

24 August 2018

Attention: The Board
DCWW
Pentwyn Road
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Project Name: Dwr Cymru Welsh Water (DCWW) non-financial assurance
Project Number: B2271301

Subject: PR19 - assurance letter

As your technical assurance partner we helped you to develop an Assurance Framework for your PR19 business plan. Amongst other things this identified the components of your plan that required external assurance. Based on the outputs from the framework, you asked us to review the elements of your business plan table data for the following broad areas of your plan.

1. Totex forecasts for 2018/19 to 2024/25 including the allocation between expenditure types and to price controls.
2. Leakage strategy and associated data tables (including forecast data for business plan table App2 - Leakage additional information and old definition reporting).
3. Non-financial data forecasts for 2018/19 to 2024/25 for selected PR19 input data.
4. PR19 Measure of Success (MoS) targets for 2018/19 and 2019/20 as the baseline for setting AMP7 targets.
5. PR14 reconciliation submission.
6. RCV submission and associated tables.

For all components we were asked to review the forecast methodology and data, the alignment with Ofwat definitions and methodology, and the consistency with APR18 and other data within the PR19 business plan tables. As agreed we have taken a risk based approach and our assurance is based on the approach we use for our annual assurance, adapted to align with the specific requirements of each PR19 component. Consistent with our normal assurance approach, in the majority of cases, our initial assurance was based on audit meetings with your teams.

For each component we provided your teams with detailed feedback that explained our assessment of the risk associated with the forecast data and set out any actions. When reviewing your forecasts, we took a risk-based approach (via sampling) to evaluating the completeness, reliability and accuracy of the source data/evidence that the item draws on, the robustness of the forecast and the appropriateness of the methodology used.

Overall, for the data we covered, other than where indicated otherwise in our feedback, we consider:

- you have processes and controls in place to produce data that are consistent, accurate and in line with Ofwat's data table requirements; and
- your forecasting methodologies are reasonable and forecasts are consistent with historic performance trends and future investment plans.

In addition:

- your initial service levels (2019-20) for your PR19 MoS targets may be considered stretching in relation to your historic performance and/or other information you provided;
- your leakage strategy is consistent with your WRMP and with the delivery of your proposed leakage target;
- your proposed leakage target for PR19 (15% reduction over the period) is stretching in relation to your historic performance; and
- your RCV submission incorporates feedback from the initial submission and has been updated for 2017/18 actuals.

Observations

We have worked constructively with your teams to help you identify regulatory and reporting risks with your proposed business plan table submissions.

We note that during our assurance work, we did identify a range of potentially material issues with the data you were proposing to report or the underlying forecasting approach. For example:

- for leakage, per capita consumption and the associated water balance data for example, we initially observed that your proposals had not been updated to align with your revised Water Resource Management Plan;
- for table Wr 7, which covers the forecast cost of new water resources capacity beginning in 2020-25, the team was unaware of a model Ofwat expects companies to use when calculating the annualised unit costs of schemes they report in this table; and
- for your capital expenditure forecasts we identified material scope for improvement in the validation of the investment tracker you were using to help generate your forecasts and the consistency of your methodologies for allocating the forecast costs across controls.

Following our feedback, your teams were able to satisfactorily address the material actions associated with such data items. At the end of our assurance exercise therefore all the tables, lines or set of lines we reviewed were graded A or B, indicating no material weaknesses with the production of the data. We note that in some instances teams are still finalising data tables and supporting commentary and planning to address areas where we raised potential reporting risks. For example, updating opex cost data in tables WS1 and WR2 to reflect that bulk supply costs should be allocated across all business units, consistent with the Regulatory Accounting Guidance. These are minor changes that we understand the team plan to complete ahead of submission.

In some areas there is scope for interpretation of Ofwat guidance and in a limited number of areas, we have discussed potential reporting risks and note that you are comfortable your approach is either consistent with Ofwat's PR19 methodology or that your rationale for where you are not fully aligned with its' expectations is well evidenced. For example, for your voids MoS, we noted a risk Ofwat will consider some elements of your approach inconsistent with its expectations (i.e. it may be expecting companies to propose bespoke Gap Site MoSs and more than one void MoS – or justify why they haven't). We understand you have discussed your approach in this

area within the business and intend to include narrative to support your approach. Also for some MoS performance forecasts we provided challenge where you are forecasting deteriorating performance to 2019-20. We note that you have provided supporting evidence in relation to your longer term performance and the influence of weather conditions.

