Affinity Water: PR24 Business Plan Submission - Commentary

PD1: Inflation indices

Overview

We have populated the table with actual index values to end March 2023 as released by the Office for National Statistics (ONS). For observations from April 2023 onwards, we have aligned our projected inflation rates with those published by the Office for Budget Responsibility (OBR).

At the time of business plan submission, the most up to date OBR forecasts were those published in March 2023, which span the period to 2028. We have converted the OBR's quarterly rates projections to monthly averages to complete the table. Projecting beyond 2028, we assume that CPI inflation will be 2.0% per year, equal to the Bank of England's inflation target. We further assume that the wedge between CPIH and RPI will be 1.0%, leading to RPI forecast 3.0% per year.

For inflation on index-linked debt, we have taken the December to December inflation rate as the measurement of indexation. This aligns with the treatment for our current index linked debts, which are predominantly indexed on calendar year basis.

PD2: Non-household water – revenues by tariff type

This table is intentionally unpopulated as it's not relevant to Affinity Water.

PD3: Non-household wastewater - revenues by tariff type

This table is intentionally unpopulated as it's not relevant to Affinity Water.

PD4: Analysis of land sales

PD4.1: Land sales – proceeds from disposals of protected land

Our land sales forecast is based on our most recent land disposal strategy, approved by our Board in June 2023, and which targets £25.1m net disposal proceeds over the five-year period 2020-25.

PD5: Revenue reconciliation - wholesale

Overview

Basis of forecast revenue

Each year we set charges such that the expected revenue from those charges will not exceed allowed wholesale revenue. Our forecast of revenue depends upon our forecasts of charge multipliers, for instance projected numbers of customers and volumes billed. We also consider expected changes in our charging base due to meter switching, new properties and projections of industrial demand as well as prior years' over-recoveries and performance incentive amounts.

For volumetric demand, we forecast revenue on the basis of normal weather conditions. We subject our projections of charge multipliers to independent external assurance review to ensure that our projections are reasonable and based on up-to-date information from reliable, internal and external data sources.

We monitor revenue throughout the year as part of management accounting and reporting. Typically, at half-year stage we are able to understand if we seem likely to over or under recover revenue against the allowed amount. At the time of business plan submission, we have set charges for 2023-24, but it is too early to be able to say whether over or under-recovery is likely. Therefore, our forecast revenue in 2023-24 does not differ from the allowed level. We have not yet set charges for 2024-25 and we do not yet know with precision, the final determination for in-period adjustments to price limits although we are able to forecast this. Our forecast then is that actual revenue will be equal to our forecast allowed amount, having adjusted the allowed amount for our expectations of in-period adjustments.

Explanation of imbalances

The table shows that we do not expect any material imbalances in revenue in years 2022-23 to 2024-25 inclusive.

Although not required in the table, our revenue imbalance results for 2020-21 and 2021-22 reported in APRs were influenced by pandemic restrictions. In 2020-21, these caused shortfall in revenue due to reductions in non-household demand and lower new connections activity, which were only partly offset by home working and consequent elevated domestic demand. This led to revenue under recovery.

Having made what turned out to be an over forecast of demand in the pandemic conditions of 2020, we adjusted our demand projections for 2021-22 charges setting to reflect our best understanding of pandemic induced perturbations in demand at that time. There was still considerable uncertainty around the likely duration of the pandemic, whether further full or regional lockdowns would be necessary, the extent of future home working versus return to workplaces and how quickly business demand might revert once the economy re-opened. In outturn, demand was higher than we had forecast in late 2020, which led to revenue over recovery in 2021-22.

The revenue forecasting incentive mechanism applies penalties for revenue forecasting errors that exceed 2%. In both pandemic affected years, our imbalances were sufficiently large to attract penalty. We ask that Ofwat consider whether these penalties ought to be dis-applied or reduced, to take account of the unusual circumstances and the additional difficulty of revenue forecasting in those years.

