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## Strategy & Regulation

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7 May 2015

Dear Sir or Madam,

### **Consultation on the PR14 reconciliation rulebook**

Thank you for the opportunity to respond to the consultation on Ofwat's draft PR14 reconciliation rulebook. We set out below a summary of our views. Detailed comments are provided in the Appendix.

The concept of a rulebook to provide clarity over the PR14 legacy adjustments is a big step forward from PR09, and is, therefore, to be welcomed. It should support the development of a regulatory framework that is transparent and stable.

#### *CIS RCV Adjustment*

The stability and transparency of the regulatory framework in an industry with long life assets and long-term financing is an essential component in keeping the cost of capital at appropriate levels, thereby minimising the financing cost borne by customers. This is an issue where the interests of customers and investors are firmly aligned. Indeed, we note that a top strategic priority set out in its forward programme is to retain investor confidence. Stability and transparency should therefore be a key consideration for Ofwat.

As Ofwat is aware, communications between companies and Ofwat regarding the CIS RCV adjustment has been extensive (far more so than alluded to in the consultation document). For completeness, we have included as Annex 1, a chronology of the communications with Ofwat on this subject. It can be seen from this that Ofwat actively considered the issue on a number of occasions, and on each occasion, reached the firm conclusion that its approach was correct. It is clear, therefore, that Ofwat's approach was deliberate.

Given the significant number of occasions when Ofwat explicitly affirmed its methodology, Thames Water (and, we assume, other companies), legitimately expected that this was the approach that Ofwat would use. It is particularly surprising, therefore, that Ofwat has considered the issue yet again, and in contrast to the previous occasions, and in contrast to expectations, has now decided that it "...could have taken a different approach to the treatment of *indexation...*",<sup>1</sup> and for this reason suggests an amendment to the PR14 methodology.

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<sup>1</sup> Consultation on the PR14 reconciliation rulebook, p3.

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Given the expectations that were created, we support the decision to continue to use the approach set out in IN12/08 (and affirmed on numerous occasions during AMP5) in the 2014 Final Determinations as to change would have had a materially detrimental effect on the stability of the regime. We note the measured consideration of this issue by the Ofwat Board<sup>2</sup> and agree with Ofwat's assessment that the decision to use the expected approach for PR14 was in the long-term interests of customers.

We appreciate that Ofwat now proposes that an adjustment would be applied at PR19. However, we do not think that the consultation document sets out a clear and compelling case that the proposed action is in customers' long-term interests. In particular:

- Given the expectations that were created, any change will have some adverse effect on the perceptions of the stability of the regime, with potential adverse consequences for the cost of capital, and therefore in the longer-term customer bills; and
- Ofwat's assessment is based on the proposed change in 2020 having no effect during AMP6. However, making such a material change and as a one-off midnight adjustment would, of necessity, have a material impact on key financial ratios that are used by ratings agencies to assess companies' credit risk. As a consequence, companies would need to take decisive action, during AMP6 ahead of the proposed midnight adjustment, to mitigate this impact (such as withholding dividends from shareholders) with the potential to make the outcome of PR14 look very different from that which companies and shareholders believed they were accepting. The proposal for a midnight adjustment would not, therefore, be prospective and would have a retrospective impact on the AMP6 business plans.

Given these considerations, our view is that the decision to make the adjustment is more finely balanced than as set out in the consultation. Ofwat has not provided a clear and compelling case that the proposed action is in customers' long-term interests. It would only take a 0.14 percent increase in the cost of capital for the costs to consumers to outweigh the benefits.<sup>3</sup> Ofwat does not appear to have made estimates of the potential customer cost, and so we would encourage Ofwat to consider the issues carefully and to undertake a more comprehensive analysis, including a full impact assessment, before finalising the rulebook.

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<sup>2</sup> As set out in the November 2014 Ofwat Board meeting minutes.

<sup>3</sup> See appendix for calculation.

If Ofwat considers, on balance, that the adjustment is in customers' interests, our view is that the adjustment should not be retrospective in any way. In such circumstances we would support Ofwat's proposal not to clawback revenue from AMP6 as to do so would amount to retrospective regulation, and would have an adverse impact on the perception of the stability and predictability of the regulatory framework, which would not be in the long-term interests of customers. In addition, any adjustment should be spread over AMP7 (e.g. 20 percent of the adjustment made in each year of the AMP), rather than being made as a midnight adjustment. This is a direct corollary of the reasoning set out in the Ofwat Board minutes, would mitigate much of the retrospective impact on AMP6 business plans and would be less damaging to companies financing arrangements (and therefore easier for companies to manage).