During our audits we observed that your regulation team had been alerting data owners to relevant entries in Ofwat's PR19 methodology queries and responses documents. As the query process was an on-going process, we agreed we would not systematically check within audits that your teams had taken account of all relevant queries.

We also observed your teams generally had a clear understanding of Ofwat's PR19 table definitions and guidance, and the relevant part of the methodology. Where teams were unclear we either: advised them of our interpretation (eg: the treatment of tankered waste costs for WWS8 L1&5); or advised them to raise queries or include text explaining their approach in commentary supporting the tables (eg: the automated calculation of the aggregate net margin for business retail in R4).

Within your business plan submission, you are required to provide updates to your initial RCV allocation submission for both water and wastewater. We observed that your team had made some updates to original submissions to reflect latest information and to reflect on Ofwat feedback. We consider the teams approach for both allocations to be reasonable although we have noted one potential reporting risk on the waste water RCV submission and the requirement to separately report the value of shared assets. Following feedback, your teams have updated the data table to include the bioresources share of global shared assets but we recommend that further detail on operational shared assets is included as this was specifically mentioned by Ofwat in its feedback. We recognise that this will not materially impact the overall RCV valuation and understand that the team were still finalising supporting commentary and intended to reflect our feedback.

We note our risk-based assurance of your PR19 business plan tables was designed to support your own first and second line assurance and your due diligence process – and to build on previous assurance, such as that provided on your annual performance report and PR14 reconciliation submission.

During our audits we observed teams often understood the links between their PR19 data and the APR data they were also responsible for. In some cases we identified that there was scope for your teams to have a greater understanding of the connections between their data and that owned by other teams (either in relation to the APR or other business plan tables). For example, on leakage the team were not clear on the relationship between its' proposals in table App2 and the overall MoS table in App1; the link between drinking water contacts in WS18 and your MoS in App1 had not been considered; and for Wn2 L2-4 (length of mains relined and renewed and new mains), 2017-18 figures did not align to APR18 for two of the lines. We recognise that we have reviewed a selection of data tables and due to tables being completed at different times that it has not always been possible to perform consistency checks. We recommend that, subject to completion of the financial tables, you perform a final consistency check across the financial and non-financial data items.

We also identified some limited instances of minor errors (eg: for Wn2 L34-41 mains length by age bands), or cases where resource constraints meant the team had not applied the quality assurance planned ahead of the audit (eg: for the Bio1 and Bio2 tables).

We note above that following each audit we provided your teams with detailed feedback and actions to help reduce reporting risk. Consistent with the agreed scope, you managed the tracking and completion of these actions. Where we did initially identify potentially material issues (see above), you either requested we complete follow up audits (in person or via conference calls) or asked your teams to respond to the material actions via email. In such cases, we agreed that our focus was on whether your teams considered they had addressed the material actions and on sense checking the impact. As requested we did not carry out full re-audits.

We also note that to help you respond quickly and accurately to any Ofwat queries on your business plan submission, your teams should consider documenting their approaches to populating the tables where they have not already done so.

Finally, we note that we carried out our assurance of your PR14 reconciliation data and feeder models alongside our work on your annual performance reporting. This was because Ofwat requested companies provide the two submissions at the same time. In July 2018 we provided you with a separate report detailing our observations on your interpretation of the PR14 reconciliation rulebook and subsequent application via the feeder models. We also provided your teams with detailed feedback on the PR14 reconciliation business plan tables that we assured (and that are associated with the feeder models) at the time of the audits.

Conclusion

Overall, we consider your teams had a good understanding of Ofwat's expectations and reporting requirements for the PR19 business plan data tables we reviewed.

At the end of our assurance exercise there were no material risks outstanding. Where we have identified risks we understand that teams will update final data tables and supporting commentary to address our feedback.

We have covered a subsection of the data tables and during our work we did observe some scope to improve your teams' understanding of the links between tables, and some areas where there is scope to more fully align your approach with Ofwat's expectations – though where this is the case we note you understand the rationale for your approach and are comfortable with the associated risks.

