on an equitable basis and provides flexibility for the regulator to account for specific factors outside the models where they are convinced by the evidence.

Anglian believes that the PR24 cost assessment methodology for phosphorus removal in Ofwat's FD is fair and fit for purpose. By incorporating scheme-level econometric modelling, alongside targeted bespoke adjustments, where appropriate, the framework ensures that the diverse needs of different companies are met while maintaining fairness and consistency across the industry.

⁶⁶ Anglian Water Business Plan ANH27: Enhancement Strategy – Ecological improvements. P. 45, table 24: Phosphorus removal option selection matrix.

⁶⁷ Anglian §397.

<u>SECTION 4: ANGLIAN'S RESPONSE ON PERFORMANCE COMMITMENTS AND</u> <u>OUTCOME DELIVERY INCENTIVES</u>

1. Overview

Anglian echoes Disputing Companies' concerns about the significant downside risk faced by the notional company in the current ODI package calibration. NW supports the KPMG analysis, cited also by Anglian, which concludes that the base case demonstrates a downside skew equivalent to -0.71% to -0.75% of RoRE due to regulatory design, and -1.55% to -1.58% of RoRE from regulatory calibration.⁶⁸ NW concludes that most of the downside risk comes from setting overly challenging targets and allowances, affecting investability. Similarly, Southern's analysis finds the P50 for a notional company is -0.5% of RoRE on ODIs.⁶⁹

This demonstrates the need for effective interventions to mitigate these risks and ensure a fair and balanced approach to performance commitments. To assist the CMA in running an efficient process, Anglian proposed targeted mitigations for only four performance commitments and the OAM.⁷⁰ In the sections below Anglian comments on other Disputing Companies' views on areas of common challenge and outlines its stance on the unchallenged PCs.

2. Outturn Adjustment Mechanism Deadband

Three other Disputing Companies agree with Anglian that the OAM deadband introduced by Ofwat without consultation should be removed (the other, WW, is silent on the deadband but notes the OAM does not fully resolve risk asymmetry issues).⁷¹ The same remedy is proposed: removing the deadband preserves performance incentives while safeguarding companies and customers from extreme outcomes.

3. Water supply interruptions

SW and SEW have, similar to Anglian, highlighted issues with Ofwat's approach to setting the PCL for the Water Supply Interruptions PC. SW argues that Ofwat's methodology for setting targets and baseline conditions for Water Supply Interruptions is inconsistent with its approach to other measures.⁷² Anglian agrees with SW that the 05:00 minute AMP8 target is more demanding than AMP7 industry upper quartile performance and therefore imposes an unjustified stretch from year one of AMP8. Anglian's proposed remedy to this issue is updating the PCL for Water Supply Interruptions to reflect recent historical performance, as detailed in the SoC.⁷³

4. Total pollution incidents

SW observes that Ofwat's PCL and ODI rate for total pollutions are unrealistic.⁷⁴ Anglian broadly concurs, particularly on resetting the baseline, but highlights a specific flaw with normalisation:

⁶⁸ NW §397.

⁶⁹ SW p. 366.

⁷⁰ Anglian, §§420-564.

 $^{^{71}}$ SEW §7.34; NW § 572 and preceding analysis; SW Chapter 6 §9.

⁷² SW Chapter 6, §101.

⁷³ Anglian §553.

⁷⁴ SW Chapter 6 § §123 and 129-132.

targets are set based on a narrow measure of sewer mains, rather than the broader range of assets that cause pollutions. Anglian notes that, although its proposed change to normalisation of total pollutions should ideally be industry-wide for the longer term and proposed this to the EA,⁷⁵ the CMA could, in practice, use it simply to calibrate Anglian's own PCL during the Redetermination.

Other companies did not specifically challenge this PC but, like Anglian, WW and SW note a rise in reported pollution incidents, due to enhanced monitoring within AMP7.⁷⁶ This supports Anglian's request that the 2024/25 baseline and PCLs be updated to reflect actual data, including increases in recorded pollution incidents due to better EDM monitoring.