Finally, we note that if Ofwat adopts its preferred approach, the calculation for Thames Water set out in the consultation is incorrect. Specifically, the calculation for Thames Water should use the RCV run-off rate for Wholesale Wastewater excluding the Thames Tideway Tunnel ("TTT") as the CIS does not apply to expenditure on the TTT. The calculation set out has erroneously used the rate including the TTT.

#### *Other Issues*

As we have stated above, the transparency and stability of the regulatory framework is a fundamental principle of good regulation, on which customers' and investors' interests are aligned. To minimise the risk of misunderstandings during PR19, we have made a number of detailed comments and suggested areas where further clarity would be helpful. These are also set out in the Appendix.

We disagree with some of the options proposed by Ofwat and, in particular, note that:

- We do not agree with the proposal to adjust the ODI reward and penalties for tax. In general, the ODI incentive rates have been based on customer willingness to pay which must implicitly include the tax impact on revenues. We do not believe that it is in our customers' interests to increase the impact on revenues above our customers' willingness to pay level by the addition of the further tax impact.
- We do not agree with the calculation of the notional allowed revenue in the Wholesale Revenue Forecasting Incentive Mechanism (WRFIM) model. As companies' licences restrict the recovery of revenues during AMP6 to allowed revenue in the PR14 Final Determinations, then a small under-recovery of revenue can result in penalties in future years under WRFIM. This provides companies with an incentive slightly to over-recover against allowed revenues during AMP6, which is an unintended consequence that would not be in the interest of customers.

- We disagree with the suggestion that blind year adjustments should be subject to a materiality threshold – it seems to us that if there is an adjustment to be made that would have been made if the 2014-15 actual performance had been known at the time of the Final Determination, then it should be made without consideration of materiality. This would have the advantage that it reduces the administrative burden that any such materiality test would impose.

I hope these comments are helpful. If you would like to discuss them further, please do not hesitate to get in touch.

Yours faithfully,

A handwritten signature in black ink, appearing to read "Nick Fincham". The signature is written in a cursive, slightly slanted style.

**Nick Fincham**  
**Director of Strategy & Regulation**



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# Technical Appendix

Section 1

## Introduction

- 1.1 We welcome the publication of the draft rulebook for consultation. This will provide clarity around how these mechanisms will work during AMP6, leading to more transparent and effective incentives.
- 1.2 We have reviewed the draft rulebook and considered carefully whether the incentives will be effective and efficient in aligning the interests of customers and companies. Where we think parts of the mechanisms can be improved, we provide details of our proposed alternative approach and explain why it is more in customers' interests, and/or better aligned with Ofwat's statutory duties and final determination.
- 1.3 This technical appendix is structured as follows:
  - Section 2 provides further details on our response to the RCV adjustment for indexation within the PR09 CIS mechanism.
  - Section 3 provides our response on outcome delivery incentives ("ODIs").
  - Section 4 provides suggestions on the service incentive mechanism ("SIM").
  - Section 5 provides our response on the wholesale totex cost performance mechanism.
  - Section 6 provides our response on the wholesale revenue forecasting incentive mechanism ("WRFIM").
  - Section 7 provides our response on the PR09 reconciliation for the blind year and COPI.
  - Section 8 provides our response on the Retail household revenue mechanism.
  - Section 9 provides our response on the Thames Tideway Tunnel uncertainty mechanism.
  - Section 10 provides our response on water trading incentives.
  - Section 11 sets out other observations on the draft rulebook.
- 1.4 We have not made any specific comments on the wholesale water business rates uncertainty mechanism, which is defined in the PR14 Final Determination, or gain sharing mechanisms, which are not applicable for Thames Water.