Yours sincerely

A handwritten signature in black ink, appearing to read 'A McGeoghan', with a long horizontal flourish extending to the right.

Andrew McGeoghan
Head of Economic Regulation

Appendix A. Scores for each PR19 component reviewed.

As we note in the letter above, our assurance approach focuses on the level of risk associated with the data/forecast. The result of our approach is a score of A, B, C or D for each PR19 table, line or group of lines. In assessing your data, we used a standard scoring framework to produce results that are comparable across the measures. Table A.1 below summarises this framework.

Table A.1 Summary of scoring framework for the data stage of our assurance approach

Score	Meaning
A	Low risk – no weaknesses in production of data/forecast
B	Low to medium risk - no material weaknesses in production of data/forecast
C	Medium to high risk - material weakness (or number of minor ones with material effect)
D	High risk – multiple material weaknesses or data missing/not provided

Table A.2 below sets out the results of our assessment for the PR19 business plan data tables, lines and groups of lines we reviewed. For completeness, table A.2 below includes the scores for the PR14 reconciliation tables we assured alongside your annual performance reporting (eg: App5, WS15, etc). As we note in the letter above, we provided you with feedback at the time of carrying out those audits and provided you with a separate assurance letter noting our scope and findings in July 2018.

Table A.2 Scores for the PR19 business plan data tables, lines and groups of lines we reviewed

Tables and line descriptions	Lines	Data score
App1 – Performance commitments (PCs) and outcome delivery incentives		
Sewer flooding – internal and external	23 and 24	B
Worst served customers	28	B
Responding to climate change	37	B
Asset Resilience	FT5, FT6 and FT7	A
App2 – Leakage additional information and old definition reporting		
Leakage and SELL	2-7, 30 -31	B
PCC	41	B

Tables and line descriptions	Lines	Data score
Supply Interruptions – PR14 measure	42	B
App5 – PR14 reconciliation ~ performance commitment		
PR14 performance commitments and ODI forecasts	All lines	B
App6 – PR14 reconciliation ~ sub-measures		
PR14 performance commitments and ODI forecasts	All lines	B
App27 – PR14 reconciliation ~ financial outcome delivery incentives summary		
PR14 performance commitments and ODI forecasts	1-33	B
App30 – Void properties		
Voids	1-2	B
App31 – Past performance		
Pollution	2-3, 7-8	B
WS1- Wholesale water operating and capital expenditure by business unit		
PR19 Opex blind year	1-4, 7-9	B
AMP 7 Capex forecasts – operating and capital expenditure by business unit	5,6,12-16	B
WS2 – Wholesale capital and operating enhancement expenditure by purpose		
AMP 7 Capex forecasts – operating and capital expenditure by business unit	All Lines	B
WS2a – Wholesale water cumulative capital enhancement expenditure by purpose		
AMP 7 Capex forecasts – operating and capital expenditure by business unit	All Lines	B

Tables and line descriptions	Lines	Data score
WS3 – Wholesale water properties and population		
Number of properties, population and meters	1-7, 11-17	A
Company area	18	B
WS4 – Wholesale water other (explanatory variables)		
Lead comm pipes replaced	1	A
WS5 – Other wholesale water expenditure		
PR19 Other wholesale water opex blind year	1-5, 7	B
WS8 – Third party costs by business unit for the wholesale water service		
Third party costs by business unit for the wholesale water service	1-14	B
WS12 – RCV allocation in the wholesale water service		
RCV Allocation in the wholesale water service	1-19	B
WS12a – Change in RCV allocation in the wholesale water service		
Change in allocation in the wholesale water service	1-15	B
WS13 – PR14 wholesale revenue forecast incentive mechanism for the water service		
WRFM feeder model	n/a- see detailed feedback	B
WS15 – PR14 Wholesale total expenditure outperformance sharing for the water service		
Totex reconciliation model	n/a- see detailed feedback	B
WS18 - Explaining the 2019 Final Determination for the water service		

