Energy Network Association's submission in respect of PR24 redetermination

17 April 2025

About ENA

Energy Networks Association (ENA) is the industry body representing the electricity networks in the UK. Our members directly employ 26,000 people in England, Scotland, Wales and Northern Ireland, including around 1,500 apprentices and trainees.

ENA's members operate a network of around 500,000 miles of lines and cables which deliver electricity to around 29 million homes and businesses across the country. Around 60% of the network is underground.

This submission is made on behalf of ENA's GB Distribution Network Operator (DNO) and Transmission Owner (TO) members. We have made this submission collectively to support the efficiency of the Competition and Market Authority's (CMA) redetermination processes.

Several of the issues before the CMA in this PR24 redetermination are critical for the investability of other GB regulated sectors

Many aspects of the PR24 package that are identified in relevant water companies' (hereafter Appellants) Statements of Case (SoC) are sector-specific or company-specific. The Appellants are better placed to provide evidence on these topics than ENA. However, some of the issues that the Appellants have asked the CMA particularly to consider have read-across to other regulatory decisions and are critical for the investability of other GB regulated sectors. We also note that some Appellants refer to relevant policies and decisions in the energy sector in their SoCs and we therefore assume that some limited evidence in respect of those may be helpful to the CMA's process. We deliberately limit our evidence to those elements of the PR24 redetermination that have strong read-across to other sectors, including energy.

Appeal rights are an important part of the regulatory framework for both water and energy networks. It is essential that investors see that the CMA represents a meaningful safeguard against inappropriate regulatory decisions. In considering the evidence before it, the CMA needs to identify those issues that it considers may be relevant to other sectors and, where this is the case, send clear signals to regulators regarding appropriate regulatory decision-making and interpretation of evidence. In this way, the CMA can provide regulators with crucial advice and avoid unnecessary future redeterminations or appeals in other sectors. In the case of the ongoing RIIO-T3 price control review processes, the timing of the price control processes relative to this redetermination means that such advice to regulators would need to be apparent well ahead of Ofgem's RIIO-T3 Final Determinations in November/ December 2025 in order to avoid the potential for duplicate CMA processes hearing the same or similar evidence in spring and summer 2026.

In the interests of efficiency, we reference pre-existing evidence prepared for RIIO-3 purposes in this submission.

The context in which PR24 is being redetermined is very different to the context in which the PR19 redetermination was made. Ofwat's PR24 package fails to recognise this.

The context in which PR24 is being redetermined is very different to the context in which the PR19 redetermination and RIIO-2 appeals were heard. Ofwat has failed appropriately to reflect this very different context in its PR24 determination.

Macroeconomic conditions have changed significantly since the PR19 and RIIO-2 determinations and since the UK Regulators Network (UKRN) Guidance was developed

The PR19 and RIIO-2 financial frameworks were determined during a period of sustained negative real gilt rates following the global financial crisis. Ofwat and Ofgem calibrated their returns for PR19 and RIIO-2 in light of these prevailing economic conditions, lowering their estimates of Total Market Return (TMR) and therefore cost of equity over time in response to the fall in gilt yields and subjective assessment of wider market evidence including interest rates.[1] The UKRN guidance for regulators[2] on the methodology for setting the cost of capital was also developed and consulted on during the same era of low-cost finance.