Section 2

## Indexation of the CIS RCV adjustment

2.1 In this section we consider Ofwat's proposal to amend the indexation assumption used in its calculation of the CIS RCV adjustment at PR14 by making an amendment to the RCV at PR19. We:

- explain why regulatory stability is an important feature of the regulatory framework for both investors and customers;
- highlight the legitimate expectations that were created through the extensive communications from Ofwat on this subject;
- agree with Ofwat that the decision to use the IN12/08 methodology in the Final Determination and the proposal not to clawback of revenue from AMP6 are both in customers' long-term interests;
- question whether Ofwat's assessment of options in the consultation is complete and suggest that a full impact assessment should be made to ensure decisions are taken in the long-term interests of customers;
- suggest that following the full assessment, if any adjustment to RCV is required, any change should be phased smoothly over AMP7 to be consistent with the Final Determination and mitigate the potential adverse consequences of a midnight adjustment;
- highlight an error in the calculation for Thames Water set out in the consultation; and
- raise issues with the CIS financing adjustment that should also be considered.

### ***Regulatory stability and certainty***

2.2 The stability and transparency of the regulatory framework in an industry with long life assets and long-term financing is an essential component in keeping the cost of capital at appropriate levels, thereby minimising the financing cost borne by customers. This is an issue where the interests of customers and investors are firmly aligned, and is consistent with Ofwat's strategic priority of maintaining investor confidence in the sector.

2.3 A report undertaken by Frontier Economics for Thames Water in August 2013<sup>1</sup> found that there are two main routes through which regulation affects the cost of finance (and hence customer bills):

- the system of regulation will affect the risk profile of companies; and

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<sup>1</sup> Frontier Economics, "Regulatory uncertainty and the cost of financing, a report for Thames Water", August 2013, submitted to Ofwat on 23 October 2013 as exhibit 146 as part of the IDoK process.

- regulatory actions, that either increase or lower uncertainty about how the system of regulation will work in future, can alter the risks faced by companies.
- 2.4 Frontier Economics reviewed the literature of empirical and event studies relating to regulatory risk. These studies show that the impact on the cost of financing from regulatory actions can be significant and that regulatory uncertainty is associated with an increase in the cost of finance (and hence customer bills).
- 2.5 As part of their work, Frontier developed a model that estimates the impact of increased regulatory discretion on the cost of finance. This is based on the published methodologies from rating agencies used to determine the credit rating (and hence cost of debt) of utilities.
- 2.6 Frontier found that whilst the evidence pointed to a wide range in terms of the potential impact, the impact on the cost of debt could be up to 0.5% while the impact on the cost of equity could be as much as 1%. Overall the impact on the cost of capital could lie between 0.5% and 1.0% which represents a significant increase in the cost of financing utility infrastructure projects.

***Extensive consultation and discussion on the CIS mechanism created legitimate expectations***

- 2.7 The communications between Ofwat and companies regarding the CIS RCV adjustment were considerably more extensive than suggested in the consultation document. For completeness, we have included (as Annex 1) the chronology of the communications with Ofwat on this subject. It can be seen from the chronology that Ofwat actively considered this issue on a number of occasions, and on each occasion, reached the firm conclusion that its approach was correct. It is clear, therefore, that Ofwat's approach was deliberate.
- 2.8 Given the significant number of occasions when Ofwat explicitly affirmed its methodology, Thames Water (and, we assume, other companies), legitimately expected that this was the approach that Ofwat would use. It is particularly surprising, therefore, that Ofwat has considered the issue yet again, and in contrast to the previous occasions, and in contrast to expectations, has now decided that it *"...could have taken a different approach to the treatment of indexation..."*,<sup>2</sup> and for this reason suggests an amendment to the PR14 methodology.
- 2.9 As part of this process, companies challenged Ofwat's approach, pointing out a number of potential weaknesses and/or inconsistencies in its detailed mechanism. Ofwat considered these representations and concluded each time that its approach was correct, and made this clear to companies. Companies have placed reliance on Ofwat's statements (and on the PR14 methodology document itself) in making decisions about AMP5 delivery, AMP6 Business Plans and in their assessment of the Final Determination.
- 2.10 The evidence provided by the extensive series of Ofwat publications, information notices, formal and informal discussions with the industry and individual companies demonstrates that Ofwat's PR14 approach to the CIS RCV adjustment was a deliberate, conscious approach (revisited on a number of occasions, and confirmed on each occasion).

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<sup>2</sup> Ofwat, "Consultation on the PR14 reconciliation rulebook", March 2015, page 3.

