

Representations: Financing and financial model

Document Reference: D004

This document sets out our representations to Ofwat on aspects of their PR19 draft determination which impact the financing of our plans

United Utilities Water Limited



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Executive summary

This document sets out U UW’s representations on Ofwat’s Draft Determination for PR19 in relation to financing and the financial model. The issues have been raised as promptly as we were able to do so under the price review process, taking into account the information that has become progressively available over time through the IAP stage, the resubmission stage for fast track companies and the release of Ofwat’s Draft Determination, alongside various other queries and correspondence between Ofwat and stakeholders during 2019.

This document is set out as follows:

Section 1 explains the key changes we observe in revenues from the September plan to the draft determination, and the high level approach we believe should be applied in revising the draft determination before making the final determination.

Section 2 sets out our representations relating to the allocation of RCV to the Water Resources price control, whereby we propose further revisions to the basis of allocation compared to previous proposals.

Section 3 represents on PAYG and RCV run-off rates to be applied to the four wholesale price controls, in which we represent some further proposals for how Ofwat should assess the level of PAYG from its totex assessments.

Section 4 explains our proposals relating to CPIH transition in AMP7, in which we propose to use emerging headroom in the business plan to accelerate CPIH transition, capped at bill levels and the bill profile proposed in our September business plan, based on customer research.

Section 5 expands on our September business plan in relation to the cost of capital, including updating this analysis having reviewed companies’ September and April business plan submissions.

Section 6 describes the importance of key financial metrics in the assessment of financeability where we propose steps that could be taken to aid greater comparability between companies.

Section 7 relates to our proposals to expand the tax true-up mechanism to also include changes to the business rates multiplier.

Section 8 regards the basis of the calculation of tax allowances in allowed revenue which has been adopted for draft determinations.

Section 9 relates to the presentation of the fast track reward in the financial model and draft determination documentation.

Section 10 relates to the presentation of ODI RORE ranges and the interaction of individual ODIs in order to calculate an overall simulated ODI RORE range

We also include an appendix in section 11 which contains details of areas in the Draft Determination documentation or financial model which appear to us to be incorrect and may benefits from further explanation or correction.

1. AMP7 allowed revenue assumptions

This section outlines a number of representations we wish to make about the AMP7 allowed revenue assumptions which are embedded in the draft determination. At the outset, It is important to make appropriate comparisons when comparing the overall changes in revenue control proposals between the company’s business plan (on a notional basis) and the draft determination. A headline comparison shows that the reduction in revenues (compared to our September business plan) is £61m. However, this tends to mask two key further changes embedded in the draft determination, as compared to our September submission.

- Firstly, this comparison is made between notional company financial models. However, business plans are not executed on the basis of a notional company and our business plan was submitted foremost on the basis of the “actual company” structure and financing costs. In our view the correct comparison for the September allowed revenue is therefore taken from our App17 data table, lines 12, 13, 18, 19, 25. This comparison of actual company allowed revenue to Ofwat’s DD notional company allowed revenue shows a larger reduction of £119m.
- Secondly, the DD also reflects a further reduction to our income statement revenues of £107m due to the application of Ofwat’s assessment of the amount of contributions from connection charges and revenue from infrastructure charges (net of income offset) at DD. We believe that this needs to be readjusted. For further representation on the treatment of these revenues, see “D003 - Cost Assessment” sections 2 and 3.

Figure 1 below shows our understanding of the component changes in revenue. It bridges from September actual company allowed revenues¹ to September Income Statement revenues² and then to Draft Determination Income Statement revenues³ and, finally, DD notional company allowed revenues⁴.

September revenues are based on the actual (“un-notional”) company structure⁵ sourced from our September business plan data tables. Draft Determination revenues are based on the notional company structure, sourced from Ofwat’s published DD U UW financial model. The bridge blocks are organised per “K calc” building block, as presented on the DD financial model “Dashboard”.

¹ Taken from September business plan data table App17 lines 12, 13, 18, 19, 25.

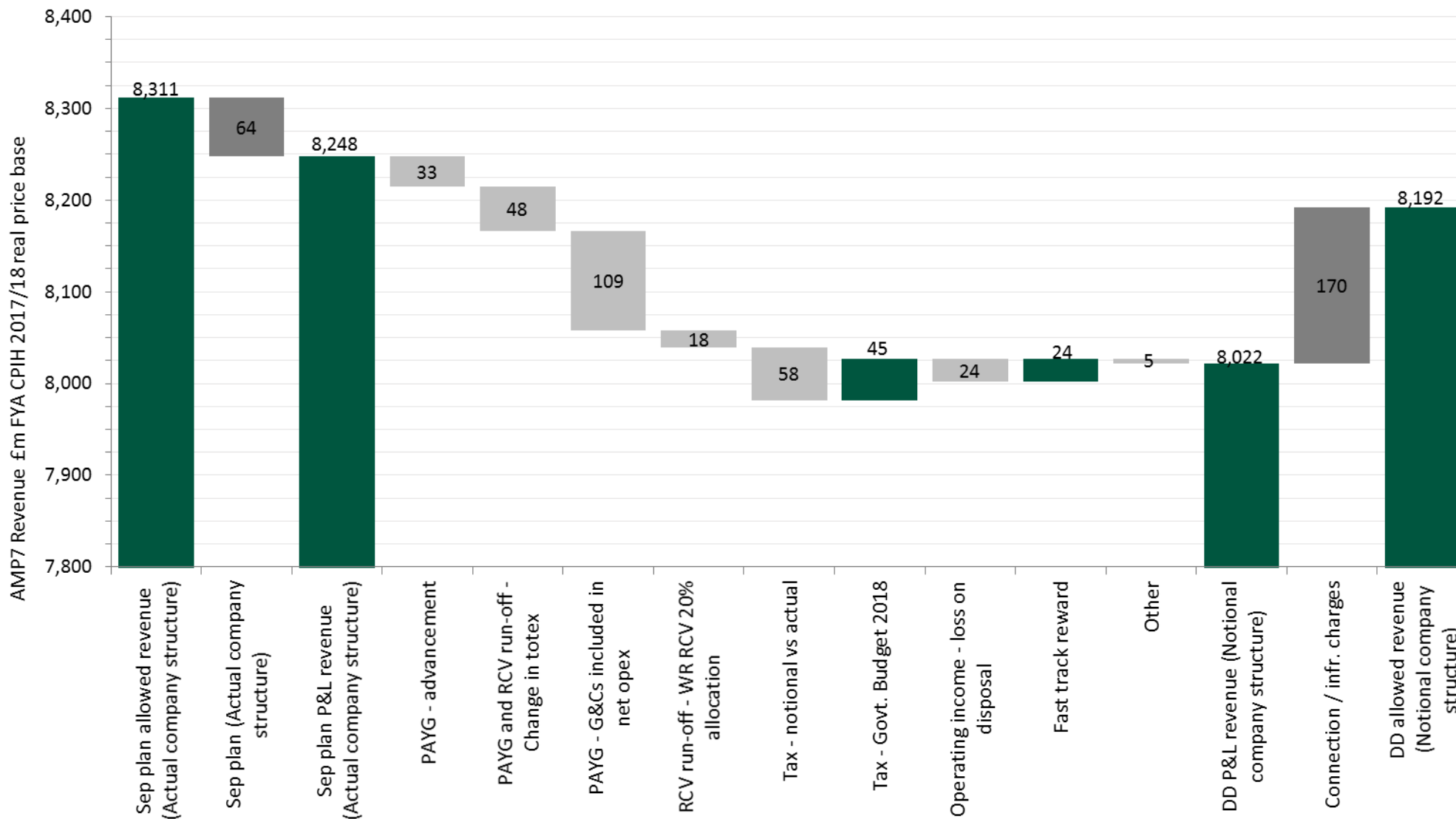
² Taken from September business plan data table App11 line 1 deflated from nominal to real price base using App23 line 29 CPIH FYA indices. The difference between the two types of revenue is due to contributions from connection charges and revenue from infrastructure charges. In our September plans, this value was disclosed on data table App17 line 25.

³ Taken from DD Financial model sheet “FinStat_Appointee” line 9 “Revenue - Appointee – nominal” deflated from nominal to real price base using App23 line 29 CPIH FYA indices.

⁴ Taken from DD Financial model sheet “Dashboard” cells T198:W198 “Final Allowed Revenues - real” plus residential retail revenue (real) from sheet “Retail_Residential” lines 199 and 203. Again, the difference between the two types of revenue is due to contributions from connection charges and revenue from infrastructure charges the value for which is taken from the DD Financial model sheet “Dashboard” cells T195:W195.

⁵ This was the basis of how we completed our allowed revenue business plan data tables App7, App17, WR3, WN3, WWN5, Bio4 and R7 at September 2018. We have not received any queries on this basis of completion for these tables.

Figure 1 - Revenue waterfall



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We are making representations in respect of the following revenue changes:

PAYG - Change in gross totex and natural rate We are making two representations in relation to this component. The first is on cost assessment, in which we have responded to Ofwat’s challenges to some of the cost adjustment claims (notably our drainage claim within wastewater network plus), and Ofwat’s enhancement cost assessments. These representations are made in document “D003 - Cost Assessment” sections 5, 6, 8 and 10.

We are also presenting further evidence in section 3 below regarding Ofwat’s assessment of our “natural” PAYG rates using its cost assessment models.

We propose that Ofwat adjusts its approach to be more representative of cost challenges within the wastewater value chain, which would result in approximately £18m of additional assumed operating expenditure within the baseline, thereby increasing the natural PAYG within the revenue build up to be more reflective of the activities we will be undertaking in AMP7. The analysis for this assessment is set out in document “D003 - Cost Assessment” section 13.

PAYG - G&Cs included in net opex We are proposing some significant amendments to Ofwat’s assumptions for grants and contributions from that proposed in the Draft Determination. Ofwat’s Draft Determination assumptions result in lower net totex, which therefore reduces the value of PAYG assumptions. For further representations on this matter and Ofwat’s overall approach to assessing diversions and income offsets, see document “D003 - Cost Assessment” sections 2 and 3.

RCV run-off - WR RCV 20% allocation We recognise Ofwat’s concerns over our previously proposed “economic value” basis of calculating the water resources RCV allocation. We now propose that the RCV allocation should be based on an alternative allocation based on future expenditure. Our revised assessment is a 15.0% allocation of Water RCV to Water Resources.

In the event that Ofwat continues to reject our revised proposed RCV allocation, and retain its assumption of 20%, then the RCV run-off should be amended to recognise that it is allocating a greater proportion of RCV to a price control with a lower RCV run off rate, and hence this will result in the wrong amount of RCV run-off; revenues from RCV run-off have reduced by £18m due to the 20% WR RCV allocation in the draft determination. Ofwat has not considered the impact on RCV run-off rates and amended them, in order to maintain the £cash value from RCV run-off. Further representations on this matter are set out in section 2 Allocation of RCV to Water Resources and section 3 PAYG and RCV run-off.

Tax – notional vs actual We disagree with Ofwat’s use of notional tax in the calculation of allowed revenues. Section 8 Use of notional company taxation sets out further representations on this issue.

Tax - Govt. Budget 2018 We note this change made in light of recent UK corporation tax legislation changes and accept it as reasonable.

Operating income - loss on disposal We note that loss on the disposal of fixed assets is a form of depreciation. Because Ofwat has intervened (action UUW.RR.C3) to remove this revenue, RCV run off may be understated. This item relates to assets replaced and written off before the end of their accounting life. Whilst this should also be included within RCV run-off and run-off rates, we note that we are seeking for our September plan RCV run-off £cash value to be reinstated (as explained above) and we are now also proposing to use RCV run-off to effect greater CPIH transition, so as to ensure customer bill profiles are in line with the -10.5% bill reduction and also income statement revenues in the September plan. Therefore, we are content to note, but not challenge, this item in the interest of focusing attention on the reinstatement of the RCV run-off £cash value and effecting greater CPIH transition via RCV run-off rates.

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Fast track reward As a fast track company, Ofwat has proposed to allow UUW a financial reward equivalent to 10 basis points on the return on regulatory equity which we requested is attributed as an additional revenue adjustment. NB. The value of this is £24m, consistent with Ofwat’s model, not the £14m stated in Ofwat’s supporting documents.

Revenue re-profiling We do not agree with the approach taken to bill re-profiling in the draft determination. Research shows that customers prefer flat bills in nominal terms. However, Ofwat’s proposed bill re-profiling acts to provide a greater up front cut, with bills subsequently increasing by inflation and more. Ofwat’s Draft Determination bill is flat in *real* terms, not *nominal* terms. This is both contrary to customer preferences and the stated aim of the re-profiling in Ofwat’s supporting documentation (“*We have made minor adjustments to make the nominal profile flat over the period.*”⁶). For further representations on this matter, see section 4 CPIH transition and bill profile.

HH Retail - SIM reward Although Ofwat has not provided for a SIM reward in the DD, we anticipate that UUW’s reward will be c.£16m, following our best ever SIM score in 2018/19. We acknowledge that Ofwat is providing further details on the SIM reward in the slow track determinations. For further representation on this matter see “D005 - Past delivery and SIM” section 1.

In summary, we propose that Ofwat:

- **accepts our representations on each of these revenue matters which are explained throughout this document and our cost assessment representations set out in “D003 - Cost Assessment”**

⁶ “PR19 Draft determinations: United Utilities draft determination”, Ofwat, 11 April 2019, page 47

2. Allocation of RCV to Water Resources

Ofwat is proposing that 20% of the Water RCV be allocated to Water Resources and states that:

“United Utilities has maintained that a 14% allocation is appropriate for Water Resources. We remain concerned about the implications of a low RCV allocation to the potential for Water Resources trading. To promote confidence in the development of a Water Resources market we are making an intervention. We are proposing to intervene to increase United Utilities’ RCV allocation for water resources to 20%. The allocation is similar to other companies operating in the north of England with similar characteristics (that is, significant long life, high value reservoir assets and aqueducts)”.⁷

We are concerned that intervening to further increase the allocation of RCV to water resources will jeopardise the development of water resources trading, rather than promoting confidence in the development of the market. In addition, it also interferes with our accountability to set prices in a way that is appropriately cost reflective. It may be appropriate for Ofwat to intervene if our proposed allocation was materially different to those proposed by other companies, but that is not the case as Ofwat appears to have accepted much lower RCV allocations from many other companies. Our existing charges already reflect a much lower RCV allocation, and Ofwat’s proposed 20% allocation will significantly impact on the balance of charges, in a way that we would not support, without reference to the value having been set by Ofwat (i.e. outside of our control). This is not consistent with the principle of companies taking accountability for compliance with competition law.

We recognise Ofwat’s concerns over our previously proposed “economic value” basis of calculation for the RCV allocation can, under certain circumstances, indicate a different valuation. Whilst we provided evidence (in our business plan) that the likelihood of it indicating a higher allocation than our proposed 14% was less than 4%, we acknowledge the risk that our proposed “economic value” basis of calculation for the RCV allocation can, under certain circumstances and scenarios, indicate a different valuation.

In our September Business plan document “S5004 Water Resources RCV Allocation” we presented a number of alternative bases of allocating RCV to water resources, which indicated a range of potential RCV allocations, which were summarised (in section 7 of that document) as follows:

⁷ “PR19 draft determinations: United Utilities draft determination”, Ofwat, April 2019, page 29

Table 1 - S5004 Water Resources RCV Allocation - alternative bases

	<i>RCV allocation</i>	<i>Potential effect on non-potable charges</i>	<i>Allocation relative to future economic value</i>
<i>Post-privatisation spend at full value</i>	6%	None	May be too low
<i>Economic value</i>	12% to 14%	Can be managed through phasing in	Almost certainly sufficiently high
<i>Totex – future expenditure</i>	14.8%	Can be managed through phasing in	Almost certainly sufficiently high
<i>Totex – past expenditure</i>	13.4%	Can be managed through phasing in	Almost certainly sufficiently high
<i>GMEAV</i>	31%	Very high incidence effects	Too high given foreseeable trades
<i>NMEAV</i>	28%	Very high incidence effects	Too high given foreseeable trades

For the reasons we have stated in previous submissions, we continue to believe that an allocation based on MEAV would not be in customers’ interests, or in the interests of economic efficiency and promotion of effective competition. However, Ofwat has not accepted our proposal that the allocation should be based on the economic value approach.

Having reviewed the remaining approaches, and as an alternative to the “economic value” approach, we now **propose that the RCV allocation should be based on an alternative allocation based on future expenditure**. We consider that the proportion of total future expenditure in Water Resources (relative to total Water expenditure) provides a fair reflection of the relative significance of water resources for the water business, and should be seen as the next best proxy value for LRIC after economic value. We also note that, other than MEAV based approaches, this is the method that results in the highest allocation of RCV to Water Resources.