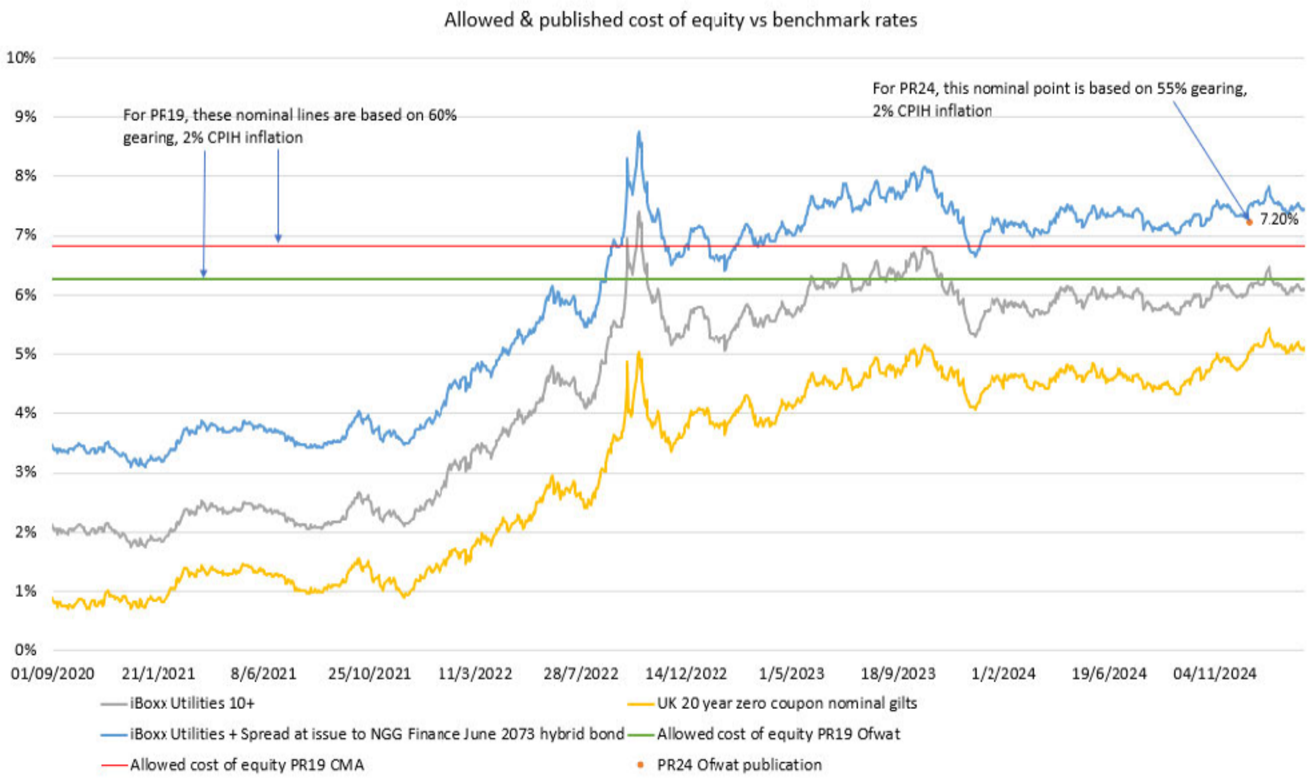
Macroeconomic conditions have changed markedly since then. The monetary policy environment has changed abruptly in response to major global shocks that have affected both real and financial markets. Since the various PR19 and RIIO-2 decisions, yields on index linked gilts have increased by around 3.5% - a huge increase over a relatively short period of time. Over the same period of time the Bank of England base rate has increased from close to zero to 4.5% today.

The era of cheap money is gone. Given that, it is unrealistic that Ofwat should select a cost of equity assumption that is just 37bps higher than the CMA's determined cost of equity for PR19.

As shown in the chart below, Ofwat's PR24 cost of equity is implausibly close to prevailing debt costs and currently below the returns that can be earned from investing in NGET's hybrid bond. Ofwat has failed to recognise the extent of the change in macroeconomic conditions in its PR24 decisions. Investors are unlikely to invest equity at rates that are close to or even below safer debt-based options. Returns on equity must reflect the returns premium of at least 300-400bps that equity requires over debt. However, Ofwat has determined an unlevered cost of equity (i.e. a cost of equity at 0% gearing) which is below its own cost of new debt.

[1] See Frontier Economics, Equity Investability in RIIO-3, section 2.1.1, 5 March 2024 for Ofgem decisions
[2] UKRN, UKRN guidance for regulators on the methodology for setting the cost of capital, 23 March 2023

Comparison of cost of equity against benchmark debt rates



PR24 and RIIO-3 both see a significant ramp up in investment programmes, providing significant economic growth potential. Networks need to raise new equity to fund these programmes.