PD5.5: Allowed grants & contributions before adjustments (or modified by CMA)

The FD19 financial model determined the level of grants and contributions as £16.3m in 2017-18 FYA price base each year 2022-23 to 2024-25 inclusive. The entries in this line are those amounts, uplifted for inflation to base year prices. However, as these are revenue items, we have used the November 2021 CPIH inflation rate for this purpose, to inflate determination values in 2017-18 FYA CPIH price base to November 2021 CPIH price base.

To note

There is no commentary for the remaining lines in this table.

PD6: Bulk supply information

The basis of forecast bulk supply exports and imports

During our Water supply budget and demand forecasting cycle we analyse our demand averages for each month over the last 15 years, to understand common trends around where our peak and base months are. We also then normalise the data for specific events those years, examples of this are Olympics in 2012, temporary use ban periods, a large leak at Iver in 2018 and Covid-19 years. During this cycle we also consider our planned work and outage impacts on our supply and demand balance. This process ultimately determines how much water we will need to import to balance forecast.

Actual Volume Data – 2022-23

Throughout the fiscal year our key bulk supply agreements are tracked by the Production Desk within the Control Operations team. On a daily basis a member of the desk will extract flow data from our telemetry system (SCX) and input this to an excel report (OCC Report). They then carry out a brief validation process to amend any anomalies or missing data. This process is largely to provide daily Operational Data that we can use for performance management and strategic decision making. This data is validated in more depth on a quarterly basis by our Analytics team that sit within Asset Strategy. The purpose of this is to provide a more thorough check of the data and gives us time to follow up any suspect data ahead of year end.

There are several minor Bulk Supplies that are not included on the OCC report as this data is currently not fed through our telemetry system. Instead, these are measured through district meters in our network which is reported through our Waternet system.

The analytics team will validate and include these supplies on a quarterly basis ready for it to be reported at year end on the APR table 4A.

The supply data for NAVS are reported through our Hi-Affinity billing system. NAV meters are read and uploaded into Hi-Affinity (normally twice annually) and for the purposes of annual reporting and forecasting a pro rata calculation is performed.

All data for 2022-23 for Bulk Import and Exports has been extracted from the 4A table.

Forecasted Bulk Supply Volume Data

The methodology for forecasting volumes becomes more specific for each individual supply and is built into our Water Budget forecasting process, details of which can be observed in the table below

Bulk Treated Water Imports Volumes

Import	Methodology	Comment
Grafham	Right to Take	This is our largest import and is a crucial import for us to maintain our supply & demand balance. We aim to reduce our dependency on this for the remainder of AMP7 through optimisation.
Ladymead	Secluded Demand Zone	
Hampstead	Secluded Demand Zone	
Fortis Green	Emergency Bulk Supply	500m3 flush every 4 weeks
Stonebridge	Annual Incident Support	390m3 flush every 4 weeks plus volumes to support planned outages of Iver in 2023/24 and 2024/25.
Snakey Lane	Emergency Bulk Supply	400m3 flush every 4 weeks
Essex &Suffolk (Days Lane)	Secluded Demand Zone	
Kingsdown	Emergency Bulk Supply	250m3 flush once a month
Hadstock	Secluded Demand Zone	
Perivale	Annual Incident Support	Flushed fortnightly. This import forms part of our emergency arrangement agreements with the Environment Agency. It is expected that we utilise this import prior to calling on any emergency license agreements we have, thus we regularly experience use of this import during high demand periods.
Cockfosters	Emergency Bulk Supply	450m3 flush every 4 weeks

Bulk Exports

Export	Methodology	Comment
Egham - SEW	Right to Take	This is our largest export, and we work closely with SEW to maintain excellent communication between organisations.
Chalton	Secluded Demand Zone	Discrepancy with the bulk supply register is due to this export being netted off against Grafham import in that report.
Cambridge Water - Odsey	Secluded Demand Zone	
Napchester	Secluded Demand Zone	

Forecasting NAV Volumes

It has been calculated that all existing NAV sites will have a growth profile for years 4 and 5 of this AMP, this has been reflected in the PD.6 table.