For this method, we have taken future Water Resources spend, as a proportion of total Water expenditure from AMP7 and AMP8, as shown in our business plan tables. This method produces a 15.0% allocation of RCV to Water Resources:

Figure 2 - Water Resources net totex as a proportion of Water wholesale net totex

		Total	AMP7	AMP8
Water Resources net totex	£m	751	374	376
Water Network Plus net totex	£m	4,258	2,074	2,184
Water wholesale net totex	£m	5,009	2,448	2,561
WR net totex as a proportion of Water wholesale net totex		15.0%	15.3%	14.7%

Source: September 2018 business plan submission financial model

We note Ofwat’s intervention in the DD is higher than the results of any of the methodologies that could be utilised to allocate the RCV, except for the inappropriate MEAV approaches which would very materially overestimate the allocation. Ofwat’s intervention is based on benchmarking our RCV allocation against two other companies. If it chooses to retain this method for the Final Determination, then we propose that it should at least factor in to its estimate the allocations applied for those adjacent companies that we are more likely to trade with (i.e. Severn Trent and Welsh), as well as or rather than Yorkshire or Northumbrian. Severn Trent and Welsh’s RCV allocations are 8% and 11% respectively.

These are substantially less than our revised proposed allocation of 15.0%, and hence Ofwat should not be concerned that our proposed allocation would present a detriment to Water Resources trading.

2.1. Impact on development of the water resources market

The price for water resources may set a lower bound on the price for trading water, as charging lower prices for external trading than we charge internally would create anomalies in terms of fair charges to our customers and for bulk pricing for inset appointments. Therefore a high allocation of RCV to water resources may create too high a price for the potential transfer of water to the South-East of England, and jeopardise such a trade, even if this is the most economic option.

As stated in the Draft Determination, an allocation of 20% of RCV would give a similar allocation of RCV to other companies in the North of England with some similar characteristics (Yorkshire and Northumbrian). However, we do not think that this is the most relevant comparison because:

- Neither of these companies is actively pursuing a water trade.
- The likelihood of trades depends on topography and location of water resources and centres of population. These factors make trades with Severn Trent or Dwr Cymru more likely than with Yorkshire or Northumbrian (which is reflected in current bulk supplies between U UW and Severn Trent and Dwr Cymru being much more significant than bulk supply arrangements with Northumbrian or Yorkshire). Therefore, it is more important to avoid distorting the market for trades with these companies where trades appear practically possible than for trades with companies which appear far less likely due to physical factors outside of company control.
- On the basis of our revised 15.0% proposal, U UW's water resource price will be above that for Severn Trent, and similar to the prices for Yorkshire and Dwr Cymru. A 20% allocation would lead to prices above all these companies, and only be below Northumbrian's price. Such a significant increase in prices is not reflective of relative resource scarcity and will inhibit trading.

2.2. Compliance with competition law

The RCV allocation is a component of pricing for contestable services (e.g. water trading and NAVs). How companies allocate costs should be a matter for companies, in managing their own risk of compliance with the requirements of competition law. It should therefore be a matter for U UW to assess, establish and defend its own allocation of RCV to Water Resources, based on what it believes would be defensible in the event of a challenge of its prices (e.g. from a NAV).

We do not believe it is appropriate for Ofwat to overwrite this value at a price review determination when it is inconsistent with the company's own assessment, and that assessment is not materially out of line (indeed is, on average, higher) than the allocations of other companies.

2.3. Impact on revenue and prices – RCV run off

Through Ofwat's intervention to increase the water resources RCV allocation, our allowed revenues decrease from our September plan. This is because water resources RCV run-off rates are lower than WN+ and these remain unchanged in Ofwat's Draft Determination, despite the RCV allocation intervention.

Our September RCV run-off percentage rates were based on an underlying economic depreciation of assets on an absolute (£cash) value, which were then translated into % run off rates as part of our September submission. As part of the IAP action U UW.RR.A1, Ofwat requested further evidence to justify our choice of RCV run-off rates. We provided this evidence as part of the IAP response which

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Ofwat has accepted. However, subsequent to our IAP response on RCV run-off rates, Ofwat increased the water resources RCV allocation yet left the RCV run-off rates unchanged, thereby disconnecting the two. This means that the resultant UUW RCV run-off revenues no longer match the underlying (£cash) economic depreciation value (i.e. it would now appear too high for Water Resources and too low for Water Network plus).

Ofwat's use of the increased RCV allocation and use of an inconsistent run RCV-off rate means water resources prices will be too high and water network+ prices will be too low. This could have unintended and detrimental consequences on attempts to encourage and facilitate water trading. If Ofwat continues to apply a 20% allocation of RCV to water resources, then RCV run-off rates for Water Resources and Water Network plus must change in order to maintain the overall RCV run-off £cash value based on economic depreciation value. For further detailed representation on this matter, see section 3, PAYG and RCV run-off.

In summary, we propose that Ofwat:

- **recognises that we have presented a different basis of RCV allocation than the previous “economic value” basis which Ofwat has challenged**
- **accepts our revised “future expenditure” basis of allocation, and amends our Water Resources RCV allocation to 15.0% allocation of Water RCV. However, if Ofwat does not, then the RCV run-off rates should be changed to ensure they continue to reflect underlying economic depreciation value**
- **acknowledges that such allocative assumptions that affect pricing for individual services should normally be a matter for the company to determine.**

3. PAYG and RCV run-off

PAYG and RCV run-off are both key components of Ofwat’s revenue controls, and therefore have significant influence on the annual financeability of our plans. Ofwat has intervened to reduce the value of these revenue sources through a number of factors at IAP and further adjustments have arisen in the draft determination.

3.1. PAYG rates – use of totex models

In the Draft Determination (action U UW.RR.C1), Ofwat takes a view of the mix of operating and capital expenditure of our business. This therefore results in different natural PAYG rates and revenues from those which we proposed in the IAP and business plan and which we think are required to fund our efficient business plans.

In “D003 - Cost Assessment” we propose a number of cost adjustments and specify the natural PAYG rate of each claim, based on the nature of expenditure. These are detailed in section 16 of “D003 – Cost Assessment”. Not only the value of the spend but also the nature of spend has an impact on the PAYG rates and revenues. In assessing our representations on cost adjustments, Ofwat should therefore also reassess the PAYG rates. Such granularity should enable Ofwat to calculate the appropriate “natural” PAYG rate for use in the financial model. This (revised) “natural” rate would then be added to the PAYG advancement of 1.38% and the total rate per annum per price control entered into Ofwat’s financial model for use in the calculation of allowed revenues.

Ofwat’s approach in the DD is an approximation whereby all enhancement expenditure is assumed capital (enhancement) expenditure and the business plan allocation between opex and capex maintenance informs the allocation of base expenditure (botex). Obviously, where there is no gap between the company view and Ofwat’s view of efficient expenditure at a granular level, then this approach will result in a representative apportionment that is reflective of the activities required to deliver the plan. However, where there are differences in the views of botex, a simple allocative approach risks disassociating the resulting expenditures (and therefore the revenues received) with the activities that are required by the company to achieve its committed performance.

Our approach detailed in section 16 of “D003 – Cost Assessment” mirrors that of Ofwat in that adjustments to enhancements are allocated to capital enhancement. For botex adjustments, rather than allocating the adjustment in line with the actual allocations of each claim, again, it is more appropriate to allocate the expenditure in line with the same approach adopted by Ofwat whereby we split botex between opex and base capex using the business plan split for each price control. We have used the exact same splits as those contained within the DD feeder models for Water and Wastewater.

If, in its Final Determinations, Ofwat makes amendments in response to our representations (e.g. on cost assessment items) such that overall income statement revenues (excluding grants and contributions) and hence customer bills are above the level in our September plan (£8,248m, real price base), then we believe it would be in customers’ interests to limit the PAYG revenues for those post-DD totex adjustments. This will ensure that the Final Determination bill impacts do not exceed (either in profile or by the end of AMP7) those in our September plans. Our business plan was tested as financeable, with bill impacts that were highly supported by customers and therefore we believe it is legitimate to limit PAYG values to ensure that Final Determination overall income statement revenues (and hence customer bills) do not exceed our September business plan.

3.2. RCV run-off rates – Water Resources RCV allocation

As part of the IAP action U UW.RR.A1, Ofwat asked for further evidence on RCV run-off rates. In "I001 – Response to Actions" pages 96-8 we provided the basis of calculation of the RCV run-off rates, showing that the rates were a mechanical means to arriving at the necessary CCD-based £cash RCV run-off in the financial model:

"The RCV run-off percentage in our PR19 submission is calculated from our forecast of current cost depreciation (CCD). The fixed asset register, maintained in our SAP system, contains both historic cost and current cost values for each asset. The CCD projections used for PR19 were derived using our standard business planning process as follows:

Base – depreciation projected using the March 2018 asset register;

Work in progress – depreciation on projects not yet commissioned at March 2018 were projected using forecast commissioning dates and asset class allocations for each project;

Growth – depreciation on future expenditure on projects was calculated based on forecast expenditure, commissioning dates and asset class allocations for each project; and

Key assumptions include standard asset lives for each asset class and commissioning periods based on historic trends.

Each asset is assigned to a price control with shared assets being assigned to the price control of principal use. Projects are allocated across price controls based on the assets expected to be constructed."

We also provided an analysis of historic trends in Current Cost Depreciation, which provides assurance that our submitted RCV run-off rates reflect an appropriate 'natural' rate. We also compared our rates to those proposed by other companies in their September business plan submissions:

The analysis of CCD from the Annual Performance Report (and Regulatory Accounts) from FY11 to FY18 gives an average percentage of 4.5% for the total business.

2017/18 price base	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	Average
Water CCD £m	201.1	163.0	185.0	177.0	184.2	165.4	155.5	159.7	173.9
Wastewater CCD £m	275.4	289.9	297.3	299.0	303.1	334.8	316.7	293.3	301.2
Total CCD £m	476.5	452.9	482.3	476.0	487.2	500.1	472.3	453.0	475.0
RCV £m	9,791.3	10,083.0	10,479.6	10,822.8	10,853.3	10,883.4	10,918.6	11,009.9	10,605.2
%	4.9%	4.5%	4.6%	4.4%	4.5%	4.6%	4.3%	4.1%	4.5%
CIS RCV inflation correction (see note 1)									0.1%
Infrastructure depreciation (see note 2)									0.4%
% after adjusting for CIS RCV inflation and infrastructure depreciation									5.0%
% RCV run-off proposed in our PR19 business plan									4.7%

Note1 - the £218 million CIS RCV inflation correction (at 2017-18 FYE CPIH deflated price base) should be added to historic calculations, which included that value within the RCV. This adjustment increases total company average percentage by 0.1%.

Note 2 - The CCD values above do not include depreciation on infrastructure assets. Infrastructure assets are however depreciated in our statutory accounts. The historic cost depreciation value for FY18 totalled £39.5 million. This figure has been included in the calculation above resulting in a further 0.4% increase on the total company RCV run-off percentage.

Reconciliation of our current CCD charge

The CCD is calculated in our SAP fixed asset register for our non-infrastructure assets. A high-level summary check of the CCD calculation is provided below. The GMEAV in the table below is shown by key asset class, excluding fully depreciated assets, as at March 2018. The standard asset lives are consistent with those used in our business planning processes.

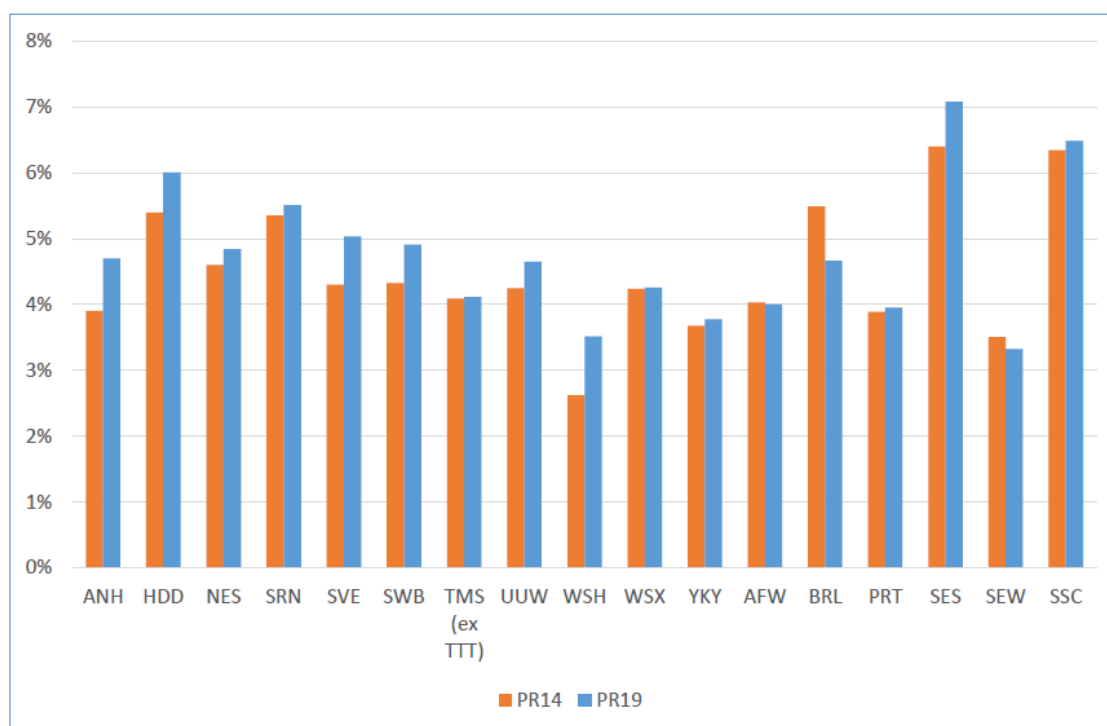
Asset class	GMEAV £m	Standard asset lives Years	Calculated CCD £m
Civils (including buildings)	7,758	60	129
Mechanical & Electrical	4,539	23	197
Instrumentation	502	15	33
Intangibles (including software)	204	7	29
Hardware	94	5	19
Vehicles	78	6	13
Non-operational	316	10	32
Total	13,490		453

Comparison with other companies and with PR14 assumptions

As set out in Ofwat's 'Technical appendix 3: Aligning risk and return' document published on 31 January, UUU's run-off rate is comparable to other companies (see chart reproduced below). Whilst Ofwat may observe an increase in the company's proposed RCV run-off in comparison with PR14, we note the following:

- The company's proposed RCV run-off rate is now more consistent with reported CCD over AMP5 and AMP6 (as outlined above), than our PR14 assumed run-off rates;
- PR19 RCV run-off rates now reflect total depreciation, not just base depreciation (the latter was the case at PR14). It is expected that the average life for base depreciation would be longer than the average life of new investment over a 5 year period, as shorter life assets are replaced more frequently;
- Recent and forecast capital expenditure has a greater element of shorter life assets when compared to historic trends (e.g. systems thinking and IT expenditure); and
- Other companies have similarly observed increases in RCV run-off rates.

Figure 6. Average RCV run-off rates as a proportion of regulatory capital value



Source: Business plan tables WS1, Wr4, Wn4, WWS1, WWn6, Bio5, Dmmy1, Dmmy 8. Calculated as total run-off as a proportion of total regulatory capital values in 2017-18 prices across all wholesale controls as per business plan table App8

We demonstrated that these RCV run-off rates were based on the £cash CCD value. The percentage rates were the mechanical means to recover that £cash CCD value from the Ofwat financial model using the inputs available (i.e. one asset life per wholesale price control, one rate per RCV type per wholesale price control). We understood that this evidence was accepted by Ofwat. However, subsequent to our IAP response, the Draft Determination RCV allocation to water resources was increased from 14% to 20%. The RCV run-off rates were left unchanged, thus disconnecting the RCV allocation and rate. This means that the resultant £cash RCV run-off revenue allowance now does not match to the RCV run-off rate calculation based on £cash CCD. This reduces revenues by **£18m**. This difference will largely be resolved by adopting our revised proposals on the Water Resources RCV allocation.

Table 2 – Reduction in revenues from RCV run-off due to Ofwat's 20% Water Resources RCV allocation

RCV run-off (CPIH and RPI RCVs) £m (real)	2021	2022	2023	2024	2025	AMP7
Draft Determination						
Water Resources	25	25	24	24	24	122
Water Network plus	155	150	144	143	140	732
September plan						
Water Resources	17	17	17	17	17	85
Water Network plus	167	161	155	154	151	787
Difference						
Water Resources	7	7	7	7	7	37
Water Network plus	(12)	(11)	(11)	(11)	(11)	(55)
Total	(4)	(4)	(4)	(3)	(3)	(18)

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Further representations on the RCV allocation itself are set out in section 2 Allocation of RCV to Water Resources.