The water and electricity sectors both face a very significant increase in investment programmes for the next price control periods. While the drivers of the investment increases differ between sectors, for both sectors the increasing capital programmes will require networks to retain existing and secure new equity and new debt investors. Our members are spending and investing £33bn with more than £22bn going into our electricity distribution networks between 2023 and 2028, and nearly £11bn in our electricity transmission networks between 2021 and 2026. A further increase in investment to £68bn has been proposed in our electricity transmission networks between 2026 and 2031. Investing in our electricity networks to promote growth in our economy and support the Government's decarbonisation and energy security ambitions will require private investment of more than £100bn between 2021 and 2031. This increase in investment in electricity networks is mirrored globally because of investment to deal with load growth, electrification of heat and transport and reducing emissions from generation.

This introduces a key change to the context in which price controls must be considered. This increase in programmes, combined with the introduction of new duties for both Ofgem and Ofwat to have regard to the desirability of promoting economic growth, means that the need to secure investment is more important than ever. The economic growth potential of these investment programmes is significant, where increased investment is a driver for immediate growth, whilst expanded and more resilient networks ensure gains are sustainable over the long term.

It is crucial that investability is at the heart of the CMA's PR24 redetermination

The increasing capital programmes seen in both sectors will require networks to secure and retain new equity and new debt investors. The very different macroeconomic environment, combined with global competition for capital, create a much more challenging environment in which to secure funding. Long term investability is therefore critical to the sectors being able to deliver a significant increase in investment levels for a sustained period of time and should be a central component of regulators' price control designs.

Ofgem has acknowledged this and has introduced the concept of investability into the RIIO-3 framework. While we continue to debate with Ofgem the implementation of this important concept, it is clear that Ofwat's proposals lag behind Ofgem's thinking in this regard.

Ofwat's approach to PR24 has failed to deliver an investable package

In redetermining the PR24 price controls, the CMA should clearly signal the importance of investability to all regulators. Investability frameworks for regulated networks should:

- Allow competitive, risk-adjusted returns to retain existing and attract new equity through the baseline allowed return on equity, with the potential to enhance returns with a fair balance of risk in allowances and incentives;
- Provide an appropriately calibrated payback period for investors that is similar to other investments;
- Provide alignment of asset and earnings growth and dividend yields in line with investor expectations to compete with existing infrastructure investments globally, particularly given the scale of new equity capital that is required;
- Ensure networks maintain strong investment grade credit ratings (minimum Baa1/ BBB+) so that equity investors have the confidence to invest and new debt financing can be secured; and
- Avoid arbitrary changes to notional capital structures that un-necessarily reduce the attractiveness of the headline equity return and of themselves may precipitate the need for new equity.

The CMA's PR24 redetermination needs to achieve a package that is simultaneously investable, financeable and resilient. The key benefits associated with networks can only be achieved for customers if networks are able to attract and retain both debt and equity finance and are financially resilient. It is not appropriate for regulators to "trade off" any one of these key elements of the package against another.

At a recent investor roundtable attended by Ofgem, investors made clear that investors need both appropriate speed of the return of RAV and return on RAV to be attractive - there is no trade-off between them. Investors also clarified that there are plenty of alternative investment opportunities available to them and they do not need to invest in UK regulated infrastructure. For example, US energy utilities capex is projected to eclipse $790 billion between 2025 and 2028[3], while US authorised return on equity has fluctuated at around 9-11% post-tax nominal since 2010.[4]

[3] S&P Global, 9 January 2025
[4] Energy Institute at Haas, WP 329R

The fact that some water companies have accepted the PR24 package must not be interpreted as meaning that investors in those water companies were satisfied with the issues that we highlight, or that the PR24 decisions are appropriate for other sectors

The CMA must be careful to not infer that the absence of further requests for redeterminations means that investors in other water companies were satisfied with the key issues that we highlight. Water companies' assessment of the acceptability of the PR24 package will have necessarily been based on consideration of each company's full PR24 package, not whether Ofwat has made an error in specific elements of that package. For example, it is notable that the traded water companies that accepted the PR24 settlement reported that they expect to outperform elements of the PR24 package and therefore expect to make returns above Ofwat's cost of equity point estimate.[5]

Ofwat's PR24 cost of equity range and point estimate are too low

Ofwat has failed to recognise that cross-checks to its Capital Asset Pricing Model (CAPM) cost of equity range, including debt-based cross-checks, clearly show that its range and point estimate are too low