- 2.11 Any change in approach after such an extensive period of consultation will naturally create a degree of regulatory uncertainty

### **2014 Final Determination**

- 2.12 Ofwat was clearly aware of the potential impact on regulatory stability when it decided against making an adjustment in the 2014 Final Determination, as can be seen from the following extracts from the minutes of the November 2014 Ofwat Board meeting:

- *“To change to the established methodology for the CIS would be inconsistent with the position adopted since 2012”.*
- *“A clear expectation has been set in recent years about how the CIS would operate”.*
- *“A change would be perceived as a retrospective adjustment”.*
- *“If we were to make changes at this point to AMP6 mechanisms, companies have time to adapt their behaviours. This is not the case for AMP5 reconciliation”.*

- 2.13 We fully support Ofwat’s decision not to make a late change to the mechanism as part of the 2014 Final Determination as to do so:

- would have created regulatory uncertainty, which would have had a substantial adverse impact on trust and confidence with companies and investors given the extent of Ofwat confirmation of methodology during AMP5;
- would have adversely affected the assessment of the stability and transparency of regulatory framework; and
- would have consequently resulted in an increase in the cost of capital which is not in the long-term interest of customers.

### **Ofwat’s proposal**

- 2.14 The reasons Ofwat cites for not making the adjustment as part of the 2014 Final Determination itself are to a large extent equally applicable in considering whether and how to make an adjustment to the RCV at PR19. It is important, therefore, that Ofwat makes a clear assessment of the potential impact of the various options on the cost of capital so that a decision can be taken that is in the best long-term interests of customers.

- 2.15 We note that the CC in its review of Phoenix Natural Gas (“PNG”) highlighted the potential impact, on the cost of capital, arising from perceptions of regulatory instability, was not so small that it could be ignored.

- 2.16 We estimate that the equivalent WACC adjustment from AMP6 to effect a reduction to sector revenues equivalent to an RCV reduction of £1.159bn<sup>3</sup> would be around 0.14%,<sup>4</sup> i.e.

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<sup>3</sup> As stated in Ofwat’s CIS RCV adjustment spreadsheet entitled “pap\_tec201503pr14cisrec.xlsx” (Ofwat website).

<sup>4</sup> Calculation to derive what WACC % applied to closing AMP6 industry RCV (of £63.64bn, post-adjustment) would equate to the RCV run-off rate (£46m) plus return on capital (£42m) associated with Ofwat’s preferred RCV reduction of £1.15bn. The revenues arising per annum of £88m would equate to

it would not require a significant increase in the cost of capital for the costs to outweigh the benefits for customers.

- 2.17 In our view, Ofwat's assessment has taken insufficient account of the extensive consultation and discussion held by Ofwat with the industry and individual companies during AMP5, which confirmed the approach Ofwat intended to take and the potential impact on the cost of capital of a retrospective change of approach, notwithstanding the consultative approach being undertaken.
- 2.18 Whilst the RCV adjustment is positioned by Ofwat as being "prospective", we do not share this view – the RCV is a fundamental element of the price control, any subsequent adjustment, which reduces RCV previously allowed as part of a final determination must by definition be retrospective, since it will require companies to change their financing position in anticipation of it.
- 2.19 Ofwat's assessment is based on the proposed change in 2020 having no effect during AMP6. However, making such a material change with a "Big bang" midnight adjustment would, of necessity, have a material impact on key financial ratios that are used by ratings agencies to assess companies' credit risk. As a consequence, companies would need to take decisive action, during AMP6 ahead of the proposed midnight adjustment, to mitigate this impact (such as withholding dividends from shareholders). This has the potential to make the outcome of PR14 materially different to that which companies and shareholders believed they were accepting. The proposal for a midnight adjustment is not, therefore, prospective and will have a retrospective impact on the AMP6 business plans.
- 2.20 We believe that Ofwat's assessment of its proposal does not take sufficient account of the following:
- A Final Determination should be final – any adjustment is likely to be perceived as retrospective regulation and contrary to the principles of good regulation.
  - Retrospective actions create regulatory uncertainty and instability, particularly with respect to the RCV which is critical to investor perceptions of the sector.
  - The extensive consultation and discussion held by Ofwat with the industry and individual companies during AMP5 which confirmed the approach Ofwat intended to take and which created a degree of legitimate expectations.
  - The retrospective impact that a "big bang" adjustment will have on AMP6 business plans and company financing.

### ***Other factors relevant to the overall assessment***

- 2.21 There are four further issues that we consider that Ofwat should take into account in its overall assessment of the costs and benefits of each option before reaching a conclusion:
- Ofwat states that there are a number of approaches to indexation that "*could potentially be consistent with the original policy intent set out in the PR09 documentation*" and that the approach Ofwat did adopt within the FD is listed as one of those "*potentially*

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a ~0.14% return on the £63.64bn RCV – and would apply over the long term to the end of the RCV run-off period.

