

PR24 RCV RUN-OFF RATE

DRAFT DETERMINATION RESPONSE PREPARED FOR YORKSHIRE WATER

AUGUST 2024

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Executive Summary

Yorkshire Water has commissioned Frontier Economics to support its response to the PR24 Draft Determination (DD) on the topic of the RCV run-off rate. The scope of our work is focused on:

- Assessing the Ofwat DD method for run-off rates – including its limitations and any issues with Ofwat’s conclusions on the run-off rate;
- Outlining the impact of Ofwat’s run-off rate changes on Yorkshire Water; and
- Setting out implications for the Yorkshire Water RCV run-off rate in the FD.

The key findings of our analysis are summarised below.

Key findings

Yorkshire Water’s Business Plan (BP)

We find that Yorkshire Water’s approach to estimating a natural run-off rate was robust and consistent with Ofwat’s guidance in its PR24 BP. This resulted in an estimate of 4.72% for the natural run-off rate. In order to ensure that the BP also took account of other aspects of Ofwat’s guidance, a final proposal for run-off of 4.65% was used.

We also find that Yorkshire Water was correct to conclude that both the natural rate estimate (4.72%), and the final BP proposal (4.65%) were below the comparable PR19 run-off rate of 5.06%. This meant Yorkshire Water had proposed a number below the current price control, and below a ‘natural’ rate – both of which aid affordability at PR24.

Ofwat’s DD

We find that Ofwat’s DD did not engage with many of the proposals contained in the company BPs. This includes Yorkshire Water’s rationale and evidence for the natural rate it estimates. This decision, and use of incorrect data, leads to flaws in the information that Ofwat relies upon when justifying their DD position.

We also find that the adjustment made to the run-off rates for several companies, including Yorkshire Water, is poorly justified, untargeted and creates inconsistencies with other areas of the price control. The source of these issues is the top-down adjustment employed by Ofwat which ‘goalseeks’ the run-off rate to a target FFO to net debt ratio. This adjustment results in Ofwat adjusting the BP proposal of 4.65%, down by 48bps to a DD rate of 4.17%.

Adjustments such as this run the risk of reducing regulatory predictability and stability.

Impact on Yorkshire Water

The adjustment that Ofwat makes to the run-off rate has a large impact on Yorkshire Water. In revenue terms the change is significant, comparing the final BP proposal with the DD rate the reduction in revenue is approximately £200m over AMP8. This reduction is even greater when compared to the BP estimate of the natural rate (£227m) and the PR19 rate (£367m). Expressed as a percentage of total allowed revenue for the period the reduction from BP proposals is almost three percentage points.

The financial impact on Yorkshire Water from the run-off changes made at DD is also the largest out of the eight companies who had similar adjustments made. This is true both in absolute and relative terms. In absolute terms Yorkshire Water had a revenue reduction of £198m compared to a range for other companies of £1m to £109m. As a percentage of allowed revenue, the reduction for Yorkshire Water of 2.8% compared to a range of 0.6% to 2.7%.

Implications for the FD

We find that there **are three key implications** from the findings set out in this report:

1. That the run-off rate selected by Yorkshire Water in its BP is below or equal to all three of:
 - a. The best estimate of the natural rate run-off rate;
 - b. The best estimate of the comparable PR19 run-off rate; and
 - c. The upper limit guidance set out by Ofwat in the PR24 Final Methodology.

This means that Yorkshire Water had **already made bills more affordable** than a scenario where the natural rate, or a continuation of the last price control rate had been applied. It also means that Yorkshire Water's approach was **consistent with Ofwat's guidance** from a quantitative and qualitative perspective.

2. That Ofwat's **DD findings drew upon evidence which had demonstrable flaws**. Meaning that Ofwat drew conclusions regarding the BP proposal from Yorkshire which were inaccurate. At the Final Determination Ofwat should consider the most appropriate data sources – those which are detailed in Yorkshire Water's BP.
3. That **Ofwat's DD financeability based adjustment approach had an unusually large impact on Yorkshire Water** and **creates inconsistencies** with other important aspects of the price control. Namely, that an approach which reduces credit ratios creates inconsistencies with Ofwat's wider objectives regarding financial resilience. Ofwat should re-consider any financeability based adjustment, to the extent it remains relevant, at the Final Determination.

1 Introduction and purpose of this report

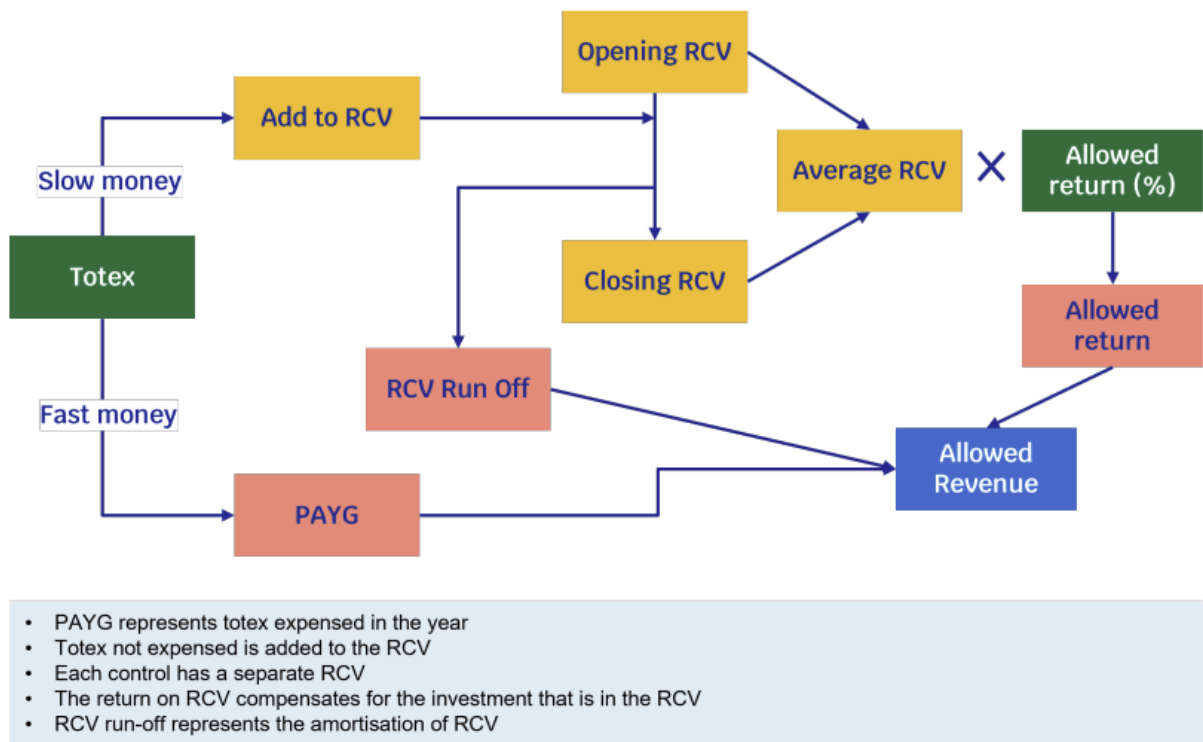
1.1 Introduction

Yorkshire Water has commissioned Frontier Economics to support its response to the PR24 Draft Determination (DD) on the topic of the RCV run-off rate.

Ofwat published its DD on 11 July 2024. Within the DD Ofwat set out the RCV run-off rates that it proposes to use for each company when determining revenues for the 2025-2030 period.

RCV run-off is an important component of the price control methodology. A significant proportion of the expenditure on wholesale water and wastewater services relates to assets that have long asset lives. Therefore, the question of ‘cost recovery’ is a fundamental part of the price control methodology. Figure 1 below shows Ofwat’s PR24 methodology for cost recovery.¹

Figure 1 Ofwat’s methodology for cost recovery



- PAYG represents totex expensed in the year
- Totex not expensed is added to the RCV
- Each control has a separate RCV
- The return on RCV compensates for the investment that is in the RCV
- RCV run-off represents the amortisation of RCV

Source: Ofwat, *Creating tomorrow, together: Our final methodology for PR24*, Figure 8.1

¹ As set out in chapter 8 of the Final Methodology for the PR24 price control.