5. PCD / ODI topics raised by other Disputing Companies not included in Anglian's SoC

Multiple Disputing Companies address extreme weather events' impacts on performance. SW requests extreme weather exemptions for eight PCs.⁷⁷ NW highlights regulatory precedent for exclusions, stating that Ofgem has set resilience standards for Distribution Network Operators allowing short duration power outages where driven by exceptional weather. However, it requests an additional allowance to improve power resilience to mitigate risks of extreme weather events to performance, rather than explicitly requesting exclusions.⁷⁸ Anglian's SoC noted it is particularly susceptible to the recent increase in extreme weather conditions, with surface water and groundwater levels putting pressure on the network. Anglian agrees⁷⁹ that uncontrollable volatility in performance for these measures compounds the asymmetric risk baked into the ODI package calibration. Anglian proposes these are addressed at source, in setting PCLs and ODI rates, with collars providing protection. However, Anglian maintains there are no incentive benefits from exacting heavy underperformance payments and erosion of trust in companies for uncontrollable weather events and would support such a change if the CMA were minded to make it.⁸⁰ If Anglian's proposed changes to other PCs – especially total pollutions – were rejected, such a measure would be essential.

To aid an effective redetermination process, Anglian only requested changes to four PCs. However, PCs challenged by other Disputing Companies do contribute to the overall asymmetric risk of the FD and Anglian has raised similar concerns at other stages in the PR24 process, as it explains below:

a. **C-MeX**: Anglian agrees with the methodological concerns raised by three Disputing Companies on the use of the UK-CSI benchmark for C-MeX at an industry level. Anglian agrees that benchmarking to the UKCSI is difficult due to differences in customer service resources between sectors like leisure, banking and retail, and regulated utilities.⁸¹ Based on current calibration of this PC, most if not all companies face penalties, undermining the base return. If the CMA wishes to dig into this further, Anglian suggested mitigations at DD.⁸²

⁷⁵ See Anglian, Appendix to Anglian Water's response to the Environmental Performance Assessment (EPA) consultation, (2024) (submitted as Annex 028 to Anglian's SoC) for more details.

⁷⁶ WW Annex A5 §1.29; SW Chapter 6 §125.

⁷⁷ SW p.366, §4.

⁷⁸ NW § 377.

⁷⁹ Anglian §519.

⁸⁰ Anglian §520.

⁸¹ SW p. 402, §1.14.

⁸² Anglian, ANH_DD_017, Outcomes Commentary, section 18. (See here)

b. **Biodiversity**: Anglian supports WW's concerns on the FD setting a common PCL (rather than company-specific PCL, contrary to Ofwat's PR24 Final Methodology), which fails to account for diversity in company landholdings and biodiversity improvement potential.⁸³ Calculating the PC based on company area unreasonably increases the number of biodiversity units to be delivered by WaSCs while providing no opportunities for delivering them, especially given the minimal opportunities⁸⁴ for biodiversity enhancement related to wastewater operations outside of a company's sewered area (85% of Anglian's wastewater company area is not sewered). Anglian responded to Ofwat's post-FD query, requesting Ofwat accept company proposed PCLs for this performance commitment, and would welcome CMA support for this.⁸⁵

SECTION 5: ANGLIAN'S RESPONSE ON PRICE CONTROL DELIVERABLES

Like Anglian, other Disputing Companies explain how Ofwat's approach to PCDs increases risk asymmetry and unduly limits companies' flexibility to adapt to changing circumstances and priorities. SW cites a P50 of -£58m for enhancement PCDs.⁸⁶ Anglian proposes some mitigations to reduce asymmetry but notes that any residual asymmetry should be accounted for in the cost of capital.⁸⁷