In order to recover the correct CCD £cash value via RCV run-off rates, the rates would need to be changed, if Ofwat retains its Water Resources RCV allocation of 20%. However, the % rates depend on what the RCV allocation is and the (1 – PAYG) RCV additions are. These are both items where we disagree with Ofwat’s DD treatment and are the subject of representations in this submission (e.g.: we are proposing an RCV allocation of 15.0% to Water Resources.) As it stands, based on the evidence provided at IAP and – we believe – accepted by Ofwat, we require a cash value of £2,637m (real) RCV run-off in AMP7 which is £27m more than in the Draft Determination:

Table 3 - RCV run-off

£m (real)	2021	2022	2023	2024	2025	AMP7
Water Resources	18	18	18	18	18	88
Water Network plus	169	171	171	176	177	864
Wastewater Network plus	308	297	295	294	292	1,486
Bioresources	36	38	40	41	43	198
Total	531	523	524	529	530	2,637

At Ofwat’s Draft Determination water resources RCV allocation of 20% and the value as given in the DD financial model, in order to generate RCV run-off revenues at the same level as in our September plans in the Water Resources and Water Network plus price controls, the RCV run-off rates should be as follows:

Table 4 - Proposed RCV run-off rates at 20% WR RCV allocation and DD financial model RCV value

	2021	2022	2023	2024	2025
Water Resources RCV run-off rate	2.19%	2.21%	2.22%	2.26%	2.25%
Water Network plus RCV run-off rate	5.20%	5.32%	5.43%	5.70%	5.93%
Wastewater Network plus RCV run-off rate	4.43%	4.30%	4.31%	4.30%	4.22%
Bioresources RCV run-off rate	8.07%	8.36%	8.81%	9.35%	9.95%

In summary, we propose that Ofwat:

- recalculates the natural PAYG rates for each wholesale price control after consideration of the value and expenditure spend of each cost adjustment claim detailed in “D003 – Cost Assessment”
- acknowledges that business plan RCV run-off rates are a mechanical means to recover a set current cost depreciation (CCD) value. If the RCV allocations or values change from the business plan then the rate must be recalculated in order to continue to recover the CCD value. If Ofwat maintains a 20% water resources RCV allocation, then the RCV rates for water resources and water network + will have to be recalculated
- help protect customers’ interests by acting to cap PAYG revenues for any post-Draft Determination cost adjustment claims, should income statement revenue (excluding grants and contributions) exceed that in the September plan
- acknowledges that should there be any remaining shortfall in revenues compared to the September plan, we propose that this gap would be met by enhanced CPIH transition of the RCV

4. CPIH transition and bill profile

4.1. Overview

As part of our business plan submission, we considered multiple options for bill profiles, and utilising PAYG levers to manage financeability in the notional company. Whilst we did not include proposals for acceleration of CPIH transition in our September business plan, we had already considered what could be introduced to further improve the legitimacy of our business plan and we raised these considerations in October 2018, shortly after submission of company plans.

The adjustments to our plan made as part of Ofwat’s Draft Determination mean that there may be headroom to further increase the effective transition to CPIH, but without undermining the customer acceptability of our September plan. This could reduce the long term trajectory of bill increases in future periods, whilst still providing significant bill reductions in AMP7. Ofwat’s IAP assessment commented on our expectation of some upward pressure on bills in future periods. The rate of transition from RPI to full CPIH indexation provides a mechanism by which future bills can be reduced if bill reductions in the current period are maintained at the levels proposed in our business plan.

We have now conducted further customer research (See document D004a “CPIH and systems thinking ODI research debrief 170519”), which indicates that 81% of customers would find it acceptable for us to advance revenues equivalent to full CPIH transition and 63% prefer this option. We propose further CPIH transition, but that the additional transition is limited to prevent bills rising above the bill levels (and profile) proposed in our September business plan, which was accepted by over 80% of customers. Clearly, we would be concerned about the legitimacy of a Final Determination in which bills exceeded the bill profile tested with customers and so would not support implementing a CPIH transition which would go beyond that limit.

Our proposal is therefore to accelerate transition to CPIH via advancing RCV run-off, albeit limited by the bill profile indicated by our September plan (the overall reduction, and the reducing profile over time). This would be up to a maximum of £238m over AMP7, an amount equivalent to the additional real returns under full CPIH transition. We note that another company has also sought accelerated CPIH transition, supported by equivalent customer research to that which we have undertaken, which Ofwat has accepted within its draft determination. We therefore consider that our proposal should also be acceptable to Ofwat.

4.1. Customer support

CPIH transition impacts on the profile of bills in AMP7 and in the longer term, the CPIH-stripped WACC is higher than its RPI equivalent. That means higher returns in the short term, offset by lower inflationary growth of the RCV in the long term. Slower transition therefore means lower bills in the short term, but bills being relatively higher in the long term. Conversely, faster transition means higher bills in the short term, but more stable / lower bills in the longer term.

Customer engagement demonstrated over 80% support for our original business plan based on a substantial reduction in bills of 10.5% and a range of service improvements. This was based on the standard transition path from RPI to CPIH, based on an initial 50:50 split outlined in Ofwat’s methodology, and future upward pressure on bills that would be applied as a result of the future CPIH transition.

Following the IAP, we anticipated that the DD would reflect an improved level of service compared to our original proposal and – based on a 50:50 RPI/CPIH approach – would also infer a reduction in bills

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beyond the level that received over 80% support in our acceptability testing research. We therefore consulted with customers about whether – in thinking about whether bills would reduce by 10.5% or more than 10.5% - they preferred a) the original proposed bill reduction, with reduced upward pressure on future bills achieved through accelerated transition from RPI to CPIH or b) a bill reduction beyond 10.5% in AMP7, with continued upward pressure on future bills as a result of a greater degree of transition from RPI to CPIH. In both cases, service levels would be improved compared to the original plan which had 80% support for those lesser levels of service. The intention of the research was to understand customer views on whether – given that a double digit bill reduction is already embedded in our proposals – any additional headroom should be used to improve bill profiles over the longer term rather than in the immediate term.

A representative sample of customers were presented with three options for CPIH transition ranging from full transition to CPIH in AMP7, to 50% CPIH transition in AMP7 which is in line with our September business plans. The three options were as follows:

- Option 1 represents the impact of full CPIH transition, with higher bills in the short term, followed by (all things remaining equal) flat bills into AMP8.
- Option 2 represents a limited additional level of CPIH transition, to ensure that the bill levels (and bill profile) implied by our September business plan were not exceeded.
- Option 3 represents no further CPIH transition than the 50/50 proposed by Ofwat and reflected in our original business plan, with (consequentially) higher bills in AMP8, resulting from both the change to full CPIH transition, plus additional bill increases in recognition of higher RCV inflation during AMP7.

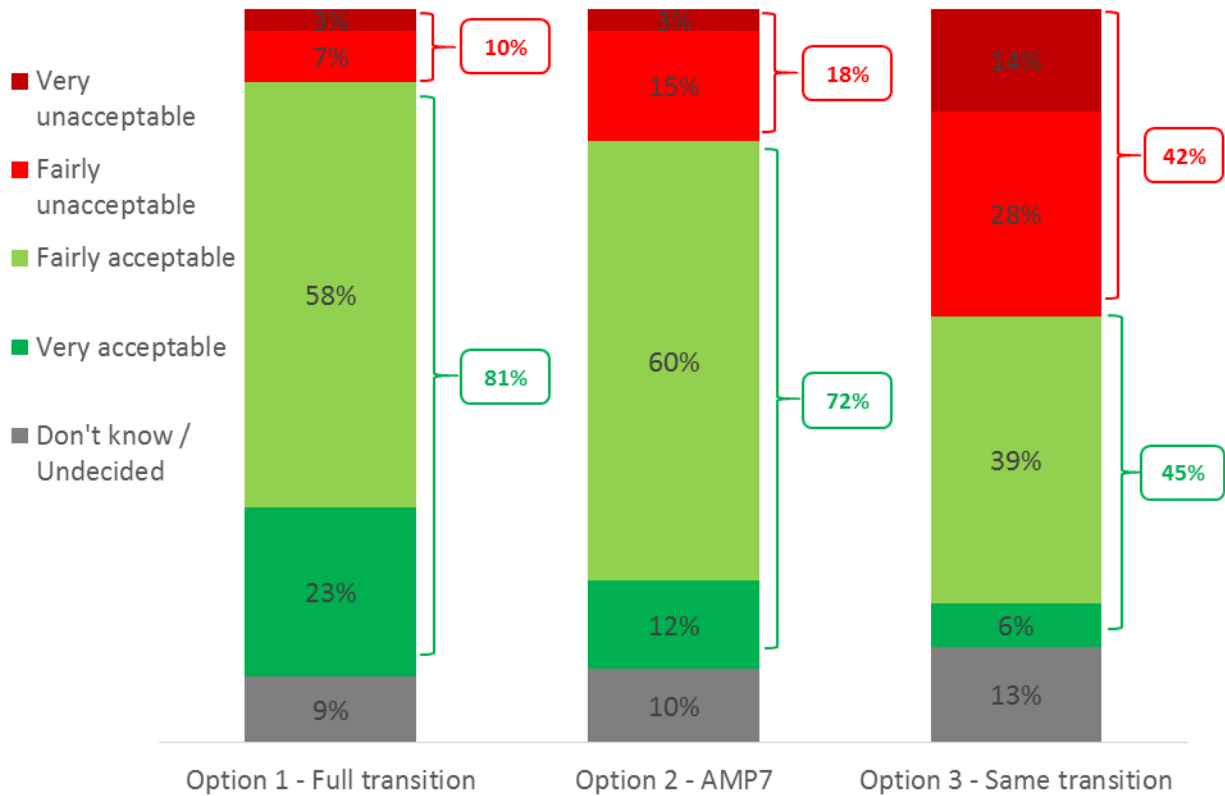
The bill profiles for the three options were:

Figure 3 - Changes in bills 2020 - 2035 for the three options



1,018 customers were asked when taking into account the bill changes and service improvements, how acceptable or unacceptable do they consider their preferred / non-preferred option. 63% of customers found the 100% CPIH transition their most preferred option. This is 9 times more preferred than the current transition profile and more than twice preferred than Option 2. 81% of customers found full CPIH transition to be either very or fairly acceptable. Preference for the full transition profile is driven by customers wanting to avoid bill increases, and have lower bills in the longer term.

Figure 4 - Customer acceptability of CPIH transition options



The approach to this research and the research findings were conducted under the supervision of YourVoice, the CCG for customers in the North West, in line with our approach for customer research for the rest of PR19.

YourVoice Customer Engagement Sub-Group were invited to comment on the survey proposals and we made amendments to incorporate their challenges. Sub-group members attended a debrief by Boxclever Consulting, who carried out the research. The members had the opportunity to raise any issues or concerns. The Group did not have any concerns about the way in which the research was carried out or the results of the research.

The conclusions that we draw from the research are that: given the business plan 10.5% bill reduction (and its associated bill profile), and given a choice between 1) more bill reductions in this period with more upward pressure in future periods or 2) the same 10.5% bill reduction in this period and a mechanistic reduction in bills in future periods through earlier CPIH transition, customers preferred the latter.

A bigger bill reduction than the one we propose would exacerbate bill volatility which customers have indicated they do not like. In our September plan we demonstrated that customers told us that they prefer stable bills and that, in particular, bill stability helped support customers who might be struggling to manage constrained budgets:

“Smoothing of bills over time also helps to support customers that are behind on their water bills – work with them shows that stable bills helps with household budgeting and avoiding arrears.”⁸

This means that in terms of the bill profile customers prefer less volatility now, and less growth in the future, rather than bigger discounts now followed by larger future increases. We therefore believe these

⁸ U UW PR19 business plan submission”, Chapter 3: Addressing affordability and vulnerability, September 2018, page 45

results provide sufficient customer mandate to implement an accelerated transition of CPIH, in the event that there remains headroom within the Final Determination to do so.

4.2. Calculation of maximum RCV run-off advancement

We calculated the value of additional returns to be advanced using Ofwat’s Draft Determination financial model. The model was used to compare the difference in returns, between 50% CPIH transition in AMP7 and 100% CPIH transition. This was done by

- setting the proportion of RCV to CPIH at 100% on tab “InpActive” in cells F263, F467, F668 and F864 for the four wholesale price controls
- switching off revenue re-profiling (which overwrites calculated revenue with an alternative input revenue). This allows revenue to change and be as calculated by the model. This switch is set to “0” on tab “InpOverride” cell F1276
- the result is then read from “Dashboard” cells T181:V181 “Return on Capital” which is for Wholesale and is in real price base in £cash. The total of these cells can then be compared to those in the published DD financial model. When set to 100% CPIH transition, the return on capital increases by £238m

Table 5 - Return on capital at 50% vs. 100% CPIH transition

£m real	2021	2022	2023	2024	2025	AMP7
50% CPIH	315	314	312	311	312	1,564
100% CPIH	370	365	359	355	353	1,802
Difference	55	51	47	44	41	238

This additional return on capital can be effected by increasing the “CPI(H) + RPI wedge” RCV run off rates by the 1% RPI-CPIH wedge. This is done in Ofwat’s DD financial model on tab “InpOverride” lines 1071, 1090, 1109, and 1128. By doing this, revenues from RCV run-off increase by a similar amount to that if the model were set to 100% CPIH transition as shown in Table 6:

Table 6 - 100% CPIH transition via increased RPI RCV run-off rates

	2021	2022	2023	2024	2025	AMP7
50% CPIH transition (per submission)						
Run-off rate - CPI(H) + RPI wedge WR	3.13%	3.19%	3.22%	3.31%	3.31%	
Run-off rate - CPI(H) + RPI wedge WN	4.86%	4.91%	4.95%	5.14%	5.28%	
Run-off rate - CPI(H) + RPI wedge WWN	4.43%	4.30%	4.31%	4.30%	4.22%	
Run-off rate - CPI(H) + RPI wedge BR	8.07%	8.36%	8.81%	9.35%	9.95%	
RCV run-off (£m real)	529	520	518	522	521	2,610
100% CPIH transition						
Run-off rate - CPI(H) + RPI wedge WR	4.13%	4.19%	4.22%	4.31%	4.31%	
Run-off rate - CPI(H) + RPI wedge WN	5.86%	5.91%	5.95%	6.14%	6.28%	
Run-off rate - CPI(H) + RPI wedge WWN	5.43%	5.30%	5.31%	5.30%	5.22%	
Run-off rate - CPI(H) + RPI wedge BR	9.07%	9.36%	9.81%	10.35%	10.95%	
RCV run-off (£m real)	586	571	565	564	558	2,844
Difference						
Run-off rate - CPI(H) + RPI wedge WR	1.00%	1.00%	1.00%	1.00%	1.00%	
Run-off rate - CPI(H) + RPI wedge WN	1.00%	1.00%	1.00%	1.00%	1.00%	
Run-off rate - CPI(H) + RPI wedge WWN	1.00%	1.00%	1.00%	1.00%	1.00%	
Run-off rate - CPI(H) + RPI wedge BR	1.00%	1.00%	1.00%	1.00%	1.00%	
RCV run-off (£m real)	57	51	46	42	37	234

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We propose that this amendment to the RCV run off should be utilised to create the effect of full CPIH transition, i.e. that the amount of RCV run off advancement required to achieve full CPIH transition would be £234m, subject to our proposal that the transition is limited by our September plan bill profile.

We are proposing to limit the level of additional CPIH transition, to ensure that our AMP7 bills do not exceed the overall level and profile indicated in our September plan, as that is what we committed to customers, and is the plan which underpinned our customer acceptability research. In order to limit the amount of transition at the bill levels and profile indicated by our September plan, we further propose that the value of this addition to RCV run off should depend on the overall value of allowed revenue (excluding developer revenue – i.e. the relevant revenue which affects customer bills).

The impact of 100% CPIH transition on customer bills, effected via increasing the “CPI(H) + RPI wedge” RCV run off rates by 1% as above, would be:

Table 7 - Average household customer bills with 100% CPIH transition

	2020	2021	2022	2023	2024	2025	Bill decrease 2020-25
Average household customer bill (real) £	427.14	400.02	396.16	392.07	383.43	381.17	-10.8%
Average household customer bill (nominal) £	446.01	425.68	430.43	434.82	433.90	440.09	-1.3%

The compares closely to the bill profile in our September plan and shows that the profile is in line with what they previously found acceptable:

Table 8 - Average household customer bills September business plan

	2020	2021	2022	2023	2024	2025	Bill decrease 2020-25
Average household customer bill (real) £	427.14	393.92	391.96	386.19	382.74	381.81*	-10.6%*
Average household customer bill (nominal) £	446.01	419.56	425.82	427.93	432.60	440.18	-1.3%

* excludes 51p assumed bill impact of Manchester & Pennines Resilience DPC payments to the CAP, which takes overall bill reduction to 10.5% over AMP7.

The impact of 100% CPIH transition on Income Statement Revenue allowances (i.e. total revenue controls, excluding developer income), effected via increasing the “CPI(H) + RPI wedge” RCV run off rates by 1% as above, would be:

	2021	2022	2023	2024	2025	AMP7
Income Statement Revenue - Appointee (including 100% CPIH transition) £m	1,677	1,670	1,664	1,639	1,642	8,291

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To achieve these Income Statement Revenues via RCV run-off, the four wholesale price control “CPI(H) + RPI wedge” RCV run off rates in the financial model would have to be amended to match those in the 100% transition lines in Table 6.