The run-off rate of the RCV is the percentage of the RCV that is amortised (i.e. depreciated) each year. This is added to the amount that is allowed to be recovered through customer bills.

In the DD, the wholesale average RCV run-off rate that Ofwat has proposed for Yorkshire Water is 4.17%, this compared with 4.65% in the company business plan (BP). A reduction of 48bps. This overall figure is an average across the different wholesale price controls, the figure for each control is set out in Table 1 below.

Table 1 RCV run-off rate comparison

Wholesale control	Business plan	Draft Determination	Difference (bps)
Water resources	4.50%	4.03%	-47bps
Water network plus	4.50%	4.03%	-47bps
Wastewater network plus	4.50%	4.03%	-47bps
Bioresources	8.00%	7.17%	-83bps
Average	4.65%	4.17%	-48bps

Source: Yorkshire Water, Ofwat DD

Note: Pre-2025 and post-2025 rates were the same for all wholesale controls; average weighted by estimated Net Book Value (NBV) for each wholesale control for the business plan.

The reduction in the average RCV run-off rate of 48bps which was applied to Yorkshire Water was the largest reduction in absolute terms, and the second largest in percentage terms, from business plan of any company in the industry.²

1.2 Purpose of this report

The purpose of this report is threefold:

- First, to assess the Ofwat DD method for estimating run-off rates;
- Second, to outline the impact on Yorkshire Water from Ofwat implementing this method; and
- Third, based on the findings from the assessment above, to set out the implications for the Yorkshire Water RCV run off rate in the Final Determination (FD).

The remainder of this report is structured as follows:

² Only SES Water received a larger percentage reduction.

- In **Section 2** we provide an overview of the business plan approach and estimation of RCV run-off, contrasting that with the approach and estimation adopted by Ofwat in the DD.
- In **Section 3** we assess the Ofwat DD method for run-off rates – summarising its limitations, reviewing the level of engagement with company arguments and setting out flaws that arise from Ofwat’s conclusions on run-off.
- In **Section 4** we outline the impact of Ofwat’s changes on Yorkshire Water. We also assess this impact compared to (i) other companies in the industry, (ii) previous price controls; and also outline concerns on intertemporal fairness.
- In **Section 5** we set out the implications for the Yorkshire Water RCV run off rate in the FD – exploring how the issues identified in the previous sections could be addressed.
- Supporting material is provided in the Annexes of the report.

2 Overview of the Yorkshire Water business plan submission and Ofwat DD

In this section we provide an overview of the run-off rates proposed in the Yorkshire Water BP and how they compare to those in the Ofwat DD. For each we summarise the key steps used to estimate the rates and then set out our observations on the methods.

2.1 Yorkshire Water business plan

Yorkshire Water followed Ofwat’s methodology guidance by using information from their Annual Performance Reports (APRs) as the starting point for estimating run-off rates. Specifically, Yorkshire Water began by considering the depreciation rate implied by raw data from Table 2D of the APRs. This table contains information on “Historic cost analysis of tangible fixed assets”.

In Table 2 below we summarise the raw APR information for Yorkshire Water in FY2023. Their plan also considered the equivalent information for FY2022.

Table 2 FY23 APR data

Wholesale control	Net Book Value	Depreciation charge	Implied depreciation rate
Water resources	£384.5m	£11.0m	2.87%
Water network plus	£3,356.2m	£112.9m	3.66%
Wastewater network plus	£4,682.3m	£147.7m	3.16%
Bioresources	£393.4m	£19.7m	5.00%
Blended wholesale rate	£8,816.5m	£301.3m	3.42%

Source: Yorkshire Water, APR Table 2D

Note: Implied depreciation rate is depreciation charge divided by Net Book Value, blended rate is NBV weighted.

Yorkshire Water then made five key adjustments to the raw APR data to achieve a more reflective run-off rate. These adjustments remedied deficiencies with the raw data. They can be grouped into two broad categories.

2.1.1 Revaluation Adjustments

Yorkshire Water revalued their infrastructure assets, land, and buildings annually to reflect their fair value.³ This revaluation, conducted with third-party support using a market value

³ Less any subsequent depreciation and accumulated impairment losses.

approach, includes discounted cash flow modelling for infrastructure assets. It also includes existing use valuation for land and buildings by an independent qualified valuer.

Including the fair value of these assets in the RCV run-off rate calculation is deemed inappropriate by Yorkshire Water due to potential intertemporal unfairness – customers would pay different amounts for the same assets in different time periods. This is because the rate calculated would be a function of prevailing market values – which can be volatile over time.

Additionally, Yorkshire Water highlights that using the PR24 RCV run-off rate in discounted cash flow calculations for future valuations creates circularity and leads to inconsistent treatment among water and sewage companies. Therefore, Yorkshire Water considers it more appropriate to use the historic cost of infrastructure assets, land, and buildings in calculating average asset lives.

2.1.2 Timing adjustments

Yorkshire Water makes a number of timings adjustments. These reflect when assets are counted in net book value and depreciation charges – correcting for any inconsistencies between the two within a given timeframe.

- For assets under construction, Yorkshire Water's annual performance report includes their costs, but no depreciation is charged until these assets are completed or commissioned. An adjustment is made to remove these assets from the NBV, ensuring costs are appropriately reflected in both numerator and denominator of the implied asset life calculation.
- Assets capitalised and acquired throughout the year do not incur a full year's depreciation charge. To address this, Yorkshire Water adjust depreciation to reflect a full year's charge for these assets, ensuring a more accurate and fair distribution of costs.

The modifications discussed to the raw APR data were necessary to calculate the "adjusted" run-off rate. In each case the modification was grounded in the nature of the accounting data being used – amending as necessary to be suitable for Ofwat's purposes.

2.1.3 Adjusted rate outputs and final business plan proposals

In Table 3 below, we set out the adjusted APR rates estimated by Yorkshire Water for FY2023. As shown, these adjustments increase the run-off rate by 1.13 percentage points compared to using the raw APR data.

Table 3 FY23 APR adjustments

Wholesale control	Raw APR rate	Adjustment total	Adjusted APR rate
Water resources	2.87%	+0.94%	3.81%
Water network plus	3.66%	+0.98%	4.64%
Wastewater network plus	3.16%	+1.25%	4.40%
Bioresources	5.00%	+0.86%	5.87%
Blended wholesale rate	3.42%	+1.13%	4.55%

Source: *Yorkshire Water business plan*

Note: *Yorkshire Water business plan appendix 'YKY57_Cost recovery rates' contains the details of the adjustments*

Yorkshire Water also calculated the equivalent values for FY2022. The raw APR rate using that financial year was 3.27% and the adjustment total was 1.62 percentage points, resulting in an adjusted APR rate of 4.89%. Yorkshire Water combined the data from these two years together to produce an overall view on natural RCV run-off rate of 4.72%.

In the table below we set out the results at an individual price control level which correspond to that value of 4.72%. As shown, the rate for some controls is greater than 4.50% - a level which the Ofwat guidance suggested should be an upper limit on PR24 run-off rates for all of the controls (except Bioresources).

Table 4 Adjusted natural rate and business plan proposal

Wholesale control	Adjusted APR rate	Upper limit guidance	Final BP rate
Water resources	3.57%	4.50%	4.50%
Water network plus	4.78%	4.50%	4.50%
Wastewater network plus	4.61%	4.50%	4.50%
Bioresources	6.16%	8.00%	8.00%
Blended wholesale rate	4.72%	4.65%	4.65%

Source: *Yorkshire Water*

Note: *BP stands for business plan. The Final BP rate is the figure used in the business plan submission to Ofwat*

Overall, given the closeness to Ofwat's maximum rate guidance, Yorkshire Water chose to adopt Ofwat's maximum rates for each price control. This resulted in an overall business plan run-off rate close to the 'natural' rate from the adjusted APR calculating but one which was within the bounds set out in Ofwat's Final Methodology.