To ensure that a price control is investable, regulators must set the baseline allowed return on equity at a level that provides competitive, risk-adjusted returns to retain existing and attract new equity. This requires regulators to consider the rates that are available in the market place. ENA asked Frontier Economics to consider how equity investability could be assessed in RIIO-3. Its conclusions are set out in the report that is appended to our submission.[6] Frontier Economics explains that a meaningful investability cross-check must reflect the returns premium that equity requires over debt.[7]

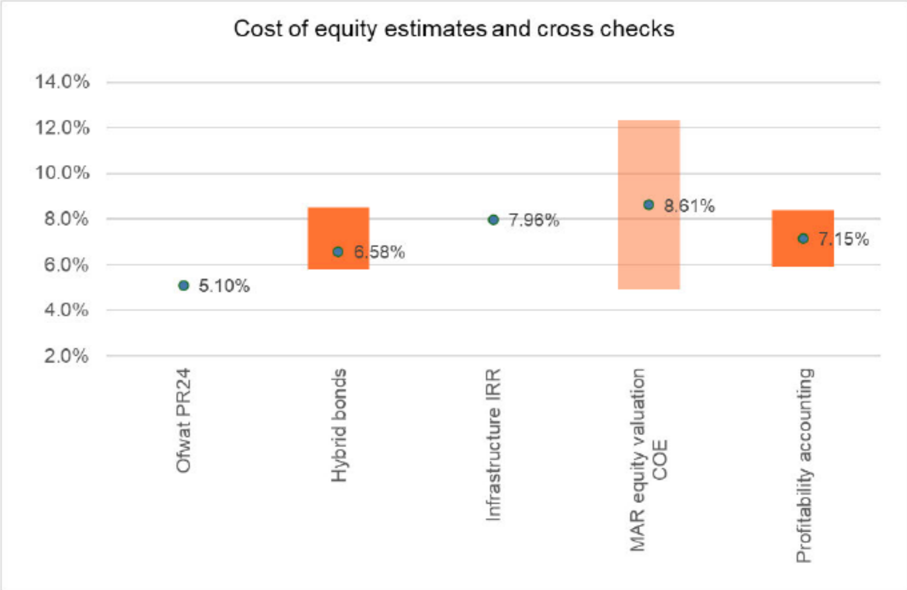
It notes that investability can also be tested by considering the 'inferred' cost of equity from cross-checks, such as those used by Ofgem at RIIO-2. It also notes that all such cross-checks come with imperfections and limitations. Nonetheless, there is merit in considering what cost of equity cross-checks now show. Even where there are differing views on the reliability of the cross checks, they may still be able inform on the overall trends in equity returns.

If the equity investability tests are failed, one would not rationally expect an equity investor to deploy capital in a proposition that has been shown to be unattractive versus readily available competing opportunities.

Frontier Economics has analysed the latest cost of equity cross-check findings for RIIO-3 in its report. We have updated Frontier's analysis to reflect the different gearing assumption for PR24 in the graph below. This cross-check evidence clearly shows that Ofwat's cost of equity of 5.10% is not supported by cross-check evidence.

[5] See Barclays (2024), 'SVT FD Response: All set for AMP8', 20 December; Pennon plc (2025), 'Investor Summary: PR24 Final Determinations', 28 January; United Utilities plc (2025), 'PR24 Final Determination', 29 January
[6] Frontier Economics, Equity Investability in RIIO-3, 5 March 2024
[7] Frontier Economics, Equity Investability in RIIO-3, para 7, 5 March 2024

Cost of equity estimates and cross-checks (CPIH-real)



Source: ENA translation of Frontier Economics' results to 55% gearing (where appropiate)[8]

Both Ofgem and Ofwat have expressed some reservations about aspects of the two debt-based cross-checks that have been proposed by ENA and by water companies, namely Asset Risk Premium – Debt Risk Premium (ARP-DRP) and hybrid bond cross-checks.[9] The accompanying reports[10,11] provide answers to Ofgem's and Ofwat's concerns. This evidence provides further assurance that the debt-based cross-checks recommended by ENA and water companies are suitably robust for use in cross-checking of the CAPM cost of equity.