Where investment requirements are removed, PCDs require companies to return allowances to customers. However, where investment requirements increase during the AMP beyond that allowed in the FD, there is no equivalent process to recover costs from customers (only partially through cost sharing). Anglian considers that the Growth at Sewage Treatment Works PCD is particularly relevant here. Recent developments in the Government's growth agenda means there is an increasing expectation that growth will exceed forecasts used in the business plans and DD representations. Should additional growth needs materialise, this will require additional capital which has not been allowed in the FD. Anglian considers that a two-sided PCD for Growth at STW schemes would support additional growth in a way which protects customers (as customers would only pay for additional growth after it has been delivered) and accounts for uncertainty in growth forecasts (as additional allowances would only be granted if growth materialises). Anglian proposed a two-sided PCD in its original business plan.⁸⁸ Such a PCD could be implemented in the same way as the existing PCD, using Ofwat's econometric modelling. This intervention would partially address concerns regarding risk asymmetry, where cost allowances may be reduced but not increased.

SW highlights the risk of repayment of allowances in the event of being well advanced in the delivery of an output.⁸⁹ It notes the regime fails to recognise that reasons for delay or non-delivery may be beyond company control and that delays may not materially impact customer outcomes.⁹⁰ Anglian

⁸³ WW §1.29(c).

⁸⁴ The PCL requires that biodiversity improvements are carried out on company-owned land or in the process of a company carrying out its statutory functions—which would necessarily be within our sewered area. Ofwat Biodiversity PC definition, v2, p. 3.

⁸⁵ Anglian provided more detail on this in its response to Ofwat's query on Biodiversity PC company area, submitted 27 March 2025.

⁸⁶ SW p. 326.

⁸⁷ Anglian p. 164.

⁸⁸ Anglian, Anglian Water Business Plan ANH37 Price Control Deliverables appendix (2023), p. 18-20.

⁸⁹ SW Chapter 5 §45.

⁹⁰ SW Chapter 5 §45.

agrees that returning funding for outputs that are in-train for delivery is counterproductive as Ofwat's approach creates a cliff edge between AMPs, with funding returned and potentially re-requested. SW, like Anglian, suggests the CMA considers Ofgem's approach as a preferable alternative.⁹¹

All Disputing Companies express concerns that using PCDs to ring-fence base funding for certain activities reduces flexibility in prioritising activity across the entire asset base, harming long-term customer outcomes. NW highlights that 38% of industry water base capex is ringfenced this way (for Anglian, the equivalent is 46% for base capex for water networks plus).⁹² Several Disputing Companies state that base PCDs should only apply, at most, to additional funding provided and not include implicit base allowances derived from botex plus models.⁹³ Anglian supports this proposal.

SECTION 6: FINANCEABILITY AND INVESTABILITY

This section explores the commonalities and differences between the Disputing Companies' SoCs on investability, financeability, and allowed return.

1. The FD is unlikely to be investable and is not financeable

The Disputing Companies' SoCs and related economic submissions agree that the FD fails to set the allowed return on equity and debt at a level commensurate to the risks for the notional company.

a. The FD has ignored the economic context of the price control

Anglian's SoC sets out the key drivers of the PR24 investability challenge, namely (i) a radically increased level of investment over AMP8 and the subsequent 20 years; (ii) an almost total lack of dividends in the period; and (iii) the sector's increased risk profile.

The Disputing Companies also highlight these risks and how the sector's step change in investment needs comes at a time of significant (global) competition for capital to fund infrastructure.⁹⁴ They also identify the significant asymmetry in the FD as worsening the FD's investability.

b. The FD ignores cross-check evidence that supports a much higher cost of equity

Anglian's SoC explains that analyses of debt-equity spreads and expected returns for infrastructure funds and a correctly calibrated MARs analysis all support a cost of equity of 6.13-7.34% (CPIH-real) in comparison to the FD's 5.1%.⁹⁵

These conclusions are corroborated by (similar and) additional analyses, including NW's MFM; SEW's inference analysis and MFMs; and SW's evidence, including return on investment grade bonds, inference analysis, hybrid bonds, IRRs, equity analyst estimates, and MARs.⁹⁶

⁹¹ SW Chapter 5 §56-60.