*consistent*<sup>5</sup> approaches. This should be recognised when identifying and assessing options within the overall assessment of costs and benefits.

- The Ofwat November Board minutes include a comment that the “*effectiveness of the incentives we have introduced for PR14 depend on companies and other stakeholders having confidence in how they will operate*”.<sup>6</sup> The overall assessment should, therefore, consider the impact of Ofwat’s proposed change in approach on confidence in and effectiveness of the incentives.
- The commitment given by Ofwat to the RCV as part of the agreement with companies to enable the s13 licence modifications to be made should be a factor which Ofwat also takes into account when considering whether to adjust the RCV for its alternative interpretation of the PR09 CIS mechanism. The timeline shows that Ofwat made its approach to the RCV under CIS very clear ahead of the s13 agreement (publishing IN12/08 in July 2012 which set out the detail of how the CIS RCV adjustment would be made, supported by a detailed spreadsheet on 6 November 2012 containing the calculations as used at the 2014 Final Determination). Companies placed reliance on Ofwat’s RCV commitment as part of the s13 process, a fundamental element of which being having clarity on how AMP5 performance would feed into the closing 2015 RCV (as part of the midnight adjustment at PR14). Any action to unwind part of that commitment could have a significant adverse effect on the credibility of senior Ofwat individuals who made that commitment and perception of risk within the sector.
- Ofwat was aware of the issue in making its PR14 Final Determinations and can be expected to have taken account of this when making these decisions “*in the round*”.<sup>7</sup> Companies, on the other hand, were only made aware that the issue may result in a “*slightly different 2015 opening RCV*”<sup>8</sup> (our emphasis) and were therefore unable to fully take account of the subsequent proposed adjustment when deciding whether to accept or reject the overall Final Determination, a decision also made “*in the round*”.

2.22 Given these considerations, our view is that the decision to make the adjustment is more finely balanced than as set out in the consultation. Ofwat has not provided a clear and compelling case that the proposed action is in customers’ long-term interests. Ofwat’s assessment has made no estimate of the potential customer cost and does not give sufficient consideration to issues set out above. Ofwat should consider the issues carefully and undertake a more comprehensive analysis, including a full impact assessment, before finalising the rulebook.

### **Method for making any adjustments**

2.23 After having taken due account of all the relevant factors including those listed above, if Ofwat were to conclude that it is appropriate to adjust the RCV, we would support Ofwat’s view that no adjustment should be made to correct for the AMP6 revenue allowance (being

<sup>5</sup> Ofwat, “Consultation on the PR14 reconciliation rulebook”, March 2015, page 52.

<sup>6</sup> Ofwat, “Ofwat Board meeting held on Thursday 20 November 2014”, November 2014, page 6.

<sup>7</sup> Ofwat, “Final price control determination notice: policy chapter A4 – reconciling 2010-15 performance”, December 2014, page 43.

<sup>8</sup> Ofwat, “Final price control determination notice: policy chapter A4 – reconciling 2010-15 performance”, December 2014, page 43.

the cost of capital and run-off rate) associated with the higher RCV arising under Ofwat's PR14 approach compared to its alternative view. Making such an adjustment would clearly be retrospective and would only serve to undermine both the credibility and stability of the regulatory regime and impact on the cost of capital for the industry.

2.24 Ofwat will need to select the most appropriate method for adjusting the RCV. Such an approach should:

- minimise the retrospective impact of the change;
- recognise the impact on companies long term financing within an industry with long-life assets; and
- as far as reasonably practicable, remain consistent with the legitimate expectations of companies.

2.25 In our view, the only approach consistent with these principles would be to adopt a glide path approach to RCV correction in AMP7, such as making the change in five equal steps during AMP7 (i.e. applying 20% of the RCV reduction in each year of AMP7).

***Error in Ofwat's RCV adjustment calculation relating to Thames Water***

2.26 Finally, we note that even if Ofwat adopts the approach as set out in the consultation that the calculation for Thames Water<sup>9</sup> is incorrect. Specifically, it should use the RCV run-off rate for Wholesale Wastewater excluding the Thames Tideway Tunnel ("TTT") on the grounds that CIS does not apply to expenditure on the TTT.<sup>10</sup> This means that the run-off rate assumption used in the calculation should be taken from the Ofwat FD model for wholesale excluding the TTT (rather than, as in the consultation document, from the Wholesale including TWUL-delivered TTT which is the current source).