Furthermore, while we acknowledge that all cross-checks rely to a certain extent on assumptions (as indeed do the CAPM parameters on which regulators rely), the cross-checks proposed by ENA and by water companies are less reliant on assumptions than the MAR cross-check that Ofwat has relied on. It seems that the quality standard that Ofwat is using to appraise - and to dismiss - cross-checks proposed by the water companies is inconsistent with the standards that Ofwat itself relies on.

Ofwat has made errors in its CAPM parameter ranges that lead to its CAPM cost of equity range being too low

Ofwat has made a number of errors in determining its CAPM parameters. In particular, Ofwat has made errors in its determination of the Risk-Free Rate (RFR), TMR and equity beta. A number of those parameters are market-based parameters and therefore also relevant to other sectors.

RFR

Ofwat's approach fails to take account of the convenience premium embedded in government bonds when estimating the RFR. This results in a RFR estimate that is too low, leading to inappropriate reductions to its cost of equity range. The CMA will be familiar with this issue as a result of its redetermination of PR19 price controls.

[8] Frontier Economics, Updated cost of equity cross-check evidence, 22 November 2024
[9] Ofgem, RIIO-3 Sector Specific Methodology Decision – Finance Annex, 18 July 2024, paragraph 3.270 and 3.271
[10] Frontier Economics, Updated cost of equity cross-check evidence, 22 November 2024, section 2
[11] Oxera, Evaluation of the ARP–DRP framework, 8 November 2024

Oxera's CAPM report[12] that was prepared on behalf of ENA in its engagements with Ofgem, provides further information, analysis and evidence regarding derivation of the RFR.[13]

TMR

We acknowledge that different consultants supporting the Appellants have reflected the current macroeconomic conditions differently in the determination of the CAPM range (Oxera uses a higher TMR, other advisors have aimed up within cost of equity range to reflect current market conditions). However, all of them consider that a cost of equity of above 6% is appropriate for water companies at 55% gearing.

We believe that there are issues with Ofwat's determination of the TMR that contribute significantly to Ofwat's CAPM cost of equity range being too low. In particular, Ofwat effectively treats the arithmetic average of long run average historical ex post TMR as a cap to its TMR range. This is not correct. In its redetermination, the CMA should recognise that it is simply an average and not an artificial constraint on required market returns. In previous regulatory decisions, regulators have recognised the relationship between the TMR and prevailing gilt yields in their selection of TMR point estimates.[14] 10 year index linked gilt yields are above the average since Bank of England independence in 1997. Also, deflated yields back to 1900 show current index linked gilts are above the long run average. As current interest rates are above the long run average, the current TMR can also be expected to be above average. The CMA will need to take account of prevailing gilt yields in determining an appropriate TMR range and cost of equity for PR24. Without this, the price control package may not be investable.

Oxera's latest CAPM report[15] that was prepared on behalf of ENA for its engagements with Ofgem, provides further information, analysis and evidence regarding derivation of the TMR.[16] Additionally, Frontier Economics has analysed a range of available TMR cross-check data i.e. cross-checks to the prevailing market return on equity.[17] Its analysis includes some cross-checks that Ofgem has relied on historically.

Equity Beta

Determination of the required equity beta for PR24 is largely a sector-specific assessment. There are legitimate differences between the water and electricity sectors, such as the two industries operating in very different risk landscapes when it comes to asset risk and safety, pace of technological change, and impacts and focus on decarbonisation, that mean fundamental differences in the beta between water and energy can be expected. We think the Appellants are generally therefore best placed to comment on Ofwat's beta determination. However, there are some aspects that the CMA has been asked to consider where ENA has relevant evidence that may assist the CMA.

We agree with the Appellants that, for a number of reasons, Pennon should be included in the sample of water companies considered in the estimation of the beta. Oxera considers the suitability of Pennon as a beta comparator in its report for ENA and concludes that:[18]

- Including Pennon in the set of comparable companies would be aligned with the UKRN guidance.[19] Including Pennon would also be in line with Ofgem's approach at RIIO-2;
- Following the disposal of Viridor in 2020 and the acquisition of Bristol Water in 2021, there are several years of water-only Pennon data which make it more appropriate to include Pennon now than it was at PR19; and