Tables and line descriptions	Lines	Data score
Number of contacts about drinking water (taste, odour and discolouration)	2	B
WR1 – Wholesale water resources (explanatory variables)		
Water Resources Sources and Capacity	1-17	A
Total length of raw water abstraction and other mains	22	B
Average Pumping Head	23	B
WR2 – Wholesale water resources opex		
PR19 Water resources opex blind year	1-7, 9-12	B
WR6 – Water resources capacity forecasts		
Water Resources Sources and Capacity	All	A
WR7 – New water resources capacity – forecast cost of options beginning in 2020-2025		
Water Resources Sources and Capacity	All	A
WN1 – Wholesale network plus raw water transport and water treatment (explanatory variables)		
Average pumping head	3 and 40	B
Blind year and AMP 7 forecast	4-7	B
Water supplied by treatment type	9-23	A
WN2 - Wholesale water network plus water distribution (explanatory variables)		
Total length of potable mains, plus mains length by year bands	1	B
Length of mains relined and renewed	2-4	B

Tables and line descriptions	Lines	Data score
Proportion of DI by source	13-20	A
Water balance	12, 21-27	A
Total length of potable mains, plus mains length by year bands	31-41	B
Blind year and AMP 7 forecast (immediate feedback)	43-46	B
WWS1 – Wholesale wastewater operating and capital expenditure by business unit		
Wholesale wastewater operating and capital expenditure by business unit	1-11	B
WWS2 – Wholesale wastewater expenditure capital and operating expenditure by purpose		
AMP 7 Capex forecasts – operating and capital expenditure by business unit	All lines	B
WWS2a – Wholesale wastewater cumulative capital enhancement expenditure by purpose		
AMP7 Capex forecasts – operating and capital expenditure by purpose	All lines	B
WWS3 – Wholesale wastewater properties and population		
Voids	9	B
Volume of wastewater receiving treatment at STWs	13	B
WWS4 – Wholesale wastewater other (explanatory variables)		
Energy Consumption	1-4	B
Total sewerage catchment area	5	B
WWS5 – Other wholesale wastewater expenditure		
Other wholesale wastewater operating expenditure	1-8	B

Tables and line descriptions	Lines	Data score
WWS8– Third party costs by business unit for the wholesale wastewater service		
Third party costs by business unit for the wholesale wastewater service	1 & 5	B
WWS12 – RCV allocation in the wholesale wastewater service		
RCV allocation in the wholesale wastewater service	1-42	B ¹
WWS13 – PR14 wholesale revenue forecast incentive mechanism for the wastewater service		
WRFM feeder model	n/a- see detailed feedback	B
WWS15 – PR14 wholesale total expenditure outperformance sharing for the wastewater service		
Totex reconciliation model	n/a- see detailed feedback	B
WWS18 – Explaining the 2019 Final determination for the wastewater service		
Pollution	2-3, 7-8	B
WWN1 – Wholesale wastewater sewage treatment operating expenditure		
Wholesale wastewater sewage treatment operating expenditure	1-10	B
WWN3 – Wholesale wastewater network (explanatory variables)		
Wholesale wastewater network (explanatory variables)	1-2, 8-10	B
Number and capacity of pumping stations	3-4	B
Sewer blockages and collapses, rising mains bursts/collapses	5-7	B
Sewer age profile	11	A

¹ Score based on outstanding actions being completed

Tables and line descriptions	Lines	Data score
Volume of trade effluent	12	A
Volume of wastewater receiving treatment at STWs	13	B
WWN4 – Wholesale wastewater sewage treatment (potential explanatory variables)		
Wholesale wastewater sewage treatment (potential explanatory factors)	All lines	B
Bio 1 – Wholesale wastewater sludge (explanatory variables)		
Bioresources	1-19	B
Bio 2 – Wholesale wastewater sludge treatment process and disposal routes		
Bioresources	1-14	B
Bio 3 - Wholesale wastewater sludge opex		
Wholesale wastewater sludge opex	1-5,12-13	B
R1- Residential retail		
Retail tables	1-2, 4-23	B
R4 – Business retail ~ Welsh companies		
Retail tables	1-22, 27-35	B
R8 – Net retail margins		
Net retail margins	1-2	B
R9 – PR14 reconciliation of household retail revenue		
Household Revenue reconciliation	Sections A to G	B