- The following RCV run-off rates for Wholesale Wastewater should be used in the calculation

2015-16	2016-17	2017-18	2018-19	2019-20
5.29%	5.05%	4.86%	4.93%	5.35%

- The impact of using these Wholesale Wastewater only percentages, excluding the TTT, would be to reduce the projected RCV adjustment for Thames Water by £6.36m from £249.12m to £242.76m (in 2012/13 prices).

2.27 We would be happy to engage with Ofwat to explore alternative approaches further should it decide to proceed with making an adjustment.

<sup>9</sup> Ofwat, pap\_tec201503pr14cisrec.xlsx, March 2015.

<sup>10</sup> Ofwat, "Final determination. Setting price limits for 2010-15: Supplementary report for Thames Water Utilities Limited", November 2009, page 61.

### ***CIS financing cost adjustments***

2.28 In determining an appropriate adjustment it is important to consider all aspects of the CIS mechanism, ensuring that its overall operation is consistent with the updated approach set out by Ofwat and with the original aims and principles of the incentive.

2.29 Our understanding of the principles of CIS is that companies should not bear financing risk for movements in relative price effects (“RPE”)<sup>11</sup>. However, the calculation of the true-up for financing costs as calculated in the CIS model is not in line with the expectations, based on Ofwat’s published information when the PR09 FD was accepted.

2.30 The CIS model as used at PR14 calculated the true-up for financing costs by considering the difference between the actual capex (using actual RPE) and PR09 FD capex (using the PR09 FD forecast RPE). The financing cost adjustment therefore reflects both the difference in capex, and the difference in RPE (where RPE equals COPI / RPI). We do not think this latter element is right and has also not been the practice of price controls prior to PR09.

2.31 The current financing cost calculation in the PR14 FD CIS spreadsheet, reflecting revenue true-up for financing costs due to capex over/underspend and changes in RPE is as follows:

$$\left\{ \text{Actual Capex (outturn)} * \left( \frac{1}{\text{RPI}} \right) - \text{Funded Capex} * \left( \frac{\text{COPI(FD)}}{\text{RPI(FD)}} \right) \right\} * \text{WACC}$$

2.32 The published information regarding CIS operation, as available at the PR09 FD, did not change this historic approach, so there should not be any financing cost true-up to reflect the difference between the PR09 FD forecast of inflation indices and actual inflation indices.

2.33 Therefore, in accepting the PR09 FD, the legitimate expectation of how CIS would operate would be that the financing cost adjustment would reflect only the difference in capex, and not the difference in RPE.

2.34 We have set out below what we believe to be the correct formula to apply the true-up for financing costs correctly, reflecting differences solely due to capex over/underspend only and not as a result of differences between actual RPI and that assumed by Ofwat in the FD.

$$\left\{ \text{Actual Capex (outturn)} * \left( \frac{1}{\text{RPI}} \right) - \text{Funded Capex} * \left( \frac{\text{COPI(Actual)}}{\text{RPI(Actual)}} \right) \right\} * \text{WACC}$$

2.35 Contrary to Ofwat’s assertion in the consultation,<sup>12</sup> we do not believe that there is a requirement for the calculation of the RCV true-up to follow the same approach as the financing cost. The RCV true-up calculation and the financing cost calculation should each be consistent with the available published information regarding CIS at the time the PR09 FD was accepted.

2.36 To further illustrate this point we set out (in Annex 2) a worked example demonstrating the problems with Ofwat’s approach to financing costs in the PR14 CIS model. If making an adjustment to correct for perceived weaknesses in its RCV true-up calculation, Ofwat should

<sup>11</sup> Whilst this principle is not spelt out in the CIS documents, it is consistent with all versions of the CIS model issued by Ofwat and with practice adopted in how price controls were set for prior periods. It is also consistent with the underlying principles of the RPI-K regime and use of a separate notified index for Capex (i.e. COPI). Certainly there is nothing in the CIS documents which state or imply that RPE risk passes from customers to companies following introduction of CIS.

<sup>12</sup> Ofwat, “Consultation on the PR14 reconciliation rulebook”, March 2015, page 52.



also correct for similar weaknesses in its financing cost true-up calculation within the same PR14 CIS legacy model.