⁹² NW Figure 41.

⁹³ See e.g., SW Chapter 5 §149; WW §2.52.

⁹⁴ Anglian §§640-652; NW §§146-149 and Annex 1 Section 3 §§46-60; SW Chapter 7 §§31-73; SEW §§6.2-6.8.

⁹⁵ Anglian §§667-680; Ofwat, PR24 FD: Aligning risk and return, Allowed return appendix (March 2025), p. 60; KPMG, *Estimating the Cost of Capital for PR24*, p. 93-95 (Annex 036); Oxera, *PR24 Cross-Checks to CAPM estimation* (Annex 003).

⁹⁶ NW Appendix 1 §176 (MARs range: 5.2-6.8%; MFM-implied range: 6.1-6.6%); SW Chapter 7 §§307-393 (inference analysis: 6.50-6.73%; hybrid bonds: 5.8-8.4%; IRR for infrastructure funds: 8.02-9.11%). SEW Annex H §61. Inference analysis suggests the FD cost of equity is at least 140bps lower than expected and MFMs that CAPM under-prices systematic risk for companies by 43 to 181bps.

The FD's failure is, moreover, now particularly stark: at the point of writing this response, Anglian's cost of new debt was 5.15% (CPIH real), which is <u>above</u> Ofwat's cost of equity in the FD.

c. The FD has ignored that the FD is not financeable for multiple reasons

Anglian's SoC explains that the notional company is unfinanceable on two bases: (i) the notional company would not meet Ofwat's required BBB+ / Baa1 credit rating; and (ii) there is no basis to assume the sizeable equity investment on which the FD's assessment relies.

Anglian's conclusions are supported by the other Disputing Companies. All recognise both that the notional company under the FD is not financeable even with Ofwat's assumed equity investment and that the FD's assumption lacks a solid basis.⁹⁷

The Disputing Companies also all share Anglian's concern that the lack of headroom severely impacts the notional company's financial resilience.⁹⁸

2. The allowed return is insufficient

It is common ground that the FD's cost of equity and debt are both too low.⁹⁹ The broad alignment is that (i) the cost of equity point estimate should be in the range of 6% and above and (ii) the cost of debt needs to be increased from the FD's 3.15%.¹⁰⁰

a. The FD's approach systematically underestimates the cost of equity

Anglian's SoC explains how the FD systematically mis-calibrates its CAPM. The Disputing Companies agree that: (i) the FD ignores the convenience yield on ILGs when estimating the RFR; (ii) Ofwat's "fixed TMR" is disconnected from current market realities and its *ex ante* approach contains subjective revisions; and (iii) the beta does not reflect the sector risk, in particular because it excludes Pennon and relies on longer term data.¹⁰¹

A number of Disputing Companies flag that a broader comparator set for beta, capturing e.g. National Grid, would better reflect the significant investments expected for water companies.¹⁰² Whilst Anglian agrees in principle with recognising the higher risk in the sector, it considers this is better addressed by "aiming up" to the top of the CAPM range and signalling the long-term risk in the sector, as set out below.

There is also broad consensus that the CMA's approach to "aiming up" at PR19 merits application at PR24: whether within the CAPM range to reflect parameter uncertainty and the inherent downward

⁹⁷ SEW §§7.24, 7.26-7.27 and Annex H §20; NW Appendix 1 §§193-198. WW highlights how the FD fails to meet the Duties, by ensuring that an "investment credit rating is secured" (§§5.24-5.25); SW Chapter 1 §§195-227.

 $^{^{98}}$ SEW \$7.25 -7.30 and Annex H \$20; NW Appendix 1 \$199; SW Chapter 1 \$228 -239.

⁹⁹ Anglian §§724-773; NW §§580-584; WW §10.12; SEW §§6.12 onwards; SW Chapter 7 §§117-283.

 $^{^{100}}$ SEW Table 6.2; NW Figure 52; SW Chapter 7 Tables 3 (before "aiming up") and 8.