However, total revenue allowances (excluding developer income) may differ in the Final Determination, compared with the Draft Determination. Therefore, then we cannot propose a single specific RCV run-off rate. The following table sets out, for varying levels of base determination revenue (excluding developer revenue), what level of RCV run-off advancement would be required, in order for CPIH transition to be limited by the allowed revenues in our September business plan (of £8,248m (real FYA CPIH 2017/18 price base)), and hence to ensure that CPIH transition is limited to prevent overall bills in AMP7 from exceeding those supported by customers in our September business plan.

Figure 5 - CPIH transition and RCV run-off rates required to achieve different levels of revenue

Final Determination Income Statement Revenue excluding G&Cs £m	RCV run-off % (AMP7 average)		CPIH transition %	
	Advancement	Total	Additional to September plan	In total
8,248	-	4.76%	-	50.00%
8,238	0.02%	4.78%	1.85%	51.85%
8,228	0.04%	4.80%	3.70%	53.70%
8,218	0.06%	4.82%	5.56%	55.56%
8,208	0.07%	4.83%	7.41%	57.41%
8,198	0.09%	4.85%	9.26%	59.26%
8,188	0.11%	4.87%	11.11%	61.11%
8,178	0.13%	4.89%	12.96%	62.96%
8,168	0.15%	4.91%	14.81%	64.81%
8,158	0.17%	4.93%	16.67%	66.67%
8,148	0.18%	4.94%	18.52%	68.52%
8,138	0.20%	4.96%	20.37%	70.37%
8,128	0.22%	4.98%	22.22%	72.22%
8,118	0.24%	5.00%	24.07%	74.07%
8,108	0.26%	5.02%	25.93%	75.93%
8,098	0.28%	5.04%	27.78%	77.78%
8,088	0.30%	5.06%	29.63%	79.63%
8,078	0.31%	5.07%	31.48%	81.48%
8,068	0.33%	5.09%	33.33%	83.33%
8,058	0.35%	5.11%	35.19%	85.19%
8,048	0.37%	5.13%	37.04%	87.04%
8,038	0.39%	5.15%	38.89%	88.89%
8,028	0.41%	5.17%	40.74%	90.74%
8,018	0.43%	5.19%	42.59%	92.59%
8,008	0.44%	5.20%	44.44%	94.44%
7,998	0.46%	5.22%	46.30%	96.30%
7,988	0.48%	5.24%	48.15%	98.15%
7,978	0.50%	5.26%	50.00%	100.00%

This approach enables us to balance acceleration of CPIH transition, which has a long term benefit to customer bill stability, whilst also ensuring that we deliver on our commitments to reduce bills in our business plan.

4.3. Interaction with bill profile

In our September business plan, we committed to deliver a significant decrease in bills to customers, along with a bill profile that reduced in real terms, and hence was flatter in nominal terms, in accordance with customer preferences. The bills proposed in our business plan received very high levels of customer acceptability.

Given that the Draft Determination results in a lower level of revenue and customer bills than our business plan, we believe that this provides headroom which we propose could be used to further increase the rate of CPIH transition, whilst also providing customers with the profile of bills which customer supported in our business plan.

We note that Ofwat has proposed a re-profiled revenue in its Draft Determination for U UW (section 5.4 of PR19 draft determinations: United Utilities draft determination), which has flattened average bills in real terms. As part of presenting its draft determination bill profile, Ofwat stated the following, which recognises customer preferences for minimising annual bill changes in nominal terms (emphasis added):

*In its business plan, the company states that most customers would like bills to be as stable and predictable as possible and that their preferred bill profile therefore drops at the start of the period and then stabilises. In line with this, the real terms bill profile in the business plan provides an immediate reduction at the start of the period, followed by small year-on-year reductions. United Utilities' CCG confirms that the company's bill profile reflects what customers want, stating '**research indicated that customers value stable, predictable bills, with a clear majority (86%) expressing a preference for bills with smaller year-on-year changes** compared with bills that may be smaller in the short term but present greater volatility over the longer term'.*

*United Utilities' bill profile in its September business plan put forward a 11% bill cut for the 2020 to 2025 period. Our amended profile reduction keeps this reduction around the same level. The table below sets out the difference in bill profile between the company's business plan submission in September 2018 and our amended draft determination profile. **We have made minor adjustments to make the nominal profile flat over the period.***

Contrary to Ofwat's intention, the intervention to re-profile revenues has acted to effect year on year bill increases for customers, by taking a falling (unprofiled) real terms bill profile and flattening it in real terms. This takes unprofiled bills that would increase a small amount year on year (after application of CPIH), to making average bills increase fully by CPIH each year. It is also important to note that typical bills for individual customers increase (year on year) by more than average bills, due (for example) to customers switching to metered charges in order reduce their bills. This additional effect would have the effect of increasing actual individual customer bills indicated in the Draft Determination by **more than inflation**.

We don't think that this bill profile is either expected or wanted by customers, and therefore we propose that further CPIH transition should be used to reinstate the bill profile from our September business plan, which is more in line with customer preferences for flatter bills in nominal terms. The table below demonstrates this comparison, with draft determination average bills increasing in nominal terms by over £34 between 2021 and 2025, whereas our business plan proposes flatter nominal bills, with an increase over the same period of just over £20.

Table 9 - Average customer bills - Company plan vs Draft determination (real and nominal)

Average bills (£)	2020	2021	2022	2023	2024	2025	Bill change 2021-25
Real price base							
Company plan	427.14	393.92	391.96	386.19	382.74	381.81	-12.11
Draft determination	427.14	378.37	378.38	378.38	378.35	378.38	0.00
Nominal price base							
Company plan	446.01	419.56	425.82	427.93	432.60	440.18	20.62
Draft determination	446.01	402.64	411.11	419.64	428.15	436.87	34.23
N.B. Company plan excludes customer bill impact of DPC							

We continue to believe that a bill profile which falls in real terms, as presented in our September business plan, is in the best interests of customers and aligned with customers' expressed preferences.. Given that RCV run-off advancement naturally declines (in £cash terms) in value over time, we consider that our proposals on CPIH transition should provide an appropriate equivalent bill profile, without the need for any additional re-profiling of revenues or bills.

In summary, we propose that Ofwat:

- recognises UUW's customers prefer a stable flat nominal bill profile
- increases the rate of CPIH transition, effected via RCV run-off, which is in line with customer preferences
- limits the amount of CPIH transition to ensure customer bills (and bill profile) does not exceed that set out in our September business plan.

5. WACC

Ofwat intends to review its estimation of WACC and publish an updated view in July, alongside draft determinations for slow track companies. We note that under the current “early view” WACC guidance, our AMP7 plans are at the threshold of financeability and indeed require some element of revenue advancement to achieve acceptable notional company financial metrics. Ofwat’s WACC, not company actions, determines the results of our key financeability metrics under the notional company structure, which is closely aligned to our actual structure. The results of these metrics are integral to credit rating agencies’ assessment of our financeability and maintaining an investment grade credit rating is part of our licence.

As we set out in September, we view the “early view” WACC as very challenging, with certain sub-elements of the wholesale cost of capital and retail margin set at the very low end of (or even below) an acceptable range. In particular, we consider that a cost of equity of 4.01% is especially low. However, our submitted business plan adopted the Ofwat’s early view guidance on the wholesale cost of capital and retail margin on an overall basis, only as part of the overall risk and return balance and price control package.

5.1. Notional company financeability

Ofwat expects that company plans are financial on both an actual and notional company basis. The definition of the notional company (in terms of gearing, interest rates, proportion of index linked debt etc.) is sufficiently restrictive that the financeability of the notional company is (mostly) outside of companies’ control, as it is largely pre-determined by Ofwat’s choice of WACC. Ofwat should recognise that notional company financeability is contingent on the assumed WACC and any further reduction in the “early view” WACC may result in essentially unresolvable financeability issues for all companies on the notional company basis.

The financeability of the notional company is particularly difficult for water companies to manage because most of the factors that determine its financeability are outside of the control of companies. The allowed WACC and the pre-determined capital structure of the notional company effectively set the level of most financial ratios. Further, the majority of the levers that actual companies can use to manage financeability are either ineffective (for example, advancement of PAYG and RCV run-off, which is “looked through” by Moody’s definition of Adjusted Interest Cover), or not appropriate for the notional company, nor is there any outperformance available to improve financeability.

What this means in practice is that the allowed WACC set by Ofwat as part of the final determinations for the sector will determine whether notional companies are financeable or not. As financeability of the notional company version of the company’s plan was assessed to be the absolute minimum acceptable in our business plan submission, any subsequent reduction in the allowed WACC will necessarily push the notional company below acceptable financeability levels.

This is an important consideration for Ofwat as it makes its further assessment of the AMP7 allowed WACC for the sector’s final determinations.

The key example which demonstrates that notional company financeability is outside of water companies’ control, is the impact of a reduction in the allowed WACC on Moody’s adjusted interest cover ratio or AICR (analogous to the financial model ‘adjusted interest cover (alternative) ratio’). As demonstrated in our financeability supplement to our business plan submission this metric effectively compares the ratio of the allowed WACC in revenues (i.e. the real return only) to the cash cost of debt (i.e. the real cost of debt plus the inflation element in relation to nominal debt only) and requires this to be at least 1.5 times to achieve a Baa1 rating. We note that in its initial assessment of business plans

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Ofwat appeared to be uncomfortable with water companies that proposed a rating below this level, stating:

“[...] most companies target BBB+/Baa1/BBB+ [...] our assessment requires a need for careful consideration of the evidence and assurance companies provide where a lower credit rating is targeted, because lower target ratings indicate a lower level of headroom to potential cost shocks.”⁹

We agree that a rating of Baa1 or higher is a more appropriately financially resilient position for companies operating in the sector.

As a consequence of the WACC, gearing, cost of debt and proportion of index linked debt all being set or assessed by Ofwat for the notional company, the notional company adjusted interest cover ratio has also effectively been set by Ofwat.

Taking the current assumptions for each of those factors, AICR can be calculated as follows:

- Current notional company assumptions: Gearing 60%, WACC (50:50 RPI/CPIH blend) 2.90%, cost of RPI linked debt 1.33%, cost of nominal debt 4.36%, proportion of RPI linked debt 33%.
- RCV of £10,000m used in this illustration

Table 10 - AICR calculation

	Calculation	Calculation	Result
Allowed WACC in revenues	RCV * WACC	£10,000m * 2.9%	£290m
Cash cost of RPI linked debt	RCV * gearing * proportion of RPI linked debt * cost of RPI debt	£10,000m * 60% * 33% * 1.33%	£26.3m
Cash cost of nominal debt	RCV * gearing * 1 - proportion of RPI linked debt * cost of nominal debt	£10,000m * 60% * 67% * 4.36%	£175.3m
Total cash cost of debt	Cash cost of RPI linked debt + cash cost of nominal debt	£26.3m + £175.3m	£201.6m
Notional company adjusted interest cover ratio	Allowed WACC in revenues / Total cash cost of debt	£290m / £201.6m	1.44x

The above ratio calculation will improve very marginally to approach the 1.5x threshold as the proportion of RCV linked to CPIH slowly increases above 50%. However, there is no headroom and the notional company financeability assessment would only just attain a Baa1 rating from Moody's.

Normal financeability levers cannot be used for the notional company to improve this ratio any further because any revenue acceleration will be stripped out of the financial ratio calculation by Ofwat's alternative AICR and Moody's. Furthermore, a reduction in gearing (and therefore debt) through either an equity injection or dividend restriction is not appropriate as these elements have already been set at an appropriately prudent level for the notional company.

Therefore the financeability of the notional company is substantially outside of companies' control and will be determined by Ofwat's choice of WACC.

In a similar manner S&P's FFO to debt ratio can be shown to be effectively determined by the allowed WACC, RCV run off rate and fast money for the notional company and therefore whilst financeability

⁹ "IAP: Technical appendix 3: Aligning Risk and Return", Ofwat, January 2019, pages 18 - 19

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levers are available to manage this metric for the notional company, if material constraints are put on the use of fast money and RCV run off rates and/or the proposed levels are not supported by customers, then the notional company FFO to debt ratio, and hence financeability, is similarly constrained.

To further explain and illustrate, the FFO to debt ratio can be simplified to the ratio of the allowed WACC in revenues less the full nominal cost of debt plus fast money plus RCV run off to the balance of debt. Again, using the assumptions from above:

Table 11 - FFO:debt calculation

	Calculation	Calculation	Result
Allowed WACC in revenues	RCV * WACC	£10,000m * 2.9%	£290m
Full nominal cost of debt	RCV * gearing * cost of nominal debt	£10,000m * 60% * 4.36%	£261.6m
Debt	RCV * gearing	£10,000m * 60%	£6,000m
Notional company FFO to debt ratio	Allowed WACC in revenues - full nominal cost of debt + fast money + RCV run off / Total debt	£290m - £261.6m + fast money + RCV run-off / £6,000m	£28.4m + fast money + RCV run off / £6,000m
FFO:debt BBB+ target	9% minimum	£6,000m * 9%	£540m
Required value of RCV run-off		£540m - £28.4m	£511.6m

Therefore, without any fast money, RCV run off would need to exceed £511.6m to achieve a 9% minimum necessary FFO to debt ratio (i.e. a 5.12% run-off rate) to attain a rating of BBB+ for the notional company.

As above, we note that in its initial assessment of business plans Ofwat appeared to be uncomfortable with water companies that proposed a rating below this level, and we agree that a rating of BBB+ or higher is a more appropriately financially resilient position for the water sector.

5.1. Reassessment of embedded to new debt ratio

The ‘early view’ WACC included in Ofwat’s PR19 final methodology included an assumed ratio of embedded to new debt of 70:30. This is significantly different to the actual ratio of 83:17 in the 10 WaSCs¹⁰ business plans. Ofwat committed to revisiting this ratio as part of its final determinations and given the significant differences that have been revealed, we believe that it should revise its assumptions.

Ofwat’s ‘early view’ 70:30 ratio is an average over the AMP7 period, as is also stated by Ofwat in its PR19 methodology:

“our assumption is that the proportion of new debt would not be 30% for each year of the price control. It would be 30% on average over the period.”¹⁵

Therefore as every water company will begin the AMP7 price control with 0% new debt, assuming a straight line profile of debt issuance, Ofwat’s 70:30 ratio equates to an assumption that 60% of a water company’s debt at 31 March 2025 will be new debt.

¹⁰ Excludes HDD

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The 70:30 ratio was calculated by Ofwat’s advisor European Economics based on historic data and it was stated that this assumption would be revisited once companies had submitted their business plans:

“We will revisit this assumption once the companies have submitted their business plans and we have a better view on the future investment requirements across the sector”¹¹.

We reviewed business plan submissions of the 10 WaSCs from September 2018 and April 2019 (as applicable) and calculated that water companies were expected to have just 16.6% (see calculation below in Table 12¹²) of new debt on average over the AMP7 period. This equates to a rounded revised ratio of embedded to new debt of 83:17, significantly different to the current 70:30 assumption.

¹¹ “Appendix 12: Aligning risk and return of Ofwat’s Delivering Water 2020: Our methodology for the 2019 price review”, Ofwat, December 2017, page 73

¹² Source: company websites

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Table 12 - ratio of embedded to new debt in WaSC September 2018 (fast track) and April 2019 (non-fast track) plans

WaSC	Debt Issuance (£m)				Debt Repaid (£m)			Net New (£m)		'New' debt (£m)		
	Fixed	Float	Index-Linked	Total A	Fixed	Float	Index-Linked	Total debt AMP7 open	Total debt AMP7 end B	'New' debt AMP7 open C	'New' debt AMP7 end D = A/B	'New' debt AMP7 average E = (C+D)/2
Anglian Water	1,825	700	715	3,240	-1,126	-215	-937	6,806	8,422	0.0%	38.5%	19.2%
Dwr Cymru	-	1,450	-	1,450	-325	-391	-181	3,596	4,416	0.0%	32.8%	16.4%
Northumbrian Water	400	-	600	1,000	-460	-17	-38	2,886	3,574	0.0%	28.0%	14.0%
Severn Trent	2,150	400	450	3,000	-970	-630	-180	5,341	6,806	0.0%	44.1%	22.0%
South West Water	427	563	1	990	-45	-671	-7	2,353	2,691	0.0%	36.8%	18.4%
Southern Water	950	-	-	950	-173	-	-354	3,713	4,540	0.0%	20.9%	10.5%
Thames Water	3,701	-100	1,856	5,457	-2,144	173	-1,373	11,883	15,051	0.0%	36.3%	18.1%
United Utilities	1,919	-	250	2,169	-1,292	-	-1,137	7,480	7,749	0.0%	28.0%	14.0%
Wessex Water	773	-	300	1,073	-400	-125	-90	2,185	2,801	0.0%	38.3%	19.1%
Yorkshire Water	1,311	-	-	1,311	-244	-514	-97	5,071	6,083	0.0%	21.5%	10.8%
Total	13,455	3,012	4,172	20,640	-7,179	-2,391	-4,394	51,315	62,132	0.0%	33.2%	16.6%

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In addition, in Ofwat’s initial assessment of business plans, enhancement to tex (a key driver of financing requirements) for non-fast track companies was subject to a material cost efficiency challenge, a significant proportion of which does not appear to be fully reflected in companies’ April 2019 revised business plan submissions. If this cost challenge is eventually more fully accepted by the sector then financing requirements are likely to move further leading to an even lower proportion of new debt across the sector and a bigger gap to the current assumption.