[12] Oxera, RIIO-3 cost of equity—CAPM parameters, 8 November 2024
[13] Oxera, RIIO-3 cost of equity—CAPM parameters, 8 November 2024, section 2
[14] Oxera, RIIO-3 cost of equity—CAPM parameters, 8 November 2024, section 2.2.4 descr bes this for Ofgem's decisions
[15] Oxera, RIIO-3 cost of equity—CAPM parameters, 8 November 2024
[16] Oxera, RIIO-3 cost of equity—CAPM parameters, 8 November 2024, section 3
[17] Frontier Economics, Updated cost of equity cross-check evidence, 22 November 2024, part 2
[18] Oxera, RIIO-3 cost of equity—CAPM parameters, 8 November 2024, section 4.2 and Appendix A1
[19] UKRN, UKRN guidance for regulators on the methodology for setting the cost of capital, 23 March 2023, pp. 22–23

- Including Pennon had the same impact on re-levered equity betas across two-, five- and ten-year estimation windows. If Ofwat's concerns in relation to Pennon's historical non-water business were correct, then we would expect to see a larger impact of including Pennon under longer-term estimation windows.

Water companies and electricity networks face increased risks relative to the historical periods over which beta is assessed. These risks will be reflected in investors' perception of the risks associated with investing in water and energy networks and therefore in the financing costs that networks will bear but may not be fully reflected in calculated equity betas based on historical data. There may be a need for the CMA to increase betas for Appellants above those calculated from historical data to reflect these increasing risks. Furthermore, we note that Ofwat's beta determination appears to suggest that risk within the sector is reducing compared to PR19. We find this surprising given the scale of the increases to water and wastewater investment programmes.

We also note that the listed companies have generally performed more strongly than the sector average which likely makes them lower risk (and therefore lower beta) than the notional network that is relevant to beta determination.

We agree that there are strong reasons to aim up within an appropriately calibrated CAPM cost of equity range. However, Ofwat's cost of equity point estimate is too low despite aiming up to the top of the range. This is because its CAPM cost of equity range is too low.

We agree with Ofwat that the current circumstances merit selecting a point at the top of a sensible CAPM cost of equity range. However, Ofwat's point estimate is still too low, despite it selecting a point estimate at the top of its range, because - for the reasons we explained above - Ofwat's CAPM cost of equity range is too low.

It is important to calibrate the return on equity allowance such that it ensures the investability of the regulatory settlement. In selecting a cost of equity point estimate for the PR24 period from within its cost of equity range, the CMA will need to consider a number of important factors including:

- redressing asymmetries in CAPM parametric uncertainty;
- considering whether the equity return on offer is competitive versus the set of other opportunities that exist in the wider international capital market;
- redressing asymmetries in the package of cost allowances and incentives; and
- avoiding the potential for welfare losses from underinvestment, and accounting for capital market constraints.

A sizeable body of evidence supports a significant increase to the cost of equity being required in the CMA's redetermination including:

<u>Asymmetries in CAPM parametric uncertainty</u>: As explained above, Ofwat's CAPM parameter range for PR24 contains a number of issues that introduce significant downwards asymmetry in Ofwat's proposed cost of equity range. We believe that many of these are better addressed by correcting Ofwat's approach to determining its CAPM parameter ranges and the CMA superimposing its own, corrected CAPM cost of equity range.

Even aiming up to the very top of Ofwat's CAPM range determines a cost of equity that is demonstrably too low. The CMA will need to consider in its redetermination whether the most appropriate approach to reflecting evidence on the latest equity market conditions is to adjust the TMR range or to deploy very considerable aiming up in choosing its cost of equity point estimate.

Regardless of how the CMA opts to reflect current market conditions, we also expect that some downwards asymmetry will exist in the CAPM parametric range in particular due to forward-looking risks not being reflected in historical beta data that would also merit aiming up.

<u>Evidence as to whether the equity return on offer is competitive versus the set of other opportunities that exist in the wider international capital market</u>: As explained above, macroeconomic conditions have changed significantly since the PR19 and RIIO-2 determinations. If the PR24 framework does not provide an equity return that is competitive versus the set of other opportunities that exist in the wider capital market, networks will be unable to finance activities that customers and society need them to deliver. Latest cost of equity cross-checks point to cost of equity allowances needing to be much higher than Ofwat's PR24 allowance.