As noted in our commentary to table PD12.24, we do not project water trading reconciliation incentives in this business plan. We have two trades with Thames Water that are at an advanced stage of negotiation, but not yet concluded. Therefore, we anticipate that we will satisfy the conditions for importer incentives later in the 2020-25 period and may propose importer incentives in 2025 as part of blind year determinations.

PD7: Impact of Green recovery on RCV

This table is intentionally unpopulated as it's not relevant to Affinity Water.

PD7a: Impact of Green recovery on RCV

This table is intentionally unpopulated as it's not relevant to Affinity Water.

PD8: Totex analysis - wholesale

PD8.1- 9: Base Operating expenditure

Our analysis of base operating expenditure in this line is consistent with entries in Table CW2, after adjustment to apply real price effects and frontier shift efficiency as set out in table SUP11. Total base operating expenditure is therefore consistent with table CW1.1.

There is no further specific line commentary for this table.

Please see commentary for table CW2 for further information on our approach to forecasting base totex.

PD9: Totex performance

Overview

This table shows that over the last three years of AMP7 for wholesale water overall, we expect to incur totex a little above the amounts allowed in the determination. Over the full five-year period, we expect to overspend allowance.

Moving from overall totex, to expenditure at business segment level, we expect to underspend FD19 allowed totex in the water resources activity but overspend in water network plus. These effects offset each other somewhat, leaving a smaller net amount for cost sharing.

PD9.1-5: Totex (net of business rates, abstraction licence fees and grants and contributions)

Our calculation of totex, net of business rates, abstraction charges, grants and contributions is consistent with the methodology set out in guidance.

PD9.2: Actual totex (excluding business rates, abstraction licence fees, grants and contributions and other items not subject to cost sharing)

Our projection of forecast 'totex subject to cost sharing' is based on YTD and budgets for 2023-24 and budget for 2024-25 and are consistent with the values entered into table CW1. Our three years' actual cost performance and our most recent budget position is consistent with our exceeding our five-year allowed expenditure for cost sharing. We are unlikely to be able to outperform allowed totex in total as we have needed to absorb energy price increases and other cost inflation as well as continuing to invest in service performance improvement for our customers. We also note that the wages adjustment is operating to reduce allowed expenditure due to the high consumer inflation relative to benchmark manufacturing wages.

PD9.6: WINEP reconciliation adjustment

Our projection of WINEP reconciliation amounts is positive, as all but one of the amber schemes included in the price controls at PR19 have been confirmed as needed with no variations in scope. The remaining scheme has confirmed additional scope than assumed in FD19, which results in a positive reconciliation amount.

We consider we are on track to deliver all the amber scheme obligations that are now confirmed, and which were included within PR19 price limits.

PD9.7-10: Totex - business rates and abstraction licence fees

For expenditure items subject to 75-25 sharing rates, the Environment Agency significantly increased abstraction charges effective from 1 April 2022. These now exceed final determination assumptions and we have borne these additional expenses during the AMP. From 2025, cost sharing of increased abstraction charges will place upward pressure on future bill levels, however we are able to mitigate this effect having reduced our business rates bill relative to determination from 2022 onwards.

PD9.11-13: CMA companies only – items excluded from general cost sharing with bespoke sharing rates

Not relevant to Affinity Water.

PD10: Capital allowance super deductions for PR19 tax reconciliation

PD10.1-10: Super-deduction first-year capital allowances

A nil entry is applicable on all the lines as no super deduction claim is made for FY22 and no claim will be made for FY23.

PD11: RCV midnight adjustments

PD11.1-4: PR19 FD / CMA / IDoK closing RCV balances as at 31 March 2025

Our closing RCV figures were taken from FD19.

PD11.5-10: PR14 Blind Year reconciliation end-of-period RCV midnight adjustments as at 31 March 2025

Blind year adjustments were taken from the blind year determinations published in 2020.

PD11.11: PR19 ODI RCV adjustment in 2017-18 FYA (CPIH deflated) prices

All of our ODIs are revenue incentives so this line is zero.