Lastly, a further part of Ofwat’s guidance was that the PR24 run-off rate should not be greater than the PR19 rate. To check this Yorkshire Water set out what the PR19 equivalent rate would be if expenditure had been recovered on the same basis as the PR24 plan.⁴ The relevant blended wholesale rate for PR19 was estimated to be 5.06% – a rate 41bps above the final business plan proposal and therefore consistent with the guidance. For three of the individual wholesale controls the PR19 rate was above the rates used in the business plan – with the exception being Water resources, where the PR19 rate of 4.07% was below the 4.5% business plan proposal.

2.1.4 Observations on Yorkshire’s submission

Having set out the steps Yorkshire Water took to estimate the run-off rate in their plan, we provide some observations on their approach.⁵ There are four observations we make:

- **There are further adjustments Yorkshire Water could have made that would have increased the natural rate estimates.** Specifically, Table 20 of the APRs contains data on the historic cost of intangible fixed assets. The data considered in the Yorkshire Water plan covered tangible assets. As intangible assets can tend have shorter asset lives, this focus on tangibles can lead to lower estimates than consideration of tangible and intangible together. Had both data sources been combined, the resulting estimate of the natural rate could have been higher. This suggests the Yorkshire Water estimate may have been conservative. We note that other companies raised this point in their submissions, and Ofwat acknowledged this in the DD, however there was no specific point of response provided by Ofwat.
- **The revisions made to the PR19 FD rate were consistent with Ofwat’s guidance.** We understand an adjustment is required to the PR19 FD run-off rate. This is to ensure a like-for-like comparison is made. The reason is that IRE was previously recovered through PAYG at PR19 by Yorkshire Water. For PR24 that treatment is being changed to recovery via the RCV. On this basis the adjustment made is consistent with Ofwat’s guidance. Specifically, there was a clarification to the PR24 Final Methodology on IRE and run-off, where Ofwat said that *“it would be helpful for the business plan to set out the company’s assessment of the PAYG and RCV run-off rates at PR19 if these were calculated assuming IRE was treated on a consistent basis with the approach proposed for PR24.”*⁶ Therefore, the comparison made by Yorkshire Water is the correct one.
- **Yorkshire Water did not deploy further cross-checks on the run-off rate.** The submission followed on the guidance set out by Ofwat. However, there are alternative methods that can provide a perspective on the ‘natural’ rate. The main cross-check which

⁴ Transferring the recovery of Infrastructure Renewals Expenditure (IRE) from PAYG to RCV run-off.

⁵ We did not undertake assurance of the run-off rate calculations provided by Yorkshire Water for this scope of work.

⁶ Ofwat, 31 July 2023, PR24 final methodology queries and responses.

could be considered is Current Cost Depreciation (CCD).⁷ Cross-checks can help test the robustness of the rates being used as each method has pros and cons. Indeed, Ofwat acknowledge themselves that their proposed approach has deficiencies and that, “*it may be appropriate to consider a range.*”⁸ Nevertheless, we note that Yorkshire Water addressed some of the deficiencies with Ofwat’s method through the adjustments made.

- **The proposed run-off rate for Water resources is above the PR19 run-off rate for that control but is a relatively small component of total run-off.** Taking Ofwat’s guidance on run-off rates by each individual control, the proposed rate for Water resources of 4.50% is greater than the PR19 equivalent of 3.57%. However, at the overall company level, and even at the wholesale water level, this has little bearing on the total amount of run-off. This is because the weighting of Water resource assets is less than 5% of the total for Yorkshire Water overall.⁹

In the next subsection we set out Ofwat’s approach to the run-off rate in the DDs.

2.2 Ofwat DD

Ofwat’s DD response on the topic of RCV run-off rate was mostly contained in the Aligning risk and return appendix. The response briefly covered Ofwat’s view on company responses by each of the four areas of the final methodology guidance (this guidance is recapped in Annex A). Following this, Ofwat then set out their own DD justification for the rates selected. We structure our overview into the same groupings below.

2.2.1 Guidance area responses

Depreciation methods and upper limits

Companies raised several concerns regarding Ofwat’s approach to setting upper limits for RCV run-off rates, citing the arbitrary nature of these limits. Ofwat acknowledged some of these issues but ultimately did not make any concessions regarding its methodology – aside from noting that different methods could be used to assess a range of rates.

Specifically, companies highlighted issues such as the exclusion of intangible asset amortization and the inclusion of non-depreciating assets under construction. They also noted that inflation impacts upon maintenance and replacement costs, creating a gap between needed and received revenue. Responses also set out that the link between net book value and RCV has weakened. Despite these critiques, Ofwat did not specifically address many of the concerns, for example those regarding intangible assets.

⁷ In Annex B we set out our views on Ofwat’s proposals in the DD for how CCD figures should be applied. We disagree with Ofwat’s DD suggestion.

⁸ Ofwat, PR24 DD, Aligning risk and return appendix.

⁹ Expressed on an adjusted net book value basis.

Ofwat did not respond to detailed proposals from companies like Yorkshire Water. While Ofwat stated that companies could propose higher RCV run-off rates than the set limits, provided they were supported by sufficient and convincing evidence, in the cases where proposed rates significantly exceeded the limits, Ofwat made downward adjustments.

Financeability and Financial Levers

Ofwat addressed financeability issues specifically for Severn Trent Water and Hafren Dyfrdwy in the DD. Beyond those, financeability responses were mainly about general observations regarding financeability headroom. Ofwat's view was that the DD supported a credit rating well within the investment-grade category for some companies. Ofwat later returned to this issue when setting out their determination justifications for Yorkshire Water (see Section 2.2.3).

Affordability

Ofwat's assessment set out that most companies considered the impact of their proposed RCV run-off rates on affordability and customer bills. However, Ofwat also claimed that minor adjustments to the recovery period can help mitigate large bill increases from the PR24 investment programme.

2.2.2 Draft determination justification

Ofwat set out their DD justification separately from the consideration of individual elements of their guidance, combining their justification into a single subsection for all companies in the industry. The justification for all companies in the sector was limited to a few pages in the appendix. Ofwat discussed a handful of companies in detail, including four individually, but did not provide a comprehensive discussion for each.

Ofwat reduced RCV run-off rates for companies with rates "at the higher end" of the sector, including a reduction from 4.50% to 4.03% for Yorkshire Water. This adjustment aims to extend the recovery period of costs and lower bills for the 2025-30 period. However, Ofwat did not use Yorkshire Water's BP specific figures for PR19 or the natural rate, instead applying a top-down view of each based on their own estimates using raw APR data and raw PR19 FD data at an industry-wide level. The mechanism for how the run-off rates for "higher end" companies were adjusted remains unclear. We go on to explore this further in Section 2.2.3 below.

As set out previously in Table 1, the result for Yorkshire Water was a rate of 4.03% for three of the wholesale controls and 7.17% for bioresources, leading to a blended rate of 4.17% overall. Ofwat mentions it welcomes feedback from companies on these changes and may apply similar adjustments in the final determinations if it considers it beneficial. Future adjustments will be based on financeability and affordability, provided companies present compelling evidence of customer benefits now and in the future.

2.2.3 Mechanism for adjusting run-off rates

As set out above, Ofwat is not clear on the mechanism used to adjust the run-off rate for those companies at, “*the higher end*” of the sector. The outputs are presented without any technical discussion of the method used. However, Ofwat does note elsewhere in their assessment that they make reductions where it considers, “*there is sufficient headroom for key financial metrics to the target credit rating.*”¹⁰

Putting these two statements together, and focusing on the companies that Ofwat grouped together, a trend becomes apparent. This trend is revealed by comparing run-off reductions with financeability outputs.¹¹ That is the FFO to net debt ratio for all those companies is precisely 10.00%.¹² This is set out in the table below. We also note that the other companies in the sector do not have an FFO to net debt ratio of exactly 10.00% using Ofwat’s DD calculations.