Not only is the ratio of embedded to new debt significant for any PR19 WACC reassessment, but it is also a critical assumption in the functioning of the new debt indexation mechanism that applies to new debt only over AMP7. If the assumed proportion of new debt does not reasonably reflect the sector average position then the function of the debt indexation mechanism may overreach its intended scope creating unintended additional financial risks for water companies.

As the current 83:17 embedded to new debt ratio is already significantly different from the 70:30 assumption in the ‘early view’ WACC and there are further risks that this difference will increase, we would strongly encourage Ofwat to revisit this assumption as part of its re-assessment of the AMP7 allowed WACC for the sector’s final determinations.

5.2. Financeability testing under actual market conditions

It is a licence condition that companies must maintain an investment grade credit rating. Companies have a limited choice of credit ratings providers. Therefore the actual rating agency version of ratios, calculations and thresholds are important for financeability assessments. Any other alternative definition would (naturally) be unable to provide any insight into whether a company was meeting its licence condition to maintain an investment grade credit rating.

With a significant proportion of a water company’s assets financed by debt and on-going financing / refinancing requirements, most water companies are dependent on efficient access to debt capital markets to fund their business. Investors in those markets usually require such debt to be rated by two rating agencies, and only three agencies (Moody’s, S&P and Fitch) are widely accepted as rating providers.

Therefore, water companies have a limited choice of credit rating provider and so in practice, under actual market conditions, water companies’ credit standings will be assessed using the actual methodologies employed by those specific agencies (including their assessment of the key credit ratios for the sector, ratings thresholds, along with the construct and the calculation methodologies of those key credit ratios).

In Ofwat’s PR19 methodology, Ofwat commented that whilst the financial model contained *“alternative calculations of both the ACICR and FFO/Net debt metrics, which reflect slightly different methodologies used by some individual credit rating agencies. We do not consider these alternative calculations to be the most appropriate indicators on which to base our assessment.”*

In addition, in the initial assessment of business plans, Ofwat commented that *“We do not propose to adjust or tighten our financeability requirements such as target credit rating or target ratios, following the putting the sector in balance position statement.”* This is despite credit ratings agencies issuing guidance that stated that the ratings thresholds applicable to the water sector were tightening, to meet their requirements for particular credit ratings. One example of this is Moody’s tightening AICR from 1.4x to 1.5x for Baa1.

Whilst Ofwat may not agree with the methodology used by specific rating agencies, as water companies do not have any alternative choice in rating providers, nor any basis upon which to challenge rating agency methodology (particularly elements relating to the assessment of the regulatory environment),

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these elements are outside of the control of companies. It is also the case that investors do not consider Ofwat’s ratio definitions when considering what companies to invest in. Therefore we strongly believe that any financeability assessment for the sector should reflect the methodologies and target thresholds that are specifically used by the rating agencies and will apply to water companies in the actual ratings assessments. Otherwise it would be challenging to conclude that price determinations are consistent with the financeability requirements of water company licence conditions.

By not reflecting the actual rating agency methodologies that companies face in the actual market – for example, through Ofwat’s use of the non-alternative adjusted cash interest cover ratio which does not mirror that of Moody’s (see section 6.2) - there are a number of potential knock-on implications to financeability assessments, including but not limited to:

- Financeability assessments that may not be achievable in the real world
- Lack of consistency between the effective credit rating applied in the financeability assessment and that used within the cost of debt methodology / debt indexation mechanism, whereby companies would receive compensation for debt costs that are set by reference to debt rated on the cusp of single A and BBB ratings, but are only able to finance themselves at lower rating levels and therefore will suffer higher costs of debt irrespective of efficiency;
- Inconsistency between the financeability assessment of companies that use different levers to address financeability issues, as explained further in section 6.2. Ofwat’s choice of ACICR, rather than the alternative version of ACICR, as a key financial ratio for financeability assessment leads to an inconsistent assessment because of different company choices over PAYG and RCV run-off revenue advancement, as a means to address financeability issues, and how ACICR treats the two types of advancement differently. A more appropriate and comparable ratio to use would be Adjusted cash interest cover ratio (ACICR) (Alternative). This looks through any additional “fast money” revenue, from either PAYG or RCV run-off, rather than ACICR which looks through advanced RCV run-off but not advanced PAYG.

It is understandable that Ofwat would not want its financeability assessment to be defined by third party organisations over which it has not control. However, in order for Ofwat’s financeability assessment to be valid and applicable in actual market conditions, it is important that Ofwat incorporates consideration of the methodologies actually used by rating agencies when assessing financeability.

In summary, we propose that Ofwat:

- **consider the mathematical restrictions inherent in the WACC and required financeability ratio thresholds and how this is outside of company control**
- **revisits - as it committed to do so - the embedded : new debt ratio in light of company submissions at September and April which indicate it should be 83:17 rather than 70:30 as in Ofwat’s earlier guidance**
- **recognises that company licences require an investment grade credit rating which is dependent upon credit rating agency financial metrics, the calculation of which is dependent upon Ofwat’s price review determination and WACC**

6. Representation of key financial ratios to demonstrate financeability

Different assumptions have been made between the three fast track companies, both for interventions to test financeability (e.g. notional company dividends, PAYG advancement, etc.) and also in the definition of Ofwat selection of key financial ratios. This means that the presentation – and potentially the assessment – of financeability of the notional companies is not on a consistent basis. This has the potential for significant confusion between stakeholders and we believe that Ofwat should adopt more consistent common assumptions across all companies, to ensure that individual determinations are consistent with one another.

6.1. Key financial ratios used in the financeability assessment

In table 5.3 of each fast track company’s draft determination document, Ofwat presents the results for what it judges to be the “key financial ratios”¹³. These are set out side by side in the table below.

Table 13 - Financial ratios - notional structure before reconciliation adjustments (5 year average)

	SVT		SWW		UUW	
	Plan	DD	Plan	DD	Plan	DD
Gearing	61.3%	60.0%	61.0%	57.9%	59.9%	58.9%
Interest cover	3.89	4.08	4.36	4.73	4.01	4.05
Adjusted cash interest cover ratio (ACICR)	1.56	1.48	1.82	2.00	1.55	1.54
Funds from operations (FFO)/Net debt	10.48%	10.02%	10.92%	11.93%	9.73%	9.81%
Dividend cover	1.40	1.42	1.52	2.16	0.96	1.00
Retained cash flow (RCF)/Net debt	7.84%	7.62%	7.60%	9.54%	6.30%	6.66%
Return on capital employed (RoCE)	5.49%	4.65%	5.29%	5.37%	4.62%	4.34%

This comparison naturally raises questions as it tends to project stronger ratios for SWW and weaker ratios for UUW. This is unexpected given that the ratios are presented on what is termed a “notional structure” basis but, for reasons such as those set out below, the basis of comparison of the notional companies is not the same.

6.2. Adjusted cash interest cover ratio (ACICR)

Advancement of revenues can impact certain financial ratios, making comparisons between them more complicated when assessing a company’s financeability. For example, Ofwat has chosen to use the Adjusted cash interest cover ratio (ACICR) as a key financial ratio for financeability assessment. Use of this ratio for cross company comparative purposes is problematic because of the different treatment applied to different company choices over PAYG and RCV run-off revenue advancement.

The differential between South West Water’s and United Utilities’ five-year average ACICR is slightly more than 0.4x. Given that this ratio is presented on the notional company structure basis, companies’ mix of debt, cost of debt and gearing are the same. Also, the start-of-period ACICR should, as a first approximation, be a mathematical expression of the relationship between certain of Ofwat’s industry-wide WACC parameters. Therefore, this size of difference in SWW and UUW’s ACICR is surprising.

The problem lies in the choice of adjusted interest cover ratio. A more appropriate and comparable ratio to use would be Adjusted cash interest cover ratio (ACICR) (Alternative). This looks through any

¹³ “PR19 Draft determinations: United Utilities draft determination”, Ofwat, 11 April 2019, page 46

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additional “fast money” revenue, from either PAYG or RCV run-off. It is most broadly aligned to Moody’s credit rating agency calculation (the importance of which is further discussed in section 5). This ratio is readily available from Ofwat’s published DD financial models on line 190 of tab “Analysis_Appointee”.

In contrast, the non-alternative version utilised in draft determinations does not look through PAYG revenue advancement, though it does look through RCV run-off advancement which SVT has chosen to employ. It therefore flatters the U UW ACICR (non-alternative) result. U UW has chosen to advance PAYG as a means of overcoming notional company structure financeability issues. It also explains the 0.4x difference in the SWW vs U UW ACICR result as SWW has £134m of additional “fast money”. By not adopting the ACICR (Alternative) metric in its headline results, there is a significant risk that Ofwat is not assessing financeability as the company has done, nor as the credit rating agencies will do.

6.3. Dividend assumptions and cover

An example of where key financial structure assumptions have not been normalised in the notional company structure is the use of different dividend assumptions. This tends to flatter the apparent financeability of companies where Ofwat has assumed a lower base yield (and vice versa).

At previous price reviews, in its financeability assessment, Ofwat overlaid consistent dividend assumptions for all companies. This is not the case for Ofwat’s PR19 draft determination financeability assessment of fast track companies. The different dividend assumptions and yields are shown in the table below, set against the “early guidance” view of notional cost of equity provided in Ofwat’s July 2017 PR19 final methodology.

Table 14 - variation in dividend assumptions in notional company structures

	SVT	SWW	U UW
Notional Cost of equity (Ofwat’s “early view”)	4.52%		
DD Dividend	3.16%	4.00% (b/f)	4.52%
DD Dividend growth	1.36%	1.03%	-
DD Dividend yield*	3.55%	3.29%	4.54%
DD Dividend cover	1.42	2.16	1.00

* AMP7 average dividend per Income Statement/ (average RCV - average net debt) ; FYA CPIH 2017/18 price base

The differential between South West Water’s and United Utilities’ average AMP7 dividend cover is 1.16x. Although some of this differential is clearly due to differences in companies’ proposed dividend yields, the magnitude of this difference is still surprising given that this ratio is on the notional company structure. The dividend cover metric is quite straightforward, with no “look throughs” which the ACICR is capable of. The AMP7 dividend cover that companies have is instead principally a function of company-specific factors that are wholly unrelated to the allowed return, most notably:

- the additional “fast money” mentioned above will also feed pound-for-pound into stronger profits and therefore stronger dividend cover; and
- after-tax profit is highly sensitive to companies’ statutory accounting, especially the calculation of accounting depreciation. Accounting depreciation is a deduction that reduces after-tax profits. RCV run-off / depreciation is a price building block that adds to companies’ revenue entitlements. Any difference between the two types of depreciation will have an immediate impact on bottom-line accounting profit and, therefore, dividend cover.

Due to the values involved, the latter point has a particularly strong impact on the dividend cover ratio.

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Table 15 - South West Water – RCV depreciation and accounting depreciation

SWW	2020/21	2021/22	2022/23	2023/24	2024/25	AMP7 avg.
RCV depreciation	177	179	182	185	188	182
Accounting depreciation	118	122	127	131	136	127
Difference	59	57	56	54	52	56
Dividend	47	48	50	51	52	50
Difference / Dividend	1.3	1.2	1.1	1.1	1.0	1.1

Table 16 - United Utilities Water – RCV depreciation and accounting depreciation

UUW	2020/21	2021/22	2022/23	2023/24	2024/25	AMP7 avg.
RCV depreciation	563	565	575	591	601	579
Accounting depreciation	398	414	428	445	462	429
Difference	165	151	147	146	140	150
Dividend	217	221	226	231	235	226
Difference / Dividend	0.8	0.7	0.6	0.6	0.6	0.7

The gap that there is between SWW’s RCV and accounting depreciation contributes approximately 1.1x to SWW’s AMP7 dividend cover. The gap that there is between UUW’s RCV and accounting depreciation contributes approximately 0.7x to UUW’s AMP7 dividend cover.

SWW’s dividend cover is presented as significantly stronger than UUW’s dividend cover due to this quirk. If the dividend assumptions were normalised in the assessment of notional company financeability, then this assessment would show that our level of allowed revenues – and the inherent “fast money” contained within it – are on a par with the other fast track companies.

In summary, we propose that Ofwat:

- assesses all companies on a consistent basis, including notional dividend policy based on Ofwat’s “early view” WACC guidance
- uses ACICR (Alternative) and FFO : Debt (adjusted) metrics, available within the financial model, to ensure companies’ key financeability metrics are presented on a comparable basis as regards revenue advancement
- ensures its interventions on determinations are more consistently ensuring equivalent levels of financeability

7. Business rates

At PR14, all determinations incorporated an uncertainty mechanism for business rates. This was because Ofwat assessed the revaluation of business rates in 2017 as a material risk that was largely outside the control of companies. This was specific to each company and specific to the five years of AMP6. Given that we expect business rates to be reassessed by government not once, but twice in AMP7 (in 2021 and 2024), the current assessment of this item is quite uncertain and potentially subject to change in AMP7. As such, we propose that Ofwat should implement a true-up mechanism for business rates, which will last beyond AMP7 thus negating any need for bespoke uncertainty mechanisms.

In order to continue to incentivise companies to act efficiently for matters where they retain a degree of control, we propose that Ofwat should simply extend the tax true-up mechanism to also include business rates. Similar to the existing tax true-up mechanism, which true-up only for those items wholly outside of management control, such as corporation tax rates and capital allowance rates, this extension would also only true-up for the business rates ‘multiplier’ (also known as poundage). This amount is set by central government and is therefore outside of management control more so than, say, rateable value. This extension would apply for all companies for AMP7 onwards. Such a mechanism would ensure that such a true-up did not have the temporary nature of Price Review-specific uncertainty mechanism, which we saw applied to business rates in PR14.

In summary, we propose that Ofwat:

- **should extend the tax true-up mechanism for all companies to include business rates**
- **this extension would true-up for changes in the business rates ‘multiplier’ which is wholly outside of management control**

8. Use of notional company taxation

We accept that Ofwat’s methodology for the calculation of tax allowances in revenue controls was to be based on the notional company structure, but using the actual company gearing for calculation of interest, if the company’s gearing was in excess of the notional company assumption of 60%. Ofwat’s methodology on the use of the notional company related to the level of gearing in the notional company. However, the methodology did not explain that its approach would require tax allowances to be based on notional embedded cost of debt, rather than actual embedded cost of debt.

Our September business plan followed Ofwat’s guidance for the completion of tables, filling in tables on a notional company basis where required. Our price control tables (App7, App17, Wr3, WN3, WWN5, Bio4) were completed using the “actual company “ (i.e. “un-notionalised”) version of Ofwat’s financial model. We are not aware of this being queried or contested during the query process, or of this being an identified errors/inconsistency (in which case companies were typically required to complete revised tables).

However, in the Draft Determinations, Ofwat has assumed tax and price controls based on the notional company gearing and notional embedded cost of debt, and not the actual embedded cost of debt. We do not believe that this was signalled in price control methodology, financial model rules, or in table guidance.

Ofwat’s PR19 Final Methodology has a section (section 9.3.2 of Appendix 12¹⁴) specifically on “Treatment of interest within corporation tax computations”, which does not mention that notional company interest tax shield was expected to be used for tax allowance in price controls:

“Our calculation of the tax allowance takes account of interest payments, which are deductible for tax purposes.

Companies bear the risks associated with their capital structure and are responsible for making sure that their chosen structure is resilient. However, companies that increase their level of gearing above our notional assumption benefit from a higher interest tax shield. We consider it is reasonable that customers, rather than investors, should benefit from this higher interest shield. This removes the incentive for companies to increase gearing purely to benefit from the increased tax shield. It is also consistent with our view that companies should not increase gearing to a level where there is insufficient equity in the company to enable it to be resilient to cost shocks and to be able to avoid, cope with and recover from disruption.

Our approach to calculating interest deductions is to take account of interest payments on debt by using the higher of a company’s actual proportion of debt financing, and the proportion of debt financing assumed in our notional capital structure.”¹⁵

The final methodology is clear that the higher of notional or actual company gearing will be used to calculate company tax allowances. Our actual company gearing is higher than the 60% notional company gearing at the start of AMP7, therefore we are content that the actual company gearing will be used to calculate UuW’s tax allowance.