¹⁰¹ Anglian §§730-733, §§734-744, §§745-759; WW §10.12; NW Appendix 1 Section 7 §§151-156, §§158-160 (flagging that CAPM expected market return is not invariant to interest rates), §§166-168 (noting the FD's time window selection is arbitrary); SEW §§6.14-6.15 (also with reservations about placing exclusive reliance on atypically low ILG yields), §§6.16-6.21; SW Chapter 7 §§129-164, §§165-193 (also raising failings in the assumption of serial correlation and sole reliance on the investor perspective), §§202-267 (noting oversight of Covid-19 data). ¹⁰²SEW §6.21; SW §§242-249 (and §§252-263 comparing betas on the basis of capital intensity).

skew in CAPM (Anglian) or beyond this range to reflect the circumstances and risk in the sector at AMP8 (NW, SEW, SW).¹⁰³

b. The FD's methodology underestimates the cost of debt

Anglian is largely in lock-step with the other Disputing Companies, recognising similar broad issues on the FD's estimate of the cost of embedded debt (i.e., the exclusion of certain debt instruments and the flaws of the "actual-notional" approach), cost of new debt (i.e., the need for an uplift on the iBoxx A/BBB 10+ index), and other individual components of this allowance (i.e., inconsistencies in the share of new debt; errors in the costs of carry and liquidity; and the exclusion of basis risk).¹⁰⁴

3. The price control should address the asymmetry in the FD

Consistent with the UKRN Guidance on the Cost of Capital, Anglian's SoC proposes the significant residual asymmetry in the FD should be addressed "at source", where possible (and inherent asymmetry in the FD justifies "aiming up" to 6.25%). The Disputing Companies largely agree that "aiming up" may be required to address "residual" asymmetry.¹⁰⁵

A number of companies have proposed that the CMA could simply address asymmetry through "aiming up" on the cost of equity. Anglian agrees that such "aiming up" is an alternative solution to address asymmetric risk (although it would need to be commensurate with such risk).

4. The price control should provide regulatory comfort on the long-run cost of equity

Anglian's SoC sets out why and how the price control should provide investors with greater certainty on the longer-run cost of equity so they can make efficient investment decisions in AMP8. Per Sir Jon Cunliffe's commentary, investors need to see the water sector as "*a stable and predictable long-term investment*".¹⁰⁶ This entails setting an expectation that the cost of equity is likely to increase significantly beyond 6.25% in future AMPs (given the longer-run cost of debt).

The Disputing Companies all recognise the level of risk in the sector and the economy at a time of a long-term paradigm shift in infrastructure investment.¹⁰⁷ SEW puts the key question succinctly in this context: "*A useful way to frame the key question in this part of the CMA's price review is: what rate of return would cause you to choose to put your money into the water industry given the returns that are currently on offer elsewhere?*" Investors need greater clarity beyond AMP8 to take efficient decisions to fund now.

¹⁰³ Anglian §§763-766; NW §§586-587 (flagging the large investment programme); SEW § 6.28 and Table 6.2. SW Chapter 7 §§295-422 (also reflecting a number of cross-checks: risk-reflective vs asset classes; risk-reflective vs other sector; market evidence; parameter-level cross-checks; debt financeability; and fair bet).

¹⁰⁴ NW Appendix 1 Section 7 §208 (noting need for an update to iBoxx A/BBB 10+ index data; reflecting actual company issuances for the latter part of 2024/25; a correction in share of new debt reflecting RCV growth; and adjustments to issuance and liquidity costs); WW §10.12. SEW §§6.32-6.39 flags an industry-average approach might not be appropriate for it as a relatively small company and infrequent debt issuer. ¹⁰⁵ See also NW Appendix 1 Section 7 §§189-190; SW §421; SEW §6.28.

¹⁰⁶ Sir Jon Cunliffe, Speech from Sir Jon Cunliffe, Independent Water Commission (27 February 2025) (See here).

¹⁰⁷ See in particular NW Section 3; SEW §§6.1-6.10.