Table 5 Companies at the “higher end” on run-off rate according to Ofwat

Company	Adjustment to run-off rate	FFO to Net Debt
Anglian Water	-0.19%	10.00%
Dwr Cymru	-0.09%	10.00%
South West Water	-0.44%	10.00%
Southern Water	-0.31%	10.00%
Yorkshire Water	-0.48%	10.00%
South East Water	-0.40%	10.00%
South Staffs Water	-0.41%	10.00%

Source: Ofwat Aligning risk and return appendix, table 7 and table 8

Note: Portsmouth excluded as their financeability is discussed separately by Ofwat

Given that all of these companies have identical FFO to net debt ratios to exactly two decimal places it seems likely that Ofwat adjusted the RCV run-off rates of each company downwards until the cashflows reached a level where this precise ratio was achieved. In other words, the mechanism used by Ofwat in practice to adjust run-off rates seems equivalent to a “goalseek” for a specific credit ratio.

¹⁰ Ofwat, PR24 DD, Aligning risk and return appendix.

¹¹ This group of companies was set in Table 7 of the Aligning risk and return appendix.

¹² Excluding Portsmouth as their financeability is discussed separately by Ofwat.

2.2.4 Observations on Ofwat's DD approach

Our detailed assessment of the Ofwat DD approach is set out below in Section 3. At this stage we record a number of initial observations regarding Ofwat's DD approach to RCV run-off rates:

- First, Ofwat has not responded on many points set out in company business plans. There is not a response on whether the proposals put forward were acceptable or not. This includes the points raised by Yorkshire Water in their cost recovery appendix.
- Second, Ofwat uses raw data from the APR tables and the PR19 FD to inform their DD view on run-off rates. This means the adjustments made by companies to the run-off rates are not reflected.
- Third, the adjustments made to several companies, including Yorkshire, are implemented on a top-down basis with a single approach applied to all. The result is an FFO to net debt which is identical across all companies (10.00%)
- Fourth, the figures contained in Ofwat DD Aligning risk and return appendix are as follows for Yorkshire Water (on a wholesale control weighted average basis):
 - The natural rate run-off rate used by Ofwat using raw APR data is around 3.4% to 3.5%.¹³
 - The PR19 run-off rate used by Ofwat is 3.76%.¹⁴
 - The DD run-off rate proposed is 4.65%.¹⁵
- In the next section we assess Ofwat's DD method and their usage of the figures set out above.

¹³ As shown by the "YKY" marker in Figure 9 of the Aligning risk and return appendix.

¹⁴ As shown by Table 6 of the Aligning risk and return appendix.

¹⁵ As shown by Table 6 of the Aligning risk and return appendix.

3 Assessment of the Ofwat DD method

This assessment is structured into four parts:

- An assessment of the overall approach (section 3.1);
- Highlighting the flaws with the figures Ofwat relies upon for the DD assessment (section 3.2);
- Commenting on the qualitative factors relevant to run-off rates mentioned by Ofwat (section 3.3); and
- Assessing the targeted financeability adjustments to run-off rates that Ofwat makes (section 3.4).

3.1 Assessment of the overall approach

Ofwat's approach is to estimate average remaining asset lives for each wholesale control. The approach is based on 'historic cost' accounting. The source data for estimating average remaining asset lives is accounting values that are recorded at historic values.

There are some significant downsides to an historic cost approach, and these have been discussed in BP submissions to Ofwat. These downsides include:

- Historic cost information does not account for the impact of inflation over time on asset values – creating bias in the estimates.¹⁶
- There are issues with what the information is capturing e.g. the figures do not take account of assets that are fully depreciated, and net book values includes assets under construction – which do not have a corresponding depreciation amount until complete.
- Inconsistency with previous regulatory treatment given Ofwat's focus on CCD in past price controls (this is covered in Annex B) and also with the run-off decisions at PR19.¹⁷
- The way Ofwat applies this approach assumes a consistent relationship between NBV and RCV that does not hold.

3.1.1 Lack of engagement with critiques and suggestions

We find that Ofwat acknowledges some of these critiques in the DD. However, Ofwat does not engage with the submissions on how the estimates can be improved to mitigate some of these issues. For example, some of the submissions noted that the method used by Ofwat did not take account of intangible asset historic cost values that are also available in the APRs.

¹⁶ This is particularly important in a sector with such reliance on assets with long asset lives.

¹⁷ There is almost zero correlation between the raw outputs from Ofwat's historic cost-based approach and the PR19 FD run-off rates across the sector.

As these assets tend to have shorter asset lives on average, their exclusion biases the asset life estimates from the APRs upwards. Ofwat did not provide any response on whether companies including the assets in their estimates was appropriate or not.

With regards to Yorkshire Water specifically, the DD appendix notes that the business plan highlighted a, “*number of adjustments*”.¹⁸ However, again Ofwat did not explore these any further. As a result, the points from the business plan outlined in Section 2 of this report – such as the adjustment to adjust the raw APR data to more accurately capture historic cost – were not addressed. Ofwat continued to use the raw APR data for Yorkshire Water in their own analysis in the DD.¹⁹

At the same time, Ofwat set out in the Yorkshire Water specific QAA appendix that the company met their minimum expectations with regards to run-off rates. And set out that:

“The company has broadly followed our guidance for RCV run-off rates.”²⁰

This document would suggest that the adjustments made by Yorkshire Water did not raise any concerns, but when Ofwat undertakes its own assessment of run-off, a different dataset – without these accepted adjustments – is used.

The introduction of a new approach to estimating natural run-off for PR24 by Ofwat, coupled with this lack of engagement on company evidence, is one of many factors contributing a perceived decline in regulatory stability and predictability. In a recent review of the DD, Moody’s sets out that, “*If the draft is adopted unchanged we could lower our view of the regulatory framework’s stability, predictability and supportiveness.*”²¹ Perceptions such as this do not support financeability or investability.

Overall, there appears to be a degree of acceptance from Ofwat regarding Yorkshire Water’s approach. At the same time there is no specific discussion of the points raised, and a lack of engagement on the details. The use of these unadjusted figures, which are not suitable for the reasons Yorkshire Water highlight, leads to flaws with Ofwat’s assessment. We explore this further in Section 3.2 below.

3.2 Flaws with the figures Ofwat relies upon for the DD assessment

A key part of Ofwat’s assessment on run-off rate is focused on the issue of intergenerational fairness. This assessment is informed by:

- comparisons to run-off rates in past periods, mainly PR19; and
- estimates of the ‘natural’ run-off rate.

¹⁸ Ofwat, PR24 DD, Aligning risk and return appendix.

¹⁹ For example, Figure 9 of the appendix.

²⁰ Ofwat, PR24 DD, Yorkshire Water – Quality and ambition assessment appendix.

²¹ Moody’s (2024), ‘Ofwat’s draft determination increases sector risk’, 14 August 2024.

However, Ofwat's view on how company PR24 run-off rates compare to PR19, and natural rate estimates is flawed. This means the conclusions Ofwat draw from their assessment are not robust. We explain this in detail below using figures specific to Yorkshire Water.

3.2.1 Incorrect PR19 rate

As set out by Yorkshire Water, the relevant PR19 run-off rate was 5.06% (average across all controls). This was estimated using the FD PR19 rate, which was not a point of contention during the CMA re-determination and was estimated such that the change in IRE approach between PR24 and PR19 was appropriately captured. 5.06% is the relevant figure for making direct comparisons to PR24.

However, in Table 6 of Ofwat's DD appendix on Aligning risk and return, it uses an average run-off rate of 3.76% for PR19 for Yorkshire Water. This table is used by Ofwat to assess the reasonableness of the PR24 rates proposed in business plans. 3.76% corresponds to the PR19 FD figure, and therefore reflects Yorkshire Water's old IRE treatment. This means it is not directly comparable to PR24. We also note that within Ofwat's Table 6 there could be inconsistent comparisons across the sector as it remains the case that not all companies are aligned in terms of IRE treatment at PR24. Some companies continue to recover a proportion of IRE through PAYG.

Ofwat acknowledge in the Yorkshire Water specific QAA appendix that this adjustment was made, so it was understood, and considered it consistent with the relevant guidance.²² So it is not clear why Ofwat failed to make the appropriate like-for-like comparison in the Aligning risk and return DD appendix.