PD11.12: PR19 WINEP / NEP RCV adjustment in 2017-18 FYA (CPIH deflated) prices

This value is taken from the WINEP reconciliation model, including the time value of money adjustment.

However, we have used the unadjusted figure for input to the cost reconciliation model as our understanding of that model is that it applies the time value of money adjustment within its calculations sheet. To have input the adjusted value would have meant that the WINEP amount is twice adjusted for the time value of money in cost reconciliation amounts.

PD11.13: PR19 Costs reconciliation RCV adjustment in 2017-18 FYA (CPIH deflated) prices

The amounts shown in this line are outputs from the cost reconciliation model and principally reflect our underspend against determination for water resources offset by overspend in water network plus activity. The incidence of cost sharing between RCV and revenue adjustment is governed by the different PAYG ratios in each of the price controls.

PD11.14: PR19 Land sales RCV adjustment in 2017-18 FYA (CPIH deflated) prices

This line reflects our projected £25.1m nominal expected land sale net proceeds over the 5 years of the price control, shared 50/50 with customers.

PD11.15: PR19 RPI-CPIH wedge RCV adjustment in 2017-18 FYA (CPIH deflated) prices

These lines are completed with the output from the RPI/CPIH wedge model. The wedge between RPI and CPIH has turned out to be larger than assumed at PR19, and there is an upwards adjustment to RCV from this, to reflect the effects of different indexation factors from PR19 assumptions.

PD11.16: PR19 Strategic regional water resources RCV adjustment in 2017-18 FYA (CPIH deflated) prices

The amounts in this line are outputs from the Strategic Resources Options reconciliation models and reflect actual expenditures to date and forecasts to end AMP.

One of the six schemes (Anglian to Affinity Water Transfer) was abandoned at Gate 2 for Affinity Water, with Anglian now the sole participant for work to Gate 3 and beyond. For this scheme, the cost sharing rules require that all future expenditure assumed beyond Gate 2 and 100% of allowances unspent at the time of reaching Gate 2 is returned to customers in AMP8. The entry in this line reflects this approach.

For the other 5 schemes, we have completed the reconciliations on the expectation that these schemes will proceed to Gates 3 & 4 and therefore there is no un-needed or unspent monies identifiable for return to customers in 2025. Further, as these schemes are not yet complete, the level of cost out/underperformance is not yet known and so there are no amounts to be returned to customers in 2025 for this.

PD11.17-18: PR19 RCV adjustment in 2017-18 FYA (CPIH deflated) prices; Green recovery and Havant Thicket

These lines are intentionally blank as they do not apply to Affinity Water.

PD11.19: Other RCV adjustments in 2017-18 FYA (CPIH deflated) prices

This line is provided to highlight any unambiguous errors that require adjustment. We have not identified any items that meet the definition so have entered zeroes.

PD11.20-21: PR24 end-of-period RCV midnight adjustments as at 31 March 2025

These lines are completed with transition and accelerated spend, as projected in tables CW12 and CW17, with inflation adjustment to deflate those inputs to 2017-18 price base.

PD11.22-23: Opening RCV balances as at 1 April 2025
PD11.24-25: Opening RCV balances as at 1 April 2025 expressed in PR24 base year prices

These lines are outputs from the RCV adjustment feeder model.

PD12: PR19 reconciliation adjustments summary

PD12.1-9: PR19 reconciliation end-of-period RCV midnight adjustments as at 31 March 2025

See commentary for PD11 as these lines are copied from that table.

PD12.10-14: PR14 Blind Year reconciliation end-of-period revenue adjustments

We have completed these lines using the blind year adjustment determination made in 2020.

PD12.15: PR19 ODI revenue adjustment in 2017-18 FYA (CPIH deflated) prices

This line relates to the per capita consumption performance commitment which was altered to become an end-of-period revenue adjustment.