<u>Asymmetries in the package of cost allowances & incentives</u>: Appellants are better placed than ENA to provide evidence of any asymmetry in the PR24 package. In general, we note that such asymmetries are best avoided in the detailed design of a price control package; however, we also note that the potential costs of aiming up in the cost of equity due to asymmetries would not be as large as the potential costs of setting the cost of equity too low.

Assessment of whether any downwards asymmetry exists in the package must be supported by a robust analysis of whether the targets set for the efficient company are achievable or not and whether risks are symmetrically allocated. Unfunded obligations or material mismatches between cost allowances and the expenditure that can be expected to be required to deliver performance targets runs counter to investability by sending a message to investors that under-performance is to be expected.

Likewise, any underfunding of the additional costs that water companies are subjected to in raising and borrowing equity and debt would cause further under-performance. If the CMA finds that a material mismatch has been created in the design of the PR24 package, it is important that the CMA sends a signal to regulators that, underfunding or over-ambitious targets should either be corrected at source or offset through material upwards adjustments to the allowed rate of return.

<u>Avoiding the welfare losses of underinvestment and accounting for capital market constraints</u>: The CMA must consider how it avoids setting the return on equity too low, as this could induce underinvestment risk, which could in turn lead to detrimental welfare consequences. The ambitious investment programmes to be delivered in PR24 and RIIO-3 are necessary for customers, and may also generate large welfare benefits through growth and job creation, consistent with the focus of regulators' new duties. In this context, the detrimental welfare consequences of setting the return on equity too low would be exacerbated. If the CMA's allowed return is inadequate there may be underinvestment against these key programmes due to networks being unable to raise the finance necessary to support investment.

Further considerations on selecting a cost of equity point estimate can be found in Oxera's and Frontier Economics' reports.[20,21,22]

[20] Frontier Economics, Equity Investability in RIIO-3, 5 March 2024
[21] Frontier Economics, Updated Cost of Equity Cross Check Evidence, 22 November 2024
[22] Oxera, RIIO-3 risks and investability topics, 9 December 2024, section 4

The CMA should recognise the significant role cashflow acceleration can play in ensuring investability – and in delivering social net present value (NPV) benefits to customers

We note that some of the Appellants have requested steps to accelerate their cashflows compared to the RCV depreciation profile adopted by Ofwat in PR24. We would encourage the CMA to seriously consider the proposals of water networks for accelerated cashflows, since:

- Alongside other factors such as earnings growth, competitive returns and appropriate dividend yields, the guarantee of and speed of return of cash are central to the investability of an asset. The speed of return of cash fundamentally affects debt financeability metrics as well as equity metrics such as the ability to pay a reasonable level of dividends while still funding new investment programmes.
- The acceleration of cashflows can provide substantial additional benefits to customers in the form of lower long-term financing and interest costs; work by NERA for ENA has shown that, when evaluated on using the Treasury's green book methodology, such changes deliver a positive social / public NPV.[23] In other words, they are not NPV neutral to customers or to society generally, but value enhancing.

Ofwat's ongoing efficiency assumption is not supported by evidence

A fundamental component of a fair and balanced price control package must be ensuring that companies are able to recover their efficient costs. This must include not only ensuring that analysis of current efficient costs is robust but also that its assumptions about how those efficient costs will change moving forwards are appropriate.

The recent UK economy productivity improvements have been below Ofwat's 1% assumption for some time. There is no rationale to expect the water sector (and its supply chain) to materially outperform the rest of the economy. The CMA must review this and propose an assumption that is better linked to relevant evidence.

Next steps

We have deliberately limited this third-party submission to the issues raised prominently in the Appellants' SoC, in a way that we expect will lead the CMA to focus on them, to limit the volume of additional material the CMA has to consider. If Ofwat or other responses propose further topics be considered as part of this redetermination, on topics where ENA has developed evidence that may be highly relevant, we would like the opportunity to feed this into this process in a timely manner, rather than waiting to formal consultation windows.

We trust that our evidence is clear and helpful. For the CMA's ease of reference, we append the ENA-commissioned reports that we refer to. If it would be helpful to the CMA, we can provide further detail or access to the consultants that produced the reports.

[23] NERA, Depreciation Policy for RIIO-ED3, 15 January 2025, slide 24

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