The difference between the correct figure and the figure Ofwat relied upon is around 1.3 percentage points.

3.2.2 Incorrect natural rate estimate

Yorkshire Water set out that the appropriate natural rate, following Ofwat's guidance, was 4.72%.

In contrast, in Figure 9 of Ofwat's DD appendix on Aligning risk and return it appears to use raw APR historical accounting data, despite acknowledging its limitations, to estimate that Yorkshire Water has a natural rate of approximately 3.4%. This figure ignores all of Yorkshire Water's work to estimate an appropriate adjusted rate of 4.72%, even though Ofwat considered that Yorkshire Water had followed its guidance.

Again, this is around 1.3 percentage points below the value Ofwat should have considered when comparing their DD proposals to the natural rate.

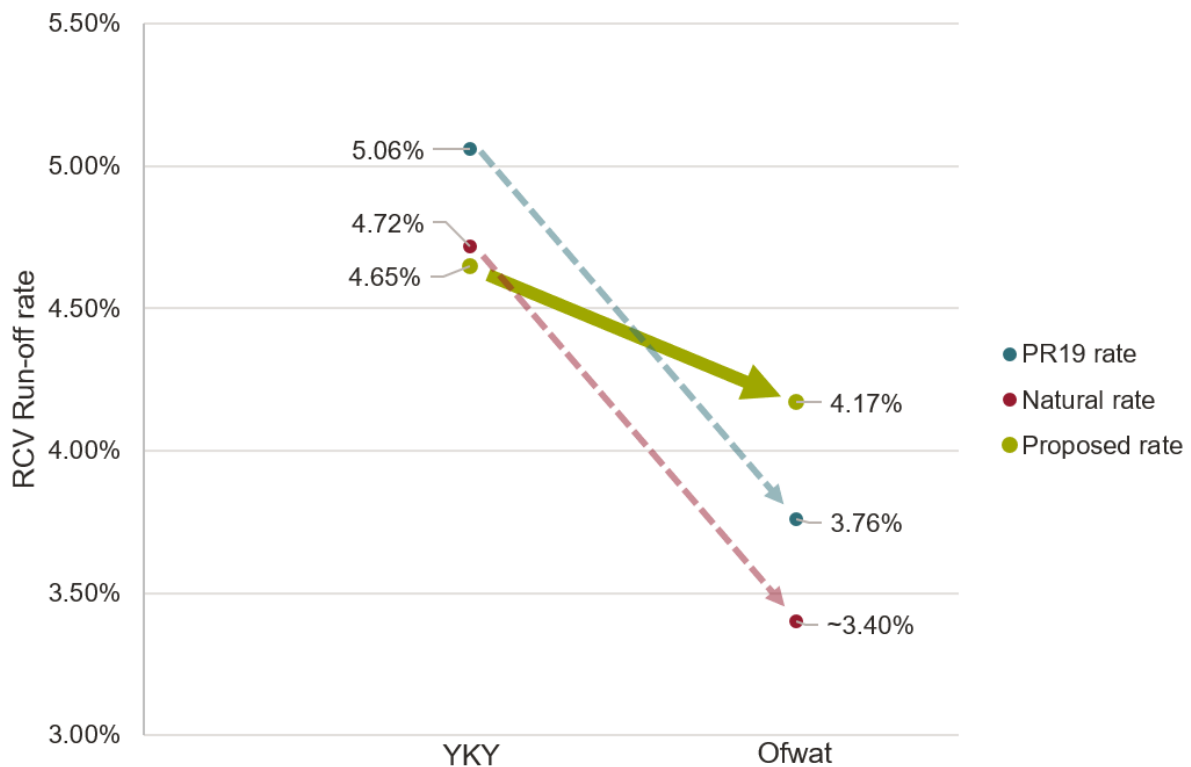
²² Ofwat recognised that, "The company has restated its PR19 RCV run-off rates to take account of a change of approach to recovering capitalised infrastructure renewals expenditure."

3.2.3 Flawed comparison resulting from the incorrect figures

Drawing upon the incorrect PR19 run-off rate and the incorrect natural rate estimate, Ofwat concluded that Yorkshire Water’s business plan proposal of 4.65% (average rate) should be adjusted downwards. The incorrect data suggested 4.65% was greater than both the PR19 rate and the natural rate.

However, using the correct data shows that 4.65% was less than both the PR19 rate (5.06%) and the natural rate (4.72%). Therefore, a consideration of the correct figures is not suggestive that a downward adjustment is appropriate. In fact, it shows that Yorkshire Water had already made a downward adjustment – which was to comply with Ofwat’s guidance on upper limits. This is captured in Figure 2 which highlights the significant differences between the run-off rates proposed by Yorkshire Water and those proposed by Ofwat. The green arrow indicates the notable disparity in the overall proposed rate by Ofwat in their DD compared to that submitted by Yorkshire Water in their BP.

Figure 2 Ofwat’s and Yorkshire Water’s approach to run-off rates



Source: Yorkshire Water, Ofwat DD

These flaws raise concerns about the reasonableness of Ofwat's view on Yorkshire Water's run-off rate. This is because Ofwat has selected a run-off rate in the DD significantly below these two relevant benchmarks.

3.3 Qualitative factors mentioned by Ofwat

With regards to intergenerational fairness and affordability, Ofwat mentions population growth and growth in the economy as factors that could lend support to lower run-off rate for PR24. However, no specific figures are provided, and there is no consideration given to the profile of future investment plans. We briefly explore these aspects below:

- **Population growth and real income growth** – Ofwat mentions population growth and income growth as factors that could support a lower run-off rate for PR24, yet no specific figures are provided to substantiate this claim. Furthermore, Ofwat refers to UK economy growth rather than real disposable incomes, though the latter is more relevant for assessing affordability. Ofwat does not adequately consider the combined impact of population growth and real income growth on future bill affordability. The future affordability of bills is uncertain, as it depends on demographic assumptions and fluctuations in disposable income. Population growth forecasts can vary significantly based on demographic trends, and real disposable income growth is influenced by numerous factors such as tax changes (and also charges for other essential services such as energy bills as these sectors address the challenges of climate change and environmental protection). Given these uncertainties, relying on these qualitative factors when setting current bills raises questions about the robustness of Ofwat's approach. Ofwat has not demonstrated that future bill paying cohorts in Yorkshire Water's service area will have greater capacity to bear costs.
- **Investment plans** – the profile of investment plans is another qualitative factor which is relevant. According to Yorkshire Water's 2023 drainage and wastewater management plan, sustained high investment over multiple years is crucial to address the anticipated challenges posed by population growth and climate change.²³ This highlights the necessity for ongoing and significant investments to maintain and enhance infrastructure resilience. The plan underscores that these investment trends are not an exception but a continuing necessity. Furthermore, Yorkshire Water's Water Resources Management Plan (WRMP) echoes this necessity for sustained investment.²⁴ Yorkshire Water highlight those risks identified, such as those from climate change, mean, "*substantial increased investment compared to our last plan*" is required. These high levels of investment are anticipated to continue beyond the current planning period. This shows the investment trends for this five-year period are not an exception.

Most pathways modelled in the LTDS (Long Term Delivery Strategy) for Yorkshire Water show that bill increases over the AMP9 period – associated with enhancement

²³ Page 6 of the plan states, "if we did not invest in our wastewater assets by 2050, the forecast impact of population growth and climate change would result in an increase in storm overflow activations, the region would be at increased risk of flooding and levels of performance of our wastewater treatment works would be impacted".

²⁴ Page 5 of the plan states that "during the next five to ten years, we will invest in new supplies including new treatment capacity, new groundwater supplies and an additional internal transfer for offsetting the loss of the import from Severn Trent Water".

expenditure – are expected to be greater than AMP8. Furthermore, pathways beyond AMP9 continue to show sustained upward bill pressure. Ofwat’s approach to run-off rates in the DD does not adequately factor this in; deferring cost recovery from this AMP into future periods which will have their own set of cost pressures.²⁵ This evidence suggests the DD is not achieving intertemporal fairness.