- 2.37 For Thames Water we calculate that the effect of adjusting the calculation in the way we suggest would reduce the downward financing cost adjustment within Ofwat's PR14 CIS model by circa £75m, offsetting 30% of the impact of Ofwat's preferred RCV adjustment. An adjustment of a similar scale can be expected for the calculations across the rest of the industry. When making this correction, one option would be to apply it to the RCV rather than making an adjustment to revenues in AMP7, for consistency with the RCV adjustment.

Section 3

## Outcome delivery incentives

- 3.1 Our response below is split into each of the issues raised in the consultation, i.e. inflation, time value of money, taxation, the aggregate cap and collar, major scheme ODIs and asset health ODIs. We also provide comments on the spreadsheet model.

### ***Inflation***

- 3.2 When submitting our business plan and interpreting the PR14 Final Determination (FD), we understood the ODI impacts to be in 2012-13 prices. We therefore support Ofwat's approach to indexing end-of-AMP ODIs from 2012-13 prices using year-average RPI, as this is consistent with the FD and companies' business plans.
- 3.3 We consider that in-period ODIs should have the same treatment as the end-of-AMP ODIs to maintain consistency with the FD and avoid any perverse incentives. Therefore, while we agree with Ofwat that option 1 (using lagged Nov-Nov RPI) is appropriate, as it relies on actuals rather than forecasts, Ofwat should consider trueing up at PR19 for differences between Nov-Nov and year average RPI to maintain consistency with the FD and the end-of-AMP ODIs. We would expect this to be straight-forward to implement.

### ***Time value of money***

- 3.4 As Ofwat states in the consultation, it has always been expected (from the PR14 methodology onwards) that changes in revenues would take place at the next price review, unless companies proposed in-period ODIs. The timing of these rewards and penalties was therefore built into customer research on ODIs, engagement with Customer Challenge Groups ("CCGs") and development of business plans, providing an opportunity to propose value of time adjustments where appropriate. We are therefore concerned that additional time value of money adjustments would lead to greater rewards and penalties than has been presented to customers, the CCGs and other stakeholders, and that these have not been demonstrated to be in customers' interests in company business plans and the FD.
- 3.5 We note that Ofwat expressed a concern<sup>13</sup> that its preferred option to not make a time value of money adjustment could provide a risk of perverse incentives (denoted by its "amber" rating). However, we consider that this risk should be very low, given that the time value of money adjustments would be a relatively small share of the total reward and penalty, and would in any case be effectively mitigated through engagement with the Customer Challenge Group and the reputational effects of reporting on annual performance.

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<sup>13</sup> Ofwat, "Consultation on the PR14 reconciliation rulebook", March 2015, page 17.

- 3.6 Given the points above and those raised by Ofwat, we therefore support Ofwat's preferred approach not to make a time value of money adjustment.

### **Taxation**

- 3.7 Ofwat has assessed four different options for the treatment of taxation:
1. Tax allowance (except in-period ODIs);
  2. Tax allowance for all ODIs;
  3. No tax allowance (except RCV adjustments).; and
  4. No tax allowance (recalibration to offset RCV adjustments).
- 3.8 Companies' ODIs are in generally based on customer benefits information, either directly using customer willingness to pay ("WTP") information or indirectly by using costs plus a premium as a proxy for WTP to ensure customers are compensated for an estimate of the benefits foregone.<sup>14</sup> In stated preference surveys, WTP will include the impacts of tax, as customers are being asked to estimate their WTP in terms of increased or reduced bills for different levels of service. Making an additional adjustment for tax, therefore, will in most cases double-count the impact of tax.<sup>15</sup> This is not in the interest of customers as the ODIs would be disproportionate (i.e. the rewards and penalties, and therefore bill impacts, would go beyond customers' WTP, research and CCG consultations), inconsistent with the PR14 methodology and FD (as additional tax adjustments had not previously been mentioned for ODIs) and skewed to create perverse incentives (in terms of companies' decisions on trade-offs between performance and costs during AMP6).
- 3.9 Based the points above, we consider that the preferred option should not make additional tax allowances, as this would protect customers, would be consistent with the FD and ODI methodology and would reduce the risk of perverse incentives that are not in the interest of customers. Options 1 and 2 do not meet this criterion.
- 3.10 Option 4 meets the above criterion and provides consistency between incentive payments made through revenue and the RCV, so should be the preferred option. However, option 3 would also be reasonable as the large majority of financial ODIs across all companies are revenue adjustments,<sup>16</sup> meaning that the differential tax treatment for RCV adjustments should only affect a small proportion of overall rewards and penalties.
- 3.11 However, if Ofwat decides to stay with option 2, then we would recommend providing clarity that these adjustments are based on the actual marginal tax rates faced by companies at