Other ODI penalties and rewards, arising from performance outcomes in 2023-24 and 2024-25 are projected in our in-period adjustment models and also shown in table OUT8. The in-period revenue adjustment amounts are included within table RR6, populated with the output from the revenue adjustments feeder model.

PD12.16: PR19 RFI revenue adjustment in 2024-25 prior November (CPIH deflated) prices

The entries in this line reflect actual revenue forecasting performance for the first three years of AMP7. At the time of business plan submission, we are not sufficiently far into 2023-24 charging year to project revenue forecast errors for that year. We are similarly unable to project forecasting errors for 2024-25 as we have not yet set charges for that year. Therefore we have completed this table on the basis that revenue imbalances are zero for these years.

In completing the RFI reconciliation model, we have allocated the incentive amounts for forecast errors across the water resources and water network plus segments in proportion to the magnitude of forecast errors in each segment relative to total forecast error.

In our commentary to table PD5 we highlight the additional difficulty of accurate revenue forecasting in pandemic affected years and ask Ofwat to consider dis-applying or reducing the penalty amounts to recognise the uncertain revenue forecasting environment at that time.

PD12.17-18: PR19 C-MeX & D-MeX revenue adjustment in 2017-18 FYA (CPIH deflated) prices

We project zero further revenue adjustments for C-Mex and D-Mex incentives, equivalent to our business planning assumption that we will perform at the industry median level.

PD12.19: PR19 Bilateral entry (BEA) revenue adjustment in 2017-18 FYA (CPIH deflated) prices

PD12.20: PR19 Bioresources revenue adjustment in 2024-25 prior November (CPIH deflated) prices

PD12.21: PR19 Bioresources forecasting accuracy incentive penalty in 2017-18 FYA (CPIH deflated) prices

These lines are intentionally blank as they don't apply to Affinity Water.

PD12.22: PR19 Residential retail revenue adjustment in 2024-25 FYA (CPIH deflated) prices

This line is taken from the output of the residential retail revenue reconciliation model. We project zero revenue imbalance in years 4 and 5 of this price control, so the amount reflects the first three year's accumulated revenue imbalances, as adjusted by the blind year amount from 2019-20.

PD12.23: PR19 Business retail revenue adjustment in 2017-18 FYA (CPIH deflated) prices

This line is intentionally blank as it doesn't apply to Affinity Water.

PD12.24: PR19 Water trading revenue adjustment in 2017-18 FYA (CPIH deflated) prices

The amounts in this line and in our water trading incentive reconciliation model reflect a position of zero qualifying water trades, and zero exporter or importer incentives, which reflects the position at time of business plan submission.

We are however negotiating two new bulk supplies with Thames Water, at the Perivale (10 Ml/d) and Cockfosters (5 Ml/d) locations. The bulk supplies are needed to ensure security of supply in our north west London supply area in view of significant construction demand for water in that zone related to the HS2 project, and beyond that, to ensure security of supply once HS2 construction ends.

We have started to incur costs for these supplies and reported our operating costs in APRs to 2022-23. Whilst we are not yet in a position to qualify for incentives for our business plan submission (as agreements are not yet concluded), we anticipate that we will be in such a position for blind year reconciliations and likely to propose importer incentives at that time.

PD12.25: PR19 Developer services revenue adjustment in 2017-18 FYA (CPIH deflated) prices

We expect to connect fewer properties than assumed in the price control and through the developer services reconciliation mechanism, plan to return allowed revenue to customers to reflect the lower new connections activity levels.

PD12.26: PR19 Cost of new debt revenue adjustment in 2017-18 FYA (CPIH deflated) prices

The amounts reflect the output of the cost of new debt model. Outturn interest rates, as adjusted for outperformance expectations, exceed the rates assumed in the 2019 determination, so there are upwards adjustments to future allowed revenue to recoup the higher cost of new debt.

PD12.27: PR19 Gearing outperformance revenue adjustment in 2022-23 FYA (CPIH deflated) prices

The GOSM adjustment is completed from the relevant reconciliation model.