3.4 Targeted financeability adjustments to run-off

There are several instances in the DD where Ofwat makes RCV run-off adjustments. Broadly, these adjustments can be placed into two groups:

- Instances where the adjustment was discussed on a company specific basis – with Ofwat commenting on the specific business plan proposals. Companies in this group were: Severn Trent Water, Hafren Dyfrdwy, SES and United Utilities.
- Adjustments made to a group of companies which Ofwat categorised as having run-off rates at the “higher end” of the industry. No company specific comments were made, the group was simply listed in a table. Companies in this group were: Anglian Water, Dwr Cymru, South West Water, Southern Water, Yorkshire Water, Portsmouth Water, South East Water and South Staffs Water.

With regards to this second group, downward adjustments to RCV run-off rate were made. These adjustments are set out in Table 5 in Section 2. The size of RCV run-off rate reduction varies by company, ranging from 9bps for Dwr Cymru to 48bps for Yorkshire Water.

As set out in Section 2, Ofwat highlighted that its approach was to make downward adjustments where, “*there is sufficient headroom for key financial metrics to the target credit rating.*” It appears that the companies in this second group fell into that category. Ofwat is not clear on the calculation steps it applied to generate the run-off rate reductions for this group. However, it is clear from the DD that all the companies in this group (with the exception of Portsmouth Water), all had an FFO to net debt ratio of exactly 10.00% in the notional financeability modelling outputs (see Table 5).

From this result it seems plausible that Ofwat targeted this FFO to net debt output when making run-off rate adjustments. But, regardless of the precise mechanism used, the companies in this group have ended up with notional financeability outputs for FFO to net debt at the very bottom of the Baa rating band for that ratio.²⁶

3.4.1 Issues with the adjustments made

The reductions made to achieve a certain financeability output have several drawbacks.

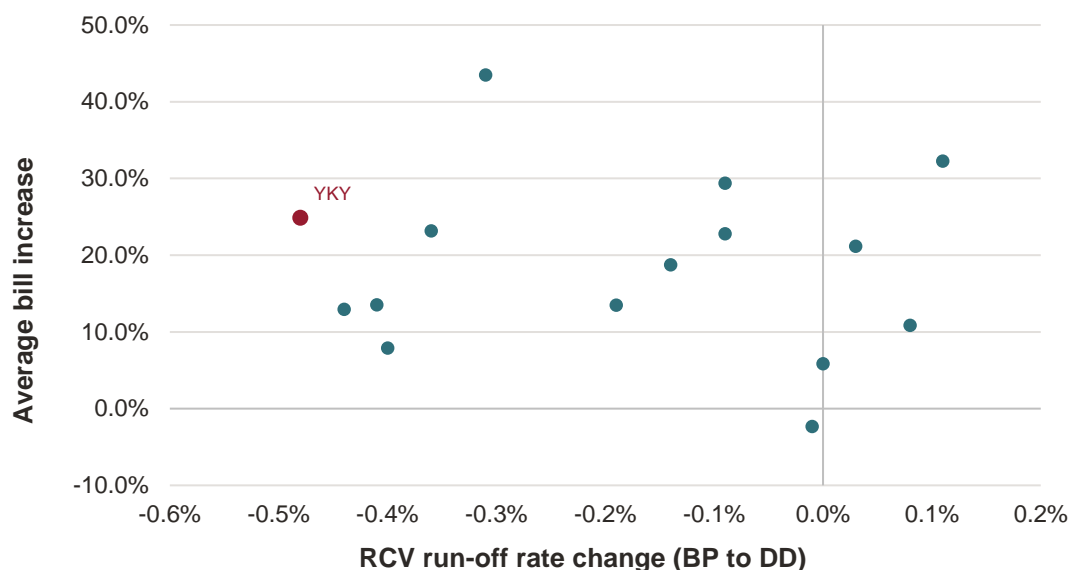
²⁵ Yorkshire Water, ‘Our Long-Term Delivery Strategy 2025-2050’.

²⁶ As set out in the Moody’s Regulated Water Utilities rating methodology (August 2023).

- Company specifics not considered – the adjustments are top-down in nature and treat all companies alike. By grouping all companies together with “higher” run-off rates ignores factors that could naturally drive differences, these include:
 - Investment levels in recent price controls and companies being at different points in their maintenance cycles; and
 - Different operating structures with differing reliance on asset types.
- Customer preferences not taken into account – companies will have engaged with their customers bases on preferences for different bill profiles. These preferences will not be identical across all customer bases, but Ofwat’s top-down approach does not factor this in.
- Downward pressure on credit ratios, and longer-term deferral of revenues could harm investor confidence in the sector. In particular, we note that Ofwat refers to, “*options to similarly mitigate bills at the PR29 price review.*”²⁷ A persistent policy of adjusting cost recovery rates downwards from the natural rates, based on assessed headroom in notional financial metrics, runs a real risk of undermining confidence of both debt and equity investors. Furthermore, as set out in Section 3.3, long-term plans indicate that investment levels may remain elevated for an extended period of time. Deferral of costs, beyond the natural rate, over a 10-year period (consistent with the PR29 reference above) would be a significant shift in regulatory policy, and one that would require a compelling justification.
- The adjustments made appear to have an arbitrary impact on bills. It is clear from the nature of the adjustment that Ofwat was not trying on match bills to specific customer research for each company. But even when reviewing the end result there appears to be no pattern or scale of bill change that is broadly achieved through these adjustments. This is captured in Figure 3 below which compares bill changes between the final years of AMP7 and AMP8 with the scale of run-off rate change between BP and DD. The BP figure, by virtue of being lower than the natural rate, had already aided affordability in this AMP. Ofwat did not set out a case why affordability for Yorkshire Water customers needed to be further supported.
- Lastly, looking beyond this AMP, there is also an expectation of future AMPs (to 2050) having their own set of cost pressures. Therefore, a deferral of costs from this AMP to those future AMPs could create a less sustainable bill pathway. This is because future customers would be paying for assets beyond their useful economic life (given a PR24 rate below the best estimate of the natural rate) as well as funding newer projects. This longer-term sustainability risk is less acute under the BP choice of run-off rate, as the gap between the natural rate and the BP rate is more narrow.

²⁷ Ofwat, PR24 DD, Aligning risk and return appendix.

Figure 3 DD bill increase compared to run-off rate change



Source: Ofwat DD

Note: SES not shown due to scale of RCV run-off change compared to other companies

Overall, all the points above show that the adjustments were poorly targeted, fail to capture any variation between companies, and are not grounded in customer preference. Instead, the approach is a top-down mechanism implemented with a general goal of achieving some level of bill reduction.

3.4.2 Inconsistency with cost of capital assumptions and financial resilience objectives

As noted above, the FFO to net debt for the group of companies being discussed was at the bottom of the Moody’s Baa rating band. Another key metric, the adjusted interest cover ratio, is also towards the bottom of the Baa rating band for the companies in the group. Meanwhile, the notional gearing assumption of 55%, which applies to all companies in the notional financeability exercise, is on the borderline of the Baa and A rating bands.

While Ofwat sets out that its, “*financeability assessment targets a credit rating two notches above the minimum investment grade (BBB+/Baa1)*.”²⁸ It is not clear from these outputs that this is being achieved.²⁹ Mainly because, using the Moody’s guidance, only one ratio, gearing, is as the top of the Baa rating band. The others are at the lower end or the bottom of the band.

We also note that historically the rating Moody’s has assigned to the stability and predictability of the regulatory regime for the water networks regulated by Ofwat was AAA. This was

²⁸ Ofwat, PR24 DD, Aligning risk and return appendix.

²⁹ We note that these ratios are weighted with other factors in the guidance.

reduced to AA in May 2018, and, if Ofwat follows the DD, could be reduced to A.³⁰ All else equal, this means other aspects of the rating needs to be stronger to achieve the same overall rating view.