¹⁵ “Delivering Water 2020: Our methodology for the 2019 price review Appendix 12: Aligning risk and return”, Ofwat, page 104

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However, the final methodology does not state what assumption would be used for the **embedded cost** of debt in the tax calculation:

“10.10 Our approach to corporation tax

As part of setting price controls, we calculate a separate tax allowance to make sure the revenue that companies receive covers the corporation tax that companies will need to pay.

To calculate each company’s tax allowance, we will use an approach based on the projected taxable profits of the appointed business. The calculation will use allowed revenue and available tax deductions based on expected expenditure. It will apply current corporation tax rates and associated reliefs and allowances, as set out in UK tax legislation.

In our draft methodology proposals we proposed to introduce a reconciliation mechanism to account for changes in the corporation tax rate and writing down allowances under the capital allowance regime. Respondents broadly agreed with the proposed mechanism which we explain in further detail in appendix 12 (aligning risk and return). In calculating the reconciliation adjustments for corporation tax, we will take into account the impact on the tax charge arising from changes to the cost of debt, derived from the cost of new debt index mechanism.

Consistent with our approach at previous price reviews, we will calculate the interest cost for the tax allowances on the basis of the gearing that underpins the notional financial structure, or a company’s actual gearing, whichever is higher.

This will make sure that customers, rather than investors, benefit from the higher tax shield from interest payments as interest payments can be offset against companies’ tax liabilities. Where a company increases gearing as a result of financial restructuring, we will claw back the tax benefits for customers at the next price review. This removes the incentive for companies to increase gearing simply to benefit from a lower tax bill.

We set out in more detail information about the basis on which we will calculate tax allowances in appendix 12.”¹⁶

Given that the methodology did not signal this approach to interest rates, in our September plan we have used Ofwat’s methodology regarding the **notional** capital structure, but using our **actual** interest rates.

In summary, we propose that Ofwat should:

- **recalculate UUW’s tax allowance based on the use of actual embedded cost of debt, rather than notional embedded cost of debt**
- **recognise that whilst the use notional gearing was expected, the use of the notional embedded cost of debt in the calculation of tax allowances was not signalled in the PR19 methodology**

¹⁶ “Delivering Water 2020: Our final methodology for the 2019 price review”, Ofwat, page 185

9. Fast track reward

The fast track reward is presented incorrectly in the Draft Determination documentation and netted off against revenue re-profiling in years 2020/21 – 2021/22.

The corrected tables should look like this:

Table 17 - Draft Determination document Table 4.1: Calculation of allowed revenue for wholesale controls (£m)

	WR	WN	WWN	BR	Total
Pay as you go	349.8	1,445.5	1,119.4	214.3	3,129.0
RCV run-off	125.4	794.9	1,487.9	201.7	2,609.9
Return on capital	107.2	437.1	957.3	62.4	1,564.0
Revenue adjustments for PR14 reconciliations	0.8	(7.1)	(2.4)	-	(8.8)
Fast-track reward	-	23.9	-	-	23.9
Tax	17.0	60.8	95.6	18.0	191.4
Grants and contributions (price control)	-	114.0	56.0	-	170.0
Other income (price control)	-	-	-	-	-
Deduct other income (non-price control)	(0.8)	(9.5)	(1.5)	-	(11.8)
Revenue re-profiling	0.3	1.2	1.7	0.2	3.4
Final allowed revenues	599.7	2,860.9	3,714.0	496.6	7,671.1

Table 18 - Allowed revenue appendix Table 1.2: Water network plus (£m)

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Pay as you go	297.3	302.3	301.3	276.3	268.2	1,445.5
RCV run-off	158.2	158.6	157.6	160.2	160.3	794.9
Return on capital	89.3	89.0	88.0	86.5	84.3	437.1
Revenue adjustments for PR14 reconciliations	(1.4)	(1.4)	(1.4)	(1.4)	(1.4)	(7.1)
Fast-track reward	4.8	4.8	4.8	4.8	4.8	23.9
Tax	6.8	9.2	11.1	15.4	18.2	60.8
Grants and contributions (price control)	22.2	22.4	22.6	23.0	23.7	114.0
Other income (price control)	-	-	-	-	-	-
Deduct other income (non-price control)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(9.5)
Revenue re-profiling	(7.8)	(4.9)	(1.4)	7.2	8.2	1.2
Final allowed revenues	567.6	578.0	580.8	570.1	564.4	2,860.9

In summary, we propose that Ofwat:

- re-present table 4.1 of the DD and table 1.2 of the DD allowed revenue appendix to correctly show £23.9m as the fast track reward

10. RoRE risk range for ODIs

10.1. Correction of ODI RoRE range presented in Draft Determination documents

In our view, the ODI ranges published in the draft determination do not reflect the proposed interventions made by Ofwat on UuW's ODIs. The draft determination sets out the RoRE risk ranges in Table 19 below.

Table 19 - Ofwat draft determination table 5.2: Annual average RoRE risk ranges

RoRE %	United Utilities			
	Business Plan		Draft Determination	
Base case RoRE	4.5		4.65	
Risk Ranges	Lower	Upper	Lower	Upper
Totex	-1.56	1.46	-2.38	1.51
ODIs	-1.90	2.00	-2.30	1.00
Financing costs	-0.14	0.14	-0.14	0.14
Retail costs	-0.34	0.34	-0.32	0.37
D Mex & C Mex	-0.32	0.29	-0.32	0.29
Revenues	-0.34	0.38	-0.02	0.05
Total	-4.60	4.61	-5.48	3.36

The correct ODI ranges (and therefore total) are shown in Table 20 below. As noted in section 11.5 the ODI figures presented in Ofwat's DD financial model are also incorrect and also require amendment.

Table 20 - Ofwat draft determination table 5.2: Annual average RoRE risk ranges (corrected)

RoRE %	United Utilities			
	Business Plan		Draft Determination	
Base case RoRE	4.5		4.65	
Risk Ranges	Lower	Upper	Lower	Upper
Totex	-1.56	1.46	-2.38	1.51
ODIs (DD corrected)	-1.90	2.00	-2.16	0.75
Financing costs	-0.14	0.14	-0.14	0.14
Retail costs	-0.34	0.34	-0.32	0.37
D Mex & C Mex	-0.32	0.29	-0.32	0.29
Revenues	-0.34	0.38	-0.02	0.05
Total	-4.60	4.61	-5.34	3.11

The rejection of some proposals set out in our IAP response has resulted in an overall balance between outperformance payments and underperformance penalties which we do not consider to be appropriate. The range reflected in the Draft Determination is -2.23% to +0.54% (see Table 22) of return regulated on equity (RoRE)). The Draft Determination ODI upper RoRE range of 0.54% is significantly less than the indicative figure described in Ofwat's final methodology, which suggested:

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“Setting an indicative RoRE range for ODIs. We are suggesting an indicative range for the size of companies’ ODI outperformance and underperformance payments of $\pm 1\%$ to $\pm 3\%$ of RoRE at PR19.”¹⁷

Ofwat’s final methodology stated that:

“We expect companies to develop their ODIs in consultation with their customers, and obtain customer support for the overall RoRE range proposed in their business plan.”²¹

We developed our September plan RoRE range in close consultation with our customers and YourVoice. Customers supported the range of ODI impact which we included our plan, including the potential upside of 1.9%. We consider that changes are needed to bring the range closer to that supported by customers. For more details, see “D002 – Outcomes”.

10.2. Draft Determination ODI RoRE range and interactions between ODIs

Ofwat made this intervention at Draft Determination:

“The company should provide an updated view of RoRE risk ranges at P10/P90 confidence levels in light of our draft determination. For this purpose, the company should apply its view on the interactions between individual ODI risks in arriving at an overall risk range for ODIs. Calculations should be carried out using the App26 rows on the F-Inputs tab of the draft determination financial model, with values read off the model dashboard. The company’s updated view should be provided in its response to the draft determination.”¹⁸

In response we provide an updated view of RoRE risk ranges at P10/P90 confidence levels in light of the draft determination. We have used the corrected values reflecting Ofwat’s actions and interventions in the draft determination, rather than those straight from the financial model or the draft determination tables which require correction as stated above. In developing this RoRE range, we considered the interaction between individual ODI risks and arrived at an overall risk range for ODIs. We modelled these interactions with Monte Carlo simulation, which enable more detailed consideration of relationships to be set between different outcomes, rather than solely combining the upside (and downside) values for each outcome.

The interaction between two ODIs can be defined in terms of a correlation. The correlation between each ODI impacts the outcome of this simulation. Simply adding values up gives the maximum potential outcome, more correlation results in values which are closer to the simple add up and lower correlation results in numbers which are closer to a P50 position. For example, a dry winter might result in a good performance on flooding related ODIs, but might mean poor performance on drought risk related ODIs. Therefore, this analysis provides a more nuanced view of United Utilities’ ODI risk and reward.

We used a triangular distribution in our simulations. We preferred the triangular distribution to the pert distribution (which has the same parameters) because the triangular distribution implies values around the target are more likely to occur. We consider that this is more representative of ODI risk and reward.

¹⁷ “Delivering Water 2020: Our final methodology for the 2019 price review”, Ofwat, December 2017, page 60

¹⁸ “PR19 draft determinations: United Utilities – Aligning risk and return actions and interventions”, Ofwat, April 2019, page 2

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In order to present the subsequent RoRE graphs, we used the App 26 rows on the “F_Inputs” tab of the draft determination financial model, with values read off the model dashboard. This is presented in Figure 8 - Restated Draft Determination RoRE ranges below.

The simulation produced the following P10/P90 ranges, with a memo column added to show the App 1 add up of the values:

Table 21 - Draft Determination P10/P90 ranges

	2020/21	2021/22	2022/23	2023/24	2024/25	AMP7	Memo
Scenario	ODI reward - high case (P90)						App 1
Water resources	0.49	0.07	0.22	0.22	0.24	1.25	1.27
Water network plus	10.53	13.85	17.38	12.99	11.21	65.95	94.61
Wastewater network plus	10.97	8.76	10.63	9.99	6.05	46.40	57.26
Bioresources	0.60	0.64	2.38	1.09	1.24	5.95	6.36
Residential retail	2.77	2.86	3.00	3.07	3.15	14.84	16.60
Appointee	25.36	26.17	33.61	27.35	21.89	134.39	176.10
Scenario	ODI penalty - low case (P10)						App 1
Water resources	-0.04	-0.22	0.02	-0.02	-0.25	-0.55	-0.57
Water network plus	-38.98	-42.75	-42.90	-48.96	-53.22	-226.81	-258.79
Wastewater network plus	-32.76	-42.87	-49.55	-58.29	-68.69	-252.17	-262.66
Bioresources	-2.35	-2.46	-2.37	-2.38	-2.45	-12.01	-12.41
Residential retail	-2.61	-2.73	-2.82	-2.89	3.02	-14.08	-15.67
Appointee	-76.75	-91.04	-97.66	-112.54	-127.63	-505.62	-550.10

Note – annual ODI numbers are derived from simulation analysis, whereas the App 1 numbers are summed.

We put these simulation figures into Ofwat’s Draft Determination financial model using the App 26 rows on the “F_Inputs” tab. We input the pre-tax RoRE figures into the financial model; Ofwat also input the pre-tax figures into the DD financial model. However, the item reference on “F_Inputs” column B refers to the post-tax figures (e.g. “APP26A043HC”, rather than “APP26043HC” which is the item reference for the pre-tax data). It would be inappropriate to use the post-tax figure for the analysis of RoRE and also not in line with how Ofwat has completed the DD financial model and analysis. Once populated with the pre-tax RoRE figures, Ofwat’s financial model produces the following RoRE range on the “Dashboard” tab:

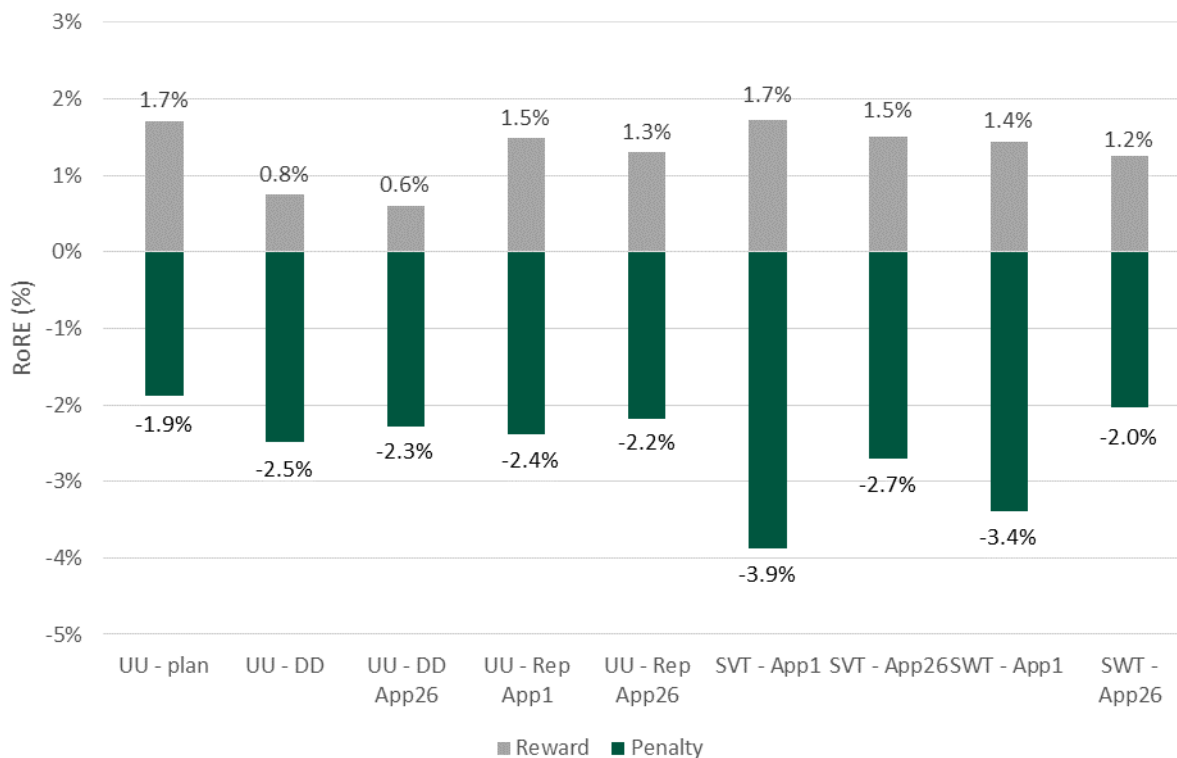
Table 22 - RoRE ranges – Draft Determination ODI scenarios

	High case (P90)	Low case (P10)
Water resources	0.08%	-0.04%
Water network plus	1.07%	-3.69%
Wastewater network plus	0.34%	-1.88%
Bioresources	0.69%	-1.39%
Retail	0.07%	-0.06%
Appointee	0.54%	-2.23%

We are concerned that this range does not appear to provide a level of upside performance potential which is consistent with either our proposed plan or the published RoRE ranges for other fast track companies. This is illustrated in Figure 6.