In the model, we are required to input closing RCV values for year 4 and 5, but Ofwat have not yet published RCV summaries for those years. Accordingly we have populated year 4 and 5 in the model with FD19 determination values for closing RCV, uplifted for inflation to year end prices from 2017/18 FD19 price base. This is summarised in the table below.

	2023/24	**2024/25**	**CPIH**	**CPIH**	**CPIH**	**2023/24**	**2024/25**
	£m 17/18p	**£m 17/18p**	**17/18FYA**	**31-Mar-24**	**31-Mar-25**	**£m nom.**	**£m nom**
Closing RCV RPI indexed component (Water Res)	46.00	41.53	104.22	129.8	130.2	57.29	51.88
Closing RCV CPIH indexed component (Water Res)	44.42	39.68	104.22	129.8	130.2	55.32	49.57
Closing RCV Post 2020 investment (Water Res)	132.25	145.35	104.22	129.8	130.2	164.72	181.59
Closing RCV RPI indexed component (Water N+)	453.84	437.59	104.22	129.8	130.2	565.25	546.69
Closing RCV CPIH indexed component (Water N+)	438.31	418.10	104.22	129.8	130.2	545.91	522.34
Closing RCV Post 2020 investment (Water N+)	323.03	371.81	104.22	129.8	130.2	402.33	464.51
Total	1437.85	1454.06	104.22	129.8	130.2	**1791**	**1817**
Check to 3.4 and 3.8 FD19 document	1437.85	1454.07					

PD12.28: PR19 Totex costs revenue adjustment in 2017-18 FYA (CPIH deflated) prices

These lines are completed with the outputs from the cost reconciliation model and reflect our projected overspend relative to determination in water network plus, partly offset by underspend in the water resources activity.

PD12.29: PR19 Tax revenue adjustment in 2017-18 FYA (CPIH deflated) prices

These lines are completed with the outputs from the tax reconciliation model and reflect the difference between allowed tax at the FD19 determination, and what tax would have been had certain changes to tax been known at that time, for instance the increase in headline rate of corporation tax in 2023.

PD12.30: PR19 RPI-CPIH wedge revenue adjustment in 2017-18 FYA (CPIH deflated) prices

These lines are completed with the output from the RPI/CPIH wedge model. The wedge between RPI and CPIH has turned out to be larger than assumed at PR19, and there is an upwards adjustment to allowed revenue from this, to reflect the revenue effects of different indexation factors.

PD12.31: PR19 Strategic regional water resources revenue adjustment in 2017-18 FYA (CPIH deflated) prices

The amounts in this line are outputs from the Strategic Resources Options reconciliation models and reflect actual expenditures to date and forecasts to end AMP.

One of the six schemes (Anglian to Affinity Water Transfer) was abandoned at Gate 2 for Affinity Water, with Anglian now the sole participant for work to gate 3 and beyond. For this scheme, the cost sharing rules require that all future expenditure assumed beyond Gate 2 and 100% of allowances unspent at the time of reaching Gate 2 is returned to customers in AMP8. The entry in this line reflects this approach.

For the other 5 schemes, we have completed the reconciliations on the expectation that these schemes will proceed to Gates 3 & 4 and therefore there is no un-needed or unspent monies identifiable for return to customers in 2025. Further, as these schemes are not yet complete, the level of cost out/underperformance is not yet known and so there are no amounts to be returned to customers in 2025 for this.

PD12.32: PR19 Havant Thicket activities revenue adjustment in 2017-18 FYA (CPIH deflated) prices

PD12.33: PR19 Green recovery costs revenue adjustment in 2017-18 FYA (CPIH deflated) prices

PD12.34: PR19 Green recovery (TVM) revenue adjustment in 2017-18 FYA (CPIH deflated) prices

PD12.35: Other revenue adjustments in 2017-18 FYA (CPIH deflated) prices

These lines are intentionally blank as these reconciliations do not apply to Affinity Water.

PD12.36-70: PR19 reconciliation adjustments

These lines are populated with the output from the Revenue Feeder Model, which converts the inputs from lines PD12.10-35 into base year prices.