The credit ratio outputs, in isolation, are not consistent with the A rating band.³¹ This raises two issues:

- **Inconsistency with financial resilience objectives** – Ofwat has been clear that financial resilience in the sector is a priority. Ofwat actively monitors resilience through its regular reporting on the sector. Yet the approach to RCV run-off rate creates a situation where the notional company effectively has a credit rating ceiling. If credit ratios are deemed by Ofwat to be sufficiently above Baa levels, then revenue is reduced through lower run-off rates. This limits the ability of the notional company to achieve a higher credit rating – even if that rating is consistent with a ‘natural’ run-off rate and can be demonstrated to be intertemporally fair. It also limits the ability of the notional company to withstand downside shocks and maintain a given minimum rating. While Ofwat tested ‘headroom’, it did not analyse risks to achieving a minimum credit rating under different shocks – and what the run-off rate adjustments made would mean for that risk.^{32 33}
- **Inconsistency with cost of capital assumptions** – Ofwat’s notional cost of new debt uses the average of the iBoxx A and BBB indices.³⁴ For this to be the appropriate, the financeability outputs need to make an A rating feasible – otherwise a 50% weighting on A-rated debt yields is unreasonable. However, as set out above, the credit ratios have been purposefully reduced. Where financeability outputs were stronger, Ofwat has made a targeted downward adjustment to revenues – via RCV run-off – to weaken those in order to reduce bills. This makes it more challenging than it otherwise would have been to achieve an A rating. In turn, this makes it more stretching for the notional company to achieve yields as low as the cost of new debt benchmarks suggest.³⁵

Both of these issues are significant and require careful consideration at FD. The usage of run-off rates to place an effect ceiling on the credit rating the notional company can achieve can have unintended consequences that Ofwat may not have fully explored to date.

³⁰ As noted by Moody’s in August 2024.

³¹ The notional gearing is on the cusp of the band, but not within it. However, Ofwat’s financeability modelling allows gearing to trend up towards 57.5%. This 57.5% threshold is within the Baa rating band.

³² For example, as the CMA did for PR19, considering a 1% RoRE downside scenario in each years of the price control.

³³ We note that assuming fresh equity is forthcoming depends on how equity investability risks are managed.

³⁴ 10-year+, GBP non-financials.

³⁵ Ofwat signalled at PR29 that similar adjustments could be used – meaning reductions over a 10-year period.

4 Impact on Yorkshire Water

In this section we explore the impact of the DD approach to run-off rate on Yorkshire Water specifically.

4.1 Demonstrating the impact on Yorkshire Water

As set out in Sections 2 and 3, Yorkshire Water's business plan had already used a run-off rate which was below both the natural rate and the PR19 rate.³⁶ Despite this, Ofwat selected a figure which was significantly lower (as shown in Figure 2).

Ofwat contends that the reductions it makes in run-off only, "*marginally increase the period over which RCV is recovered from customers*", and that, it has "*made small reductions to RCV run-off rates*".³⁷ As set out below, in the case of Yorkshire Water these statements are inaccurate, the impacts are significant, and they heighten investability risks.

4.1.1 Financial impacts

In terms of the revenue impacts on Yorkshire Water from the run-off rate reduction, we set out a range of figures in Table 6 below. The reductions to run-off rate in the DD are shown with respect to the final business plan proposal, the business plan estimate of the natural rate and the PR19 rate. These range from 48bps up to 89bps, and therefore we do not find they can be considered "*small reductions*" as Ofwat claim.

Table 6 Estimated revenue impacts

Point of comparison to DD	RCV run-off change (bps)	Implied average asset life change	AMP8 revenue impact (£m)
BP proposal	48bps	2.5yrs	£198m
BP natural rate	55bps	2.8yrs	£227m
BP PR19 rate	89bps	4.2yrs	£367m

Source: Ofwat DD, Frontier Economics estimates

Note: Revenue impacts scaled linearly from the DD figures on run-off rate and revenue; inputs are the DD rate of 4.17%, the BP natural rate of 4.72% and the BP PR19 rate of 5.06%

³⁶ We note that the PR19 comparisons Ofwat used may have been biased in many cases, and not just in the case of Yorkshire Water. This is shown by the following statement from Ofwat's PR19 FD appendix on aligning risk and return, "*PAYG for all companies covers operating costs including infrastructure renewal expenditure where this is forecast in operating costs. There are thirteen companies that forecast an element of infrastructure renewal expenditure in capex. **Seven of these propose recovering these costs in period through PAYG rates.** The remaining six companies propose recovering these costs through the RCV and associated RCV run-off.*" [emphasis added]

³⁷ Ofwat, PR24 DD, Aligning risk and return appendix.

Translating these differences into implied asset life changes shows that there is a material difference between the asset life implied by the business plan figures and the DD rate. In the case of the PR19 comparison, the reduction in run-off rate applied by Ofwat in the DD implies an increase in asset lives of over 4 years on average. The DD implies an average asset life of approximately 24 years, while the PR19 equivalent is under 20 years. This changes the average asset life by almost an entire price control period. This means that Ofwat's statements saying the changes it made, "*marginally increase the period over which RCV is recovered from customers*", do not apply in the Yorkshire Water case. The changes are significant, not marginal.

In revenue terms the change is also significant. Comparing the final BP proposal with the DD rate the reduction in revenue is approximately £200m over AMP8. This reduction is even greater when compared to the BP estimate of the natural rate (£227m) and the PR19 rate (£367m). Expressed as a percentage of total allowed revenue for the period the reduction from BP proposals is almost three percentage points.

The scale of the changes between PR24 DD and PR19 are particularly stark in Table 6 above. Given that the run-off rate was not a point of contention at PR19, and also that Yorkshire Water followed Ofwat's guidance with respect to reflecting its change to IRE for PR24, we consider that this PR19 reference point is a robust one. We find that it demonstrates that the financial impact between price controls is large both in terms of implied asset life change and revenue change. This demonstrates that Yorkshire Water had the greatest sensitivity to the top-down revenue reduction method implemented by Ofwat in the DD.³⁸

The financial impact on Yorkshire Water from the run-off changes made at DD is also the largest out of the eight companies who had similar adjustments made.³⁹ This is true both in absolute and relative terms. In absolute terms Yorkshire Water had a revenue reduction of £198m compared to a range for other companies of £1m to £109m. As a percentage of allowed revenue, the reduction for Yorkshire Water of 2.8% compared to a range of 0.6% to 2.7%.

Overall, the top-down adjustment Ofwat makes, which is largely to achieve a general, qualitative aim of bill reduction, has had a particularly acute quantitative impact on Yorkshire Water.

4.1.2 Heightened investability risks

We find that approach taken by Ofwat to run-off rates heightens PR24 investability risks for Yorkshire. This is because the reduction in revenues means that a greater amount of cash from financing is required to provide the necessary cash for PR24 CAPEX. In order for the

³⁸ In the DD city briefing Q&A Ofwat highlighted that the changes to run-off rate were driven by bill level motivations rather than views on average asset lives. Setting out that, "*The targeted changes we have made to reduce RCV run-off rates help to mitigate sharp increases in bills.*"

³⁹ The group set out in Table 7 of the DD Aligning risk and return appendix.

notional company to maintain a given gearing level, a proportion of this cash from financing will need to be equity injections.⁴⁰

Ofwat's own financeability modelling shows £333m of equity injections for Yorkshire Water in the next price control. The ability to attract new equity, beyond equity sourced from retained earnings, requires investors need to have sufficient confidence regarding prospective returns. Where this confidence is lower, and the amount of new equity required is greater, investability risks are higher.

Had Ofwat allowed the BP proposal for RCV run-off, meaning £198m of additional revenue in the period for Yorkshire, this equity injection amount would decline considerably to £135m – mitigating this investability risk.

4.2 Further factors relevant to Yorkshire Water

In addition to the points covered regarding the 'natural rate' we have also seen customer research compiled by Yorkshire Water that is also relevant to preferences and the topic of intergenerational fairness. In particular, the research sets out that:

- Customers have repeatedly told Yorkshire Water that they would prefer to spread the impact of bills out or even have an impact sooner rather than push back the impact of risks to future bill payers.
- Yorkshire Water sets out that there has been consistency of message between Affordability and Acceptability Testing (AAT) and LTDS research.