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Figure 6 - Comparison of fast track ODI RoRE ranges



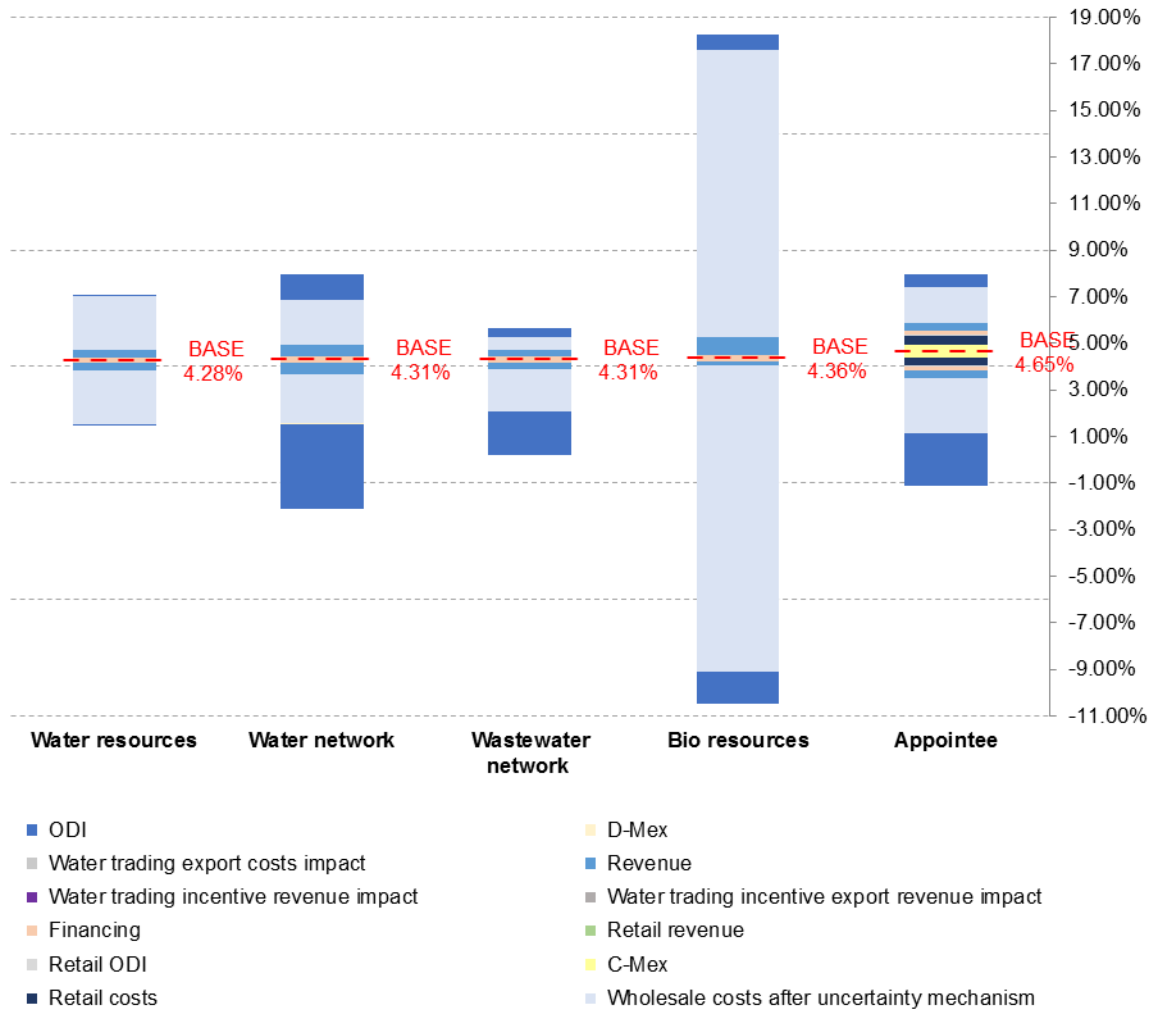
As set out below, the downward skew of the expected performance range is more significant for UUU than either of the other fast track companies.

Table 23 - Comparison of fast track companies' RoRE ODI upside vs. downside

	UU	SVT	SWT
Upside as a percentage of downside (App 26 version)	27%	44%	50%

Our restated post-simulation RoRE range is illustrated in Figure 8, again presented using the functionality in Ofwat's Draft Determination financial model "Dashboard" tab.

Figure 8 - Restated Draft Determination RoRE ranges



We have also calculated the potential impact of this ODI RoRE range on household customers’ bills. This analysis is shown in Table 24.

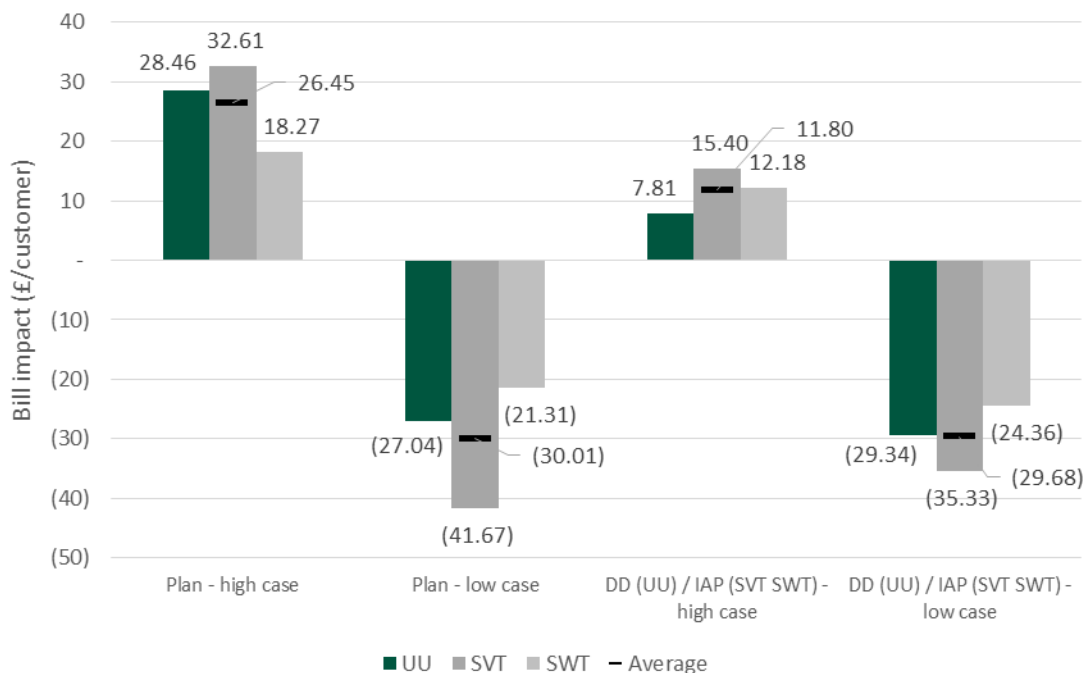
Table 24 - Draft Determination ODI range Bill impacts

	High case (P90)	Low case (P10)
Household bill impact	£7.81	-£29.40

Figure 9 below clearly illustrates that Ofwat’s Draft Determination interventions have skewed the impact on customers’ bills towards the downside. It is clear that Ofwat’s interventions have materially reduced potential ODI upside for all fast track companies, although United Utilities has seen the largest reduction (we have used company IAP submission App 26 values, as we do not have equivalent App26 values from other company draft determinations).

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Figure 9 - The bill impact of P10 / P90s (App 26 versions)

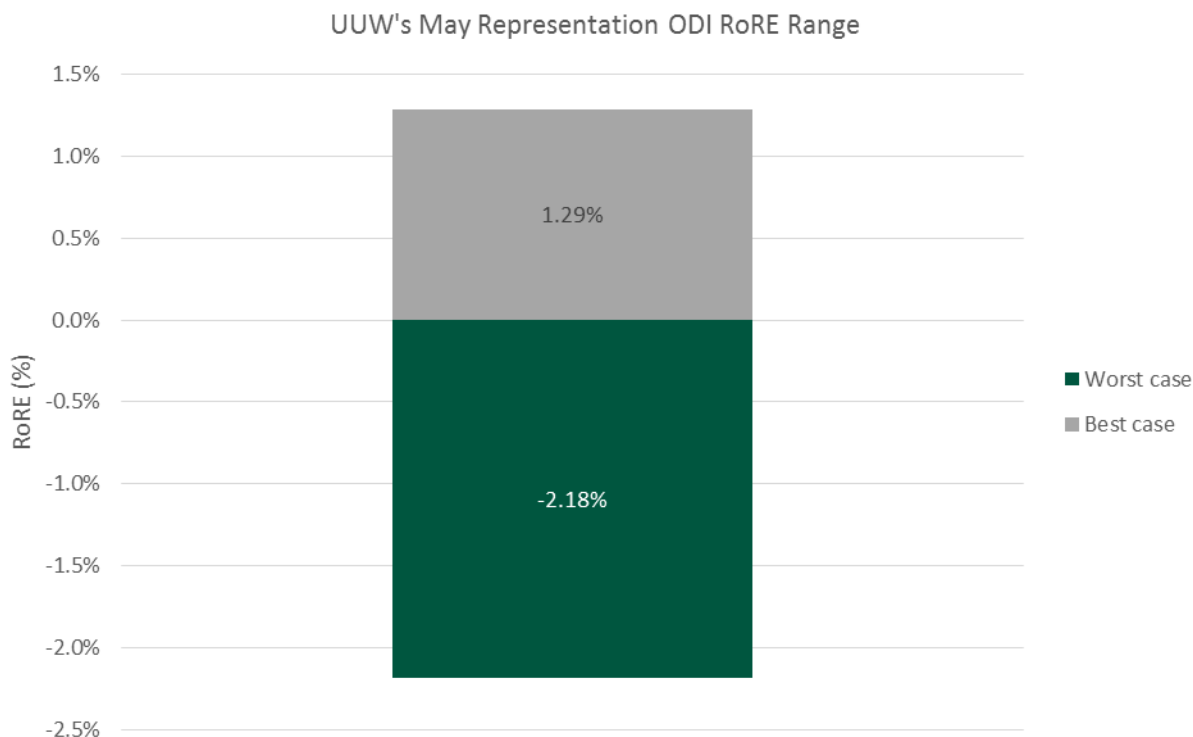


Whilst we have a narrower ODI RoRE range compared to the other fast track companies (as illustrated in Figure 6), we think it is equally important to examine the resulting impact on customer bills, as that is the consequence that customers experience. If our ODI RoRE range was similar to the other fast track companies, then the household bill impacts presented in Table 24 would also increase. We seek a smaller RoRE range in comparison to the other fast track companies, in light of the bill impact. The customer bill value of our rewards is much lower, even after accounting for our relatively high RCV.

10.3. Draft Determination representation on ODI RoRE range and interactions between ODIs

Our representations on the draft determination will, if accepted, lead to the following RoRE range.

Figure 10 - UUW's Draft Determination Representation ODI RoRE Range (App 26 version)



This illustrates a more reasonable overall allocation of risk and return, relative to Ofwat’s DD and to the DD’s of the other fast track companies (we have used company IAP submission App26 values, as we do not have equivalent App26 values from other company draft determinations). The relative proportion of reward and penalty which we propose is now comparably slightly above that of the other fast track companies, set out in Table 25 below:

Table 25 - Comparison of upside and downside risk across the fast track companies

	UUW’s DD Representation	SVT	SWT
Upside as a percentage of downside (App 26 version)	59%	44%	50%

However, this comparison is necessarily made between our DD representation figures and other company earlier IAP figures. It is reasonable to assume that these earlier IAP figures may also have improved due to DD representations made by those companies.

The bill impact of UUW’s ODI representation is set out in Table 26 below.

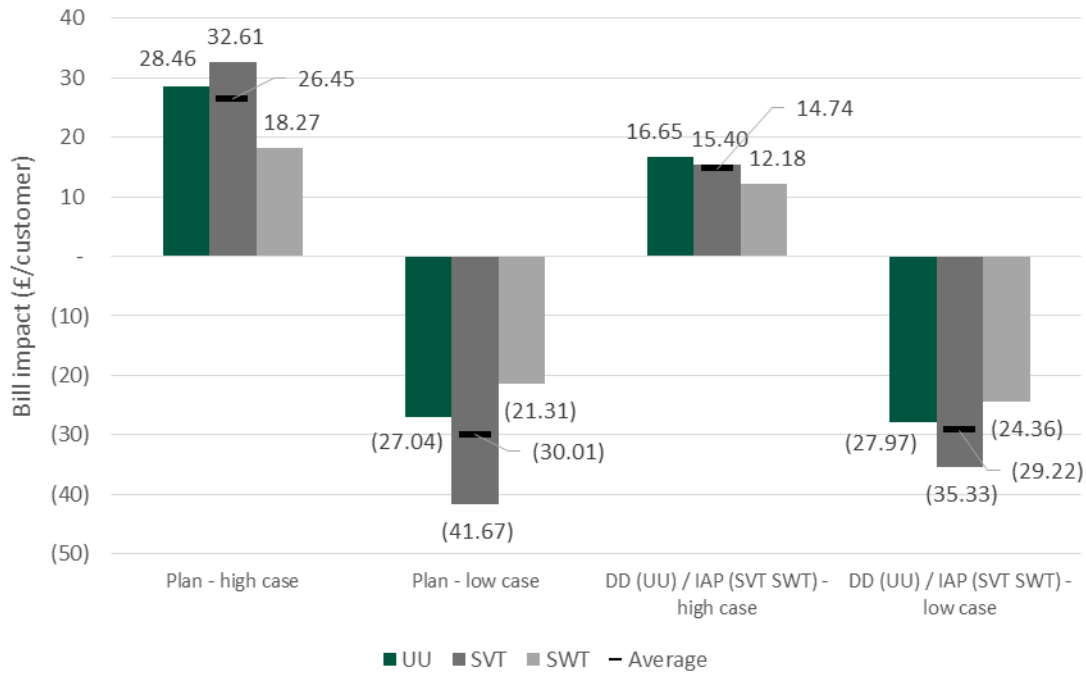
Table 26 - P10/P90 bill impact of UUW’s ODI representation

DD Representation	High case (P90)	Low case (P10)
Average annual household customer bill impact (£ real)	£16.54	-£28.00

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We consider that this brings U UW more into line with the outcome for other fast track companies, as illustrated in Figure 11.

Figure 11 - Comparing the bill impact of U UW's DD representation with other fast track company IAPs



For more details on our ODI representations, see “D002 – Outcomes”.

In summary, we propose that Ofwat should:

- reflect an upside ODI RoRE for U UW within the 1-3% range required by Ofwat’s PR19 methodology
- ensure the balance of incentives are more in line with other fast track determinations
- review and correct the ODI RoRE range shown in DD table 5.2 and in the financial model.

11. Appendix A - Model and table issues

In reviewing the draft determination documentation and model we believe we have identified a number of issues and inconsistencies which should be considered by Ofwat and are capable of being revised ahead of the final determination.

11.1. Consistent PAYG rates in Draft Determination documents

Ofwat has indicated various changes to PAYG rates and the derivation of these is difficult for us to trace through. We would suggest that there is scope for some additional clarity and consistency in the rates quoted in text and tables to facilitate better understanding of the approach. This is particularly the case where a single total AMP7 rate is given.

The Draft Determination allowed revenue appendix tables 2.1 - 2.4 contain these PAYG rates:

Table 27 – Draft Determination allowed revenue appendix PAYG rates (%)

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Table 2.1 Water resources	90.4%	88.6%	90.2%	86.0%	78.4%	Not given
Table 2.2 Water network plus	68.8%	75.3%	76.6%	79.8%	82.2%	Not given
Table 2.3 Wastewater network plus	51.9%	49.5%	54.5%	38.5%	45.0%	48.0%
Table 2.4 Bioresources	55.6%	53.8%	56.8%	59.9%	58.2%	56.8%

This compares to the Draft Determination summary document table 4.4 which contains these PAYG rates:

Table 28 - Draft Determination summary document table 4.4 PAYG rates (%)

	PAYG rates for each wholesale control (5 year)
Water resources	86.2%
Water network plus	76.1%
Wastewater network plus	47.2%
Bioresources	56.8%

PAYG (%) reflects the weighted average rate applied across the 5 years 2020-25.

We note that the Wastewater network plus total rate does not appear to agree between table 2.3 and table 4.4.

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The PAYG rates in the DD financial model are:

Table 29 - Draft Determination financial model PAYG rates (%)

	2020-21	2021-22	2022-23	2023-24	2024-25	Total *	Source: Financial-model-United-Utilities-Water.xlsb, tab "Adjustments workings sheet"
Water resources	90.4%	88.6%	90.2%	86.0%	78.4%	86.1%	Line 157
Water network plus	68.9%	75.3%	76.6%	79.8%	82.3%	76.1%	Line 158
Wastewater network plus	51.9%	49.5%	54.5%	38.5%	45.0%	47.2%	Line 159
Bioresources	55.6%	53.8%	56.8%	59.9%	58.2%	56.8%	Line 160

* AMP7 Total PAYG per Price Control / AMP7 Total totex per Price control, e.g. WR = tab "Exec Summary" line 188 / tab "Summary_Calc" line 219; WN = tab "Exec Summary" line 212 / tab "Summary_Calc" line 410; WWN = tab "Exec Summary" line 236 / tab "Summary_Calc" line 637; BR = tab "Exec Summary" line 260 / tab "Summary_Calc" line 811

We note that the:

- Water resources total does not appear to agree to that in Draft Determination summary document table 4.4
- Wastewater network plus total does not appear to agree to that in allowed revenue appendix table 2.3
- Water network plus rates in 2020-21 and 2024-25 do not appear to agree to those in allowed revenue appendix table 2.3.

We note that, for U UW only, PAYG rates (in %) are also given in table 4.3 in the Draft Determination summary document. We have assumed that this is an error in the document and that the values on this line ("Pay as you go (£ million)") should be the £cash PAYG value rather than the PAYG % rate.

11.2. PAYG advancement - correction of value

PAYG "excess fast money" in financial model does not appear to agree to Draft Determination wording

In the DD documentation Ofwat states that the PAYG revenues are based on "[recovering] in each year an amount equivalent to operating costs"¹⁹. In addition to this, Ofwat has accepted our proposed revenue advancement via PAYG. Following the IAP, we amended our proposal to a 1.38% advancement of totex, which Ofwat accepted.²⁰

¹⁹ "PR19 draft determinations: United Utilities – Aligning risk and return actions and interventions", Ofwat, April 2019, page 2

²⁰ "PR19 draft determinations: United Utilities – Aligning risk and return actions and interventions", Ofwat, April 2019, page 1

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The PAYG advancement (described as “excess fast money” in the financial model) is £77m (nominal price base). Deflated to real price base and attributed to each wholesale price control, this amount in the financial model is:

Table 30 - Wholesale “excess fast money”

£m Real price base	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	Total	Source:
Water resources	0.996	1.029	1.033	1.153	1.392	5.603	Tab “FinStat_Water Resources” line 11 deflated to real price base using tab “Index” line 81, less tab “Exec Summary” line 188
Water network plus	5.959	5.540	5.426	4.776	4.501	26.202	Tab “FinStat_Water Network” line 11 deflated to real price base using tab “Index” line 81, less tab “Exec Summary” line 212
Wastewater network plus	5.815	6.266	5.739	8.162	6.773	32.755	Tab “FinStat_Wastewater Network” line 11 deflated to real price base using tab “Index” line 81, less tab “Exec Summary” line 236
Bioresources	1.001	1.031	0.972	0.910	0.937	4.850	Tab “FinStat_Bio Resources” line 11 deflated to real price base using tab “Index” line 81, less tab “Exec Summary” line 260
Wholesale “excess fast money”	13.770	13.866	13.170	15.001	13.603	69.410	Tab “Analysis_Appointee” line 183 deflated to real price base using tab “Index” line 81

Given that Ofwat has maintained our basis of calculation for the natural PAYG rates and accepted the 1.38% advancement, we would expect to see a slightly higher value overall for PAYG excess fast money in the DD financial model. These are the PAYG excess fast money / advancement values we would expect to see in the financial model:

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Table 31 - Wholesale expected “excess fast money”

£m Real price base	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	Total	Source: Net totex * 1.38% advancement Financial-model-United- Utilities-Water.xlsb, line 429 deflated from nominal to real price base using tab “Index” line 81
Water resources	0.996	1.029	1.033	1.153	1.392	5.603	Tab “Water Resources”
Water network plus	5.959	5.540	5.426	4.776	4.500	26.201	Tab “Water network”
Wastewater network plus	5.860	6.228	5.677	7.964	7.024	32.753	Tab “Wastewater network”
Bioresources	1.075	1.108	1.044	0.976	1.006	5.209	Tab “Bio Resources”
Wholesale expected “excess fast money”	13.890	13.905	13.180	14.869	13.923	69.767	

These are more than the £cash values in the financial model by £357k, with most of the differences in every year of the WWN+ and BR price controls:

Table 32 - Wholesale “excess fast money” difference

£m Real price base	2020- 21	2021- 22	2022- 23	2023- 24	2024- 25	Total	Source:
Water resources	(0.000)	0.000	0.000	(0.000)	0.000	0.000	Tab “FinStat_Water Resources” line 11 deflated to real price base using tab “Index” line 81, less tab “Exec Summary” line 188
Water network plus	0.000	(0.001)	(0.000)	0.000	(0.000)	(0.000)	Tab “FinStat_Water Network” line 11 deflated to real price base using tab “Index” line 81, less tab “Exec Summary” line 212
Wastewater network plus	0.046	(0.038)	(0.062)	(0.198)	0.251	(0.002)	Tab “FinStat_Wastewater Network” line 11 deflated to real price base using tab “Index” line 81, less tab “Exec Summary” line 236
Bioresources	0.075	0.077	0.072	0.066	0.069	0.359	Tab “FinStat_Bio Resources” line 11 deflated to real price base using tab “Index” line 81, less tab “Exec Summary” line 260
Wholesale “excess fast money” difference	0.120	0.039	0.010	(0.132)	0.320	0.357	

These corrected values can be achieved in the financial model if the following PAYG rates are used on the “Inp_Override” tab (corrected to 15 d.p. as per financial model data input by Ofwat:

Table 33 - “Excess fast moey” PAYG rate corrections

	2020-21	2021-22	2022-23	2023-24	2024-25	Source:
Water resources	90.3872647 97769400%	88.64952440 3748900%	90.18594604 0866900%	86.01518579 9616400%	78.38019120 8221800%	Line 1062
Water network plus	68.8600007 13635300%	75.30051649 4502900%	76.63352718 5453700%	79.83948372 2929100%	82.25341396 5731100%	Line 1081
Wastewater network plus	51.9327195 21435500%	49.50619371 6865200%	54.49294774 0509400%	38.47985346 7424400%	45.03708635 6675700%	Line 1100
Bioresources	55.7456899 14895600%	53.86333603 8568200%	56.86643911 0222200%	60.02730296 2645400%	58.27752490 4275700%	Line 1119

11.3. Presentation of RCV values in Draft Determination documents

Draft Determination table 4.9: RCV run off on the RCV

The values in the top two rows of the table appear to have been transposed. The values in the table row ‘RPI inflated RCV’ appear to be the values intended for the line below ‘CPIH inflated RCV’, and vice versa.

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The values in table 4.9 are in the same order as they appear in the financial model. However, the row titles in table 4.9 are in a different order to those in the financial model. See rows '[Financial-model-United-Utilities-Water.xlsx]Summary_Calc'!E230 and E231.

The values in the draft determination document table 4.9 are:

Table 34 - Draft Determination summary document table 4.9

Table 4.9	Water resources	Water network plus	Wastewater network plus	Bioresources	Total
RPI inflated RCV	60.2	361.6	677.6	82.2	1181.6
CPIH inflated RCV	61.7	370.6	694.0	84.2	1210.5

It appears to us that the values should be reversed as follows:

Table 35 - Draft Determination summary document table 4.9 (corrected)

Table 4.9 (corrected)	Water resources	Water network plus	Wastewater network plus	Bioresources	Total
RPI inflated RCV	61.7	370.6	694.0	84.2	1210.5
CPIH inflated RCV	60.2	361.6	677.6	82.2	1181.6

Draft Determination table 4.10: RCV run off rates for each wholesale control

We believe there are some slight rounding errors in the RCV run off rate values for water network plus and bioresources.

The values in the tables are to two decimal places and have been rounded down for water network plus and bioresources. The averages for the two price controls have been calculated as:

Original company plan (%):

=AVERAGE('[PR19-14h-for-publication - UUW.xlsx]Water Network'!\$L\$763:\$P\$763)

=AVERAGE('[PR19-14h-for-publication - UUW.xlsx]Bio Resources'!\$L\$763:\$P\$763)

Draft determination (%):

=AVERAGE('[Financial-model-United-Utilities-Water.xlsx]Water Network'!\$L\$778:\$P\$778)

=AVERAGE('[Financial-model-United-Utilities-Water.xlsx]Bio Resources'!\$L\$778:\$P\$778)

The values in the Draft determination document are:

Table 36 - Draft Determination summary document table 4.10

Table 4.10	Water resources	Water network plus	Wastewater network plus	Bioresources
Original company plan (%)	3.23%	5.02%	4.31%	8.90%
Draft determination (%)	3.23%	5.02%	4.31%	8.90%

We believe that the values should be:

Table 37 - Draft Determination summary document table 4.10 (corrected)

Table 4.10 (corrected)	Water resources	Water network plus	Wastewater network plus	Bioresources
Original company plan (%)	3.23%	5.03%	4.31%	8.91%
Draft determination (%)	3.23%	5.03%	4.31%	8.91%

11.4. AMP6 Customer bill

The 2018/19 and 2019/20 average dual customer bill is in nominal price base in the financial model on tab “F_Inputs” whereas we believe it is intended that this should be in real price base. Consequently, this then means that the “Average bill” graph shown on “Dashboard” does not show the customer bill profile on a real price base, but rather a mix of nominal (AMP 6) and real (AMP 7) price bases. The bill shown in the draft determination written document is in real price base for all years (table 1.1). The financial model error has occurred because the value has been taken from business plan data table App 7 line 41 which is in mixed price base: AMP6 is in nominal price base whereas AMP7 is in real price base. The AMP6 values should therefore be deflated within the financial model before they are used.

11.5. ODI RoRE values in financial model

The ODI RoRE values currently in the DD financial model do not appear to reflect those in Ofwat’s written draft determination documents, but rather those in our IAP response. For example, this range appears to include values from the company’s representations in response to the IAP that have not been accepted by Ofwat in the draft determination (most materially, but not exclusively, the outperformance payment for the systems thinking outcome). Consequently, this means that the RoRE graphs and high/low ODI RoRE shown on the DD financial model “Dashboard” values are misstated. We assume that these will be corrected in the final determination financial model to reflect the final ODI position.

In addition, as noted in section 10, the DD financial model contains the post-tax item reference for the App 26 RoRE values. We believe that this should instead be the pre-tax item reference.

11.6. Corrections required in the financial model “F_Inputs” tab

We have reviewed the DD financial model “F_Inputs” tab, in light of changes explained in the other draft determination documents and the financial model tabs “Adjustments log” and “Adjustments workings sheet”. The following items in the “F_Inputs” tab either 1) appear to us to be incorrect for the reasons stated or 2) would, we believe, benefit from explanation or correction as we are unable to understand the values currently presented.

11.6.1. Transposed values

Charge for DB schemes

The charge for DB schemes for Bioresources and Wastewater Network plus appear on transposed lines in the financial model (“F_Inputs” tab row 164 and 165). The values in row 164 and row 315 in the “F_Inputs” tab should be swapped so that the values line-up with the correct description and are carried forward into the relevant price control calculations.

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We completed App 22 based on the line description as shown in Table 38. These line descriptions and values were used in our financial model.

Table 38 - Costs included in App22 and the “F_Inputs” tab in our financial model submitted in September 2018 are aligned to the item description

Reference	Item description	Unit	2020-21	2021-22	2022-23	2023-24	2024-25
A5018WWN	Charge for DB schemes ~ residential retail - Charge for DB schemes ~ wholesale wastewater bioresources	£m	0.765	0.758	0.760	0.758	0.760
A5018BIO	Charge for DB schemes ~ residential retail - Charge for DB schemes ~ wholesale wastewater network plus	£m	3.002	2.952	2.845	2.772	2.713

The reference codes for the two lines have been swapped in App 22 of the January table set which fast track companies were not required to complete. This change has been replicated in the “F_Inputs” tab in the draft determination financial model. However, at the same time the values for these two lines have also been moved and now appear against the wrong item description in the draft determination financial model (“F_Inputs” tab), shown in Table 39. The values are carried forward and used in the calculations for the wrong price control. To correct this the values should be moved to align with the line descriptions shown in Table 38.

Table 39 - Changes to the two lines have resulted in the incorrect charges appearing against the item descriptions in the financial model (“F_Inputs”)

Reference	Item description	Unit	2020-21	2021-22	2022-23	2023-24	2024-25
A5018BIO “F_Inputs” row 315	Charge for DB schemes ~ residential retail - Charge for DB schemes ~ wholesale wastewater bioresources	£m	3.002	2.952	2.845	2.772	2.713
A5018WWN “F_Inputs” row 164	Charge for DB schemes ~ residential retail - Charge for DB schemes ~ wholesale wastewater network plus	£m	0.765	0.758	0.760	0.758	0.760

11.6.2. References

Wholesale Tax

The references for two of the tax inputs in the financial model (“F_Inputs”, row 577 and row 588) do not match the references for the corresponding descriptions in table App 29. The references in the financial model should be changed to avoid confusion later if the references are used elsewhere.

We completed the new App 29 as part of our IAP response based on the descriptions, shown below.

Table 40 - Business plan table App 29 submitted in IAP tables, February 2019

Reference	Item description	Unit	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
APP290055	Brought forward capital allowance pool ~ structures and buildings 2% - Brought forward capital allowance 2% ~ Wastewater network plus	£m	14.905	-	-	-	-	-
APP290067	New capital expenditure - Proportion of new capital expenditure qualifying for the structures and buildings (2%) pool ~ Wastewater network plus	%	-	7.85%	7.30%	7.25%	7.68%	7.72%

In the draft determination financial model (“F_Inputs” tab) the references are against different lines. The values for the description are correct and the lines are used correctly in the calculations. However, if the references were changed to be consistent with App 29 this would avoid potential errors if the references are used elsewhere.

Table 41 - Draft determination U UW financial model “F_Inputs” tab

Reference	Item description	Unit	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
APP290067 “F_Inputs” row 577	Brought forward capital allowance pool ~ structures and buildings 2% - Brought forward capital allowance 2% ~ Wastewater network plus	£m	14.905	-	-	-	-	-
APP290055 “F_Inputs” row 578	New capital expenditure - Proportion of new capital expenditure qualifying for the structures and buildings (2%) pool ~ Wastewater network plus	%	-	7.85%	7.30%	7.25%	7.68%	7.72%

11.6.3. AMP7 totals entered in cells for 2025-26 values

Wholesale water resources charges

In the business plan table Wr3 column M is a sum that calculates a total for AMP7 (2020-25). In the financial model (“F_Inputs”) tables the values have been copied into column O which is for values for the year 2025-26, these should be moved to column T.

Table 42 - Business Plan table Wr3 with column for AMP7 total

Reference	Item description	Unit	2020-21	2021-22	2022-23	2023-24	2024-25	2020-25
A19031WR	Wholesale water resources charges - Water resources unmeasured charge ~ residential	%	43.56	42.55	41.49	40.39	39.39	41.47
A19032WR	Wholesale water resources charges - Water resources unmeasured charge ~ business	%	0.47	0.47	0.47	0.47	0.47	0.47
A19033WR	Wholesale water resources charges - Water resources measured charge ~ residential	%	26.48	27.66	28.83	30.07	31.20	28.85
A19034WR	Wholesale water resources charges - Water resources measured charge ~ business	%	29.49	29.32	29.21	29.07	28.95	29.21
A19045WR	Wholesale water resources ~ non-price control income (principal services) - Wholesale water resources non-price control income (principal services)	£m	0.150	0.152	0.153	0.155	0.156	0.766

Values entered in column O of the Draft determination U UW financial model “F_Inputs” tab (as shown in Table 43 below) should therefore be moved to column T.

Table 43 - Draft determination U UW financial model “F_Inputs” tab AMP7 totals entered incorrectly in column O

Reference	Item description	Unit	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
A19031WR row 207	Wholesale water resources charges - Water resources unmeasured charge ~ residential	%	43.56	42.55	41.49	40.39	39.39	41.47
A19032WR row 208	Wholesale water resources charges - Water resources unmeasured charge ~ business	%	0.47	0.47	0.47	0.47	0.47	0.47
A19033WR row 209	Wholesale water resources charges - Water resources measured charge ~ residential	%	26.48	27.66	28.83	30.07	31.20	28.85
A19034WR row 210	Wholesale water resources charges - Water resources measured charge ~ business	%	29.49	29.32	29.21	29.07	28.95	29.21
A19045WR row 473	Wholesale water resources ~ non-price control income (principal services) - Wholesale water resources non-price control income (principal services)	£m	0.150	0.152	0.153	0.155	0.156	0.766

11.6.4. Different values in the Draft determination financial model “F_Inputs” tab.

Pensions

Ofwat has amended the “movement in pensions” values on “F_Inputs” for all wholesale price controls in all years of AMP7. Whilst the total movement per year agrees to that in our September submission, the split between price controls has changed. Ofwat has not explained the reason for this change on the “Adjustments working sheet” or elsewhere in the Draft Determination. Ofwat’s Draft Determination change therefore appears to be an error. Our September split between price controls was based on the RCVs. We believe the correct values to be used in “F_Inputs” are as submitted in September and are shown in the Table 44 below.

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Table 44 – movement in pensions values from U UW financial model PR19-14h-for-publication.xlsx, “F_Inputs” tab

Reference	Item description	Unit	2020-21	2021-22	2022-23	2023-24	2024-25
PR19PEN0001	Movement in Pensions (+ve = increase in provision) - WR - nominal	£m	(1.856)	(1.591)	(0.517)	(0.396)	(0.943)
PR19PEN0002	Movement in Pensions (+ve = increase in provision) - WN - nominal	£m	(14.463)	(10.838)	(4.052)	(1.185)	(1.475)
PR19PEN0003	Movement in Pensions (+ve = increase in provision) - BR - nominal	£m	(1.677)	(1.513)	(0.456)	0.016	(0.111)
PR19PEN0004	Movement in Pensions (+ve = increase in provision) - WWN - nominal	£m	(25.305)	(22.458)	(8.075)	(12.035)	(11.171)

These values above should replace the values currently in the DD financial model “F_Inputs” tab, shown in the table below.

Table 45 - movement in pensions values from Draft determination U UW financial model “F_Inputs” tab

Reference	Item description	Unit	2020-21	2021-22	2022-23	2023-24	2024-25
PR19PEN0001	Movement in Pensions (+ve = increase in provision) - WR - nominal	£m	(1.670)	(1.396)	(0.464)	(0.482)	(0.481)
PR19PEN0002	Movement in Pensions (+ve = increase in provision) - WN - nominal	£m	(19.944)	(16.613)	(5.504)	(5.710)	(5.703)
PR19PEN0003	Movement in Pensions (+ve = increase in provision) - BR - nominal	£m	(4.406)	(3.759)	(1.504)	(1.592)	(1.645)
PR19PEN0004	Movement in Pensions (+ve = increase in provision) - WWN - nominal	£m	(17.281)	(14.632)	(5.629)	(5.816)	(5.870)