This is a factor that should be considered qualitatively when considering the extent to which its appropriate for the AMP8 RCV run-off rate to differ from the natural rate.

Another factor relevant to Yorkshire Water is that the long-term delivery strategy shows that bill increases associated with enhancement are not limited to AMP8. In fact, most pathways modelled in the LTDS show that bill increases over the AMP9 period associated with enhancement expenditure are expected to be greater than AMP8.⁴¹ This shows that high investment levels will not necessarily 'peak' this period (which could arguably support a reduction in cost recovery in AMP8), but instead that bill pressures will be sustained as the sector deals with a range of challenges. This demonstrates that this period is not an exception, and therefore supports rates which are closer to the natural rate (which in the Yorkshire Water business plan was estimated to be 4.72%).

⁴⁰ Given limits on the equity financing which can be provided by retained earnings.

⁴¹ Yorkshire Water, 'Our Long-Term Delivery Strategy 2025-2050'.

4.3 Actual company considerations

Lastly, we note that the DD did not consider any actual company impacts. While we would expect that the focus of Ofwat's approach would be on the notional company, there are some reasons why impacts on the actual company may be warranted.

Mainly, this is because Ofwat is actively reducing revenues through the run-off rate adjustment to a level below the natural rate.⁴² A reduction of this kind, which explicitly removes 'headroom' on financeability metrics, is novel. Ofwat would not typically adjust revenues upwards for actual company financeability, at the same time one would not expect Ofwat to adjust revenues downwards for notional company financeability.

Where a novel adjustment is being applied, it is reasonable to consider whether it has an unintended consequences for the actual company. Where this check does not take place, this could heighten risks regarding regulatory stability and predictability. In this case we consider that it would be reasonable to check whether the adjustments being made have any unintended negative consequences for actual credit rating assessments or actual equity raising activities.

⁴² Even more so that Yorkshire had already done through their selection of a run-off rate below PR19 and the natural rate.

5 Implications for the Yorkshire Water RCV run off rate in the FD

In this section, based on the findings from the assessment above, we set out the implications for the Yorkshire Water RCV run off rate in the FD.

We find that there **are three key implications** from the findings set out in this report:

1. That the run-off rate selected by Yorkshire Water in its BP is below or equal to all three of:
 - a. The best estimate of the natural rate run-off rate;
 - b. The best estimate of the comparable PR19 run-off rate; and
 - c. The upper limit guidance set out by Ofwat in the PR24 Final Methodology.

This means that Yorkshire Water had **already made bills more affordable** than a scenario where the natural rate, or a continuation of the last price control rate had been applied. It also means that Yorkshire Water's approach was **consistent with Ofwat's guidance** from a quantitative and qualitative perspective.

2. That Ofwat's **DD findings drew upon evidence which had demonstrable flaws**. Meaning that Ofwat drew conclusions regarding the BP proposal from Yorkshire which were inaccurate. At the FD Ofwat should consider the most appropriate data sources – those which are detailed in Yorkshire Water's BP.
3. That **Ofwat's DD financeability based adjustment approach had an unusually large impact on Yorkshire Water and creates inconsistencies** with other important aspects of the price control. Namely, that an approach which reduces credit ratios creates inconsistencies with Ofwat's wider objectives regarding financial resilience. Ofwat should re-consider any financeability based adjustment, to the extent it remains relevant, at the FD.

Annex A – Ofwat’s guidance on RCV run-off for PR24

Ofwat’s Final Methodology for PR24 sets out four components of a framework that companies were expected to use when proposing RCV run-off rates:

- *“Intertemporal fairness such that the RCV is allocated fairly to each generation of customers in a way that represents how previous investment will provide services to the customers. We consider run-off rates that are based on average remaining asset lives that can be derived from published 2021-22 accounts to be a reasonable starting point.*
- *Affordability for customers. RCV run-off represents a significant element of allowed revenue and therefore customer bills. Companies will need to provide evidence that they have considered the impact of their proposals on customers both now and in the longer term and they should provide evidence of customer views on the chosen bill profile incorporating both the PAYG and RCV run-off proposals.*
- *Our guidance on acceptable upper limits. Reflecting expected levels of enhancement spend and pressures on customer affordability, we would not expect companies to propose RCV run-off rates that are higher than those allowed at PR19 or that are above the guidance set out in table 8.1.*
- *Financeability of the notional company, such that the choice of RCV run-off rate balances the need to manage financeability in both the short and the long term.”*⁴³

⁴³ Ofwat, Creating tomorrow, together: Our final methodology for PR24, Chapter 8, pages 117-118.

Annex B – Continuation of an inconsistent regulatory approach

In this annex we highlight why Ofwat's views on 'Current Cost' depreciation methods remain inconsistent with past price controls. We first set out an overview of current cost methods. We then articulate why the statements made in the PR24 DD by Ofwat would result in an approach inconsistent with their past approach to the same issue.

Overview of current cost methods for run-off

There are different ways in which current cost depreciation (CCD) methods can be implemented.

- One approach takes the historic cost value of assets and adjusts this to reflect the change in a general price index (e.g. RPI or CPI) between the time of construction and the valuation point.
- An alternative approach is to periodically revalue each asset (or each type of asset) based on an estimate of the cost of a modern equivalent. This modern equivalent asset valuation (MEAV) form of CCD differs from the other approach in that it takes account of differing inflation levels for each asset. It also takes account of changes in technology and asset obsolescence. On the other hand, it is a more resource intensive exercise.

Ofwat's early price control methodology was based on the MEAV version of CCD, with revaluations every five years as part of the price control process. This method was amended after PR09 and therefore the last MEAV revaluation was in 2007/08.

As a result, implementing a CCD method typically now requires a hybrid version of these two approaches, with valuations since the last MEAV revaluations in 2007/08 updated with a general inflation index.

Practically, Current cost depreciation (CCD) estimates are formed from two key inputs. These are:

- an estimate of the current cost asset value of the regulated business assets (e.g. MEAV); and
- an estimate of asset lives.

Given these inputs, **a depreciation value (£m) by price control per annum can be calculated.** CCD figures are often calculated at the level of specific assets, and then grouped into a total CCD figure by price control by summing the individual amounts.

This value is then expressed relative to RCV for the relevant price control to produce a percentage per annum figure for run-off.

Inconsistency of Ofwat's DD view

In the DD, Ofwat recognises that there are alternative methods to calculating run-off rates, setting out that:

*"we accept that there are a number of methods of calculating this, meaning it may be appropriate to consider a range."*⁴⁴

However, in terms of CCD, Ofwat goes on to state that:

*"In the event that we were to accept that current cost depreciation should inform the run-off rate, we consider this should be expressed as a percentage of GMEAVs, rather than the RCV balance"*⁴⁵

This statement reflects a change from past regulatory treatment of CCD. Rather than the CCD estimate in £ being expressed relative to the RCV in £ (implying a run-off rate in %), Ofwat is saying that an alternative approach should be taken. This alternative is to first express CCD as a % of GMEAVs, and then apply this percentage figure to the relevant RCV balance.

This suggestion from Ofwat would not reflect the costs of replacing assets with modern equivalents. It is also inconsistent with statements made by Ofwat in the Final Methodology for PR24, where it set out that:

*"Typically, over the longer term we would expect the amount of revenue generated from customers in respect of the RCV run-off to be close to that required to be reinvested in new or replacement regulatory assets"*⁴⁶

In fact, Ofwat's suggestion regarding CCD may exacerbate the gap between previous price controls and PR24 even more than applying their preferred 'starting point' based on historic cost figures.

In conclusion, following Ofwat's suggestion would result in an inconsistency between PR24 and past price control approaches to RCV run-off. We do not agree this is an appropriate way to apply CCD.

⁴⁴ Ofwat, PR24 DD, Aligning risk and return appendix.

⁴⁵ Ofwat, PR24 DD, Aligning risk and return appendix.

⁴⁶ Ofwat, Creating tomorrow, together: Our draft methodology for PR24, Chapter 8.

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