<sup>14</sup> For example, the incentive rates are based on a cost plus a premium/annualised benefits for asset health measures (e.g. Thames Water) and ODIs for major schemes (as set out in Ofwat's FD policy chapter A2 – outcomes).

<sup>15</sup> For example, if a customer has willingness to pay of £100 for a service improvement and the calibrated ODI reward is £50 (equal to the WTP \* 50% totex sharing rate), then the customer has indicated that the reward should be no more than £50, e.g. £41.7 reward plus £8.3 tax adjustment, assuming a marginal tax rate of 20%. With a tax adjustment, the net revenue increase would be £60, i.e. customers would be overpaying their calibrated WTP by 20%. For penalties, companies would be overpaying customer WTP by 20%.

<sup>16</sup> Across the industry, we have found that for 295 financial incentives (where we could identify the type of adjustment): 210 (71%) are revenue adjustments, 67 (23%) are RCV adjustments and 18 (6%) are a mixture of revenue and RCV adjustments.

PR19, rather than notional rates, for consistency with determining tax allowances. This is mentioned in the consultation,<sup>17</sup> but is not made clear in the draft rulebook.

### **Aggregate cap and collar**

- 3.12 We showed in our response to Ofwat's draft determination<sup>18</sup> that applying notional tax to ODI rewards and penalties understates the size of the impact, meaning the stated return on regulatory equity (RORE) range is +/-2.0%, but the 20% tax adjustment increases the exposure to a range of +/-2.5%. For consistency with the FD, which has an aggregate cap/collar of +/-2.0% RORE, we therefore support Ofwat's preferred option 1 where there would be no separate tax adjustment.
- 3.13 If Ofwat does change its preferred approach to include a tax adjustment, to align with the tax allowance in the FD and tax adjustments for other mechanisms, this should be based on actual tax rates, not notional tax rates.
- 3.14 For Thames Water, three options are presented for the aggregate cap/collar: including TTT and IP; including TTT but excluding IP; and excluding both TTT and IP. Consistent with other companies, we consider that the aggregate caps/collars for both Wholesale Water and Wholesale Wastewater should exclude TTT and IP, as these are separate price controls. We would welcome this being clarified in the rulebook and spreadsheet.

### **Spreadsheet model**

- 3.15 We have the following comments from our review of the spreadsheet model:
- The model currently assumes that the PCs, deadbands, and caps/collars should be entered to two decimal places (e.g. 'Inputs - ODI 1' tab). This will not always be consistent with the FD, which sets PCs, etc to different numbers of decimal places. We recommend, therefore, that the number of decimal places be a user input, to ensure consistency with the FD.
  - The RPI which deflates the nominal regulatory equity on the 'General inputs' tab is not fixed to be the FD RPI, but rather is overwritten by actual RPI if input into the relevant sheet. This is inconsistent with the draft rulebook (p.12), where the description states that it should use the "forecast RPI series in the financial model".
  - The draft rulebook (p.11) states that year average RCV is in 2012-13 prices, but the model input is nominal prices.
  - For the numeric ODI option, we recommend this is made more flexible to give the user the ability (if necessary) to overwrite calculated rewards and penalties before comparison with aggregate cap/collar. For example, in our FD we will not earn calculated rewards for pollution incidents in any year where we incur any category 1 or 2 incidents, but the model is not able to represent this without allowing a user override.

<sup>17</sup> "The PR19 tax adjustments will be based on the taxation position of the companies at the time." Ofwat, "Consultation on the PR14 reconciliation rulebook", March 2015, page 19.

<sup>18</sup> Thames Water, "Draft Price Control Determination – Thames Water response", October 2014, pages 110-111.



- The inputs for the bespoke ODI option should also be made more flexible, to allow the user to input performance, the associated reward/penalty and show the underlying calculation. The model currently only allows a “pass”/“fail” option for performance, which does not cover sufficient number of possibilities.
- The input incentive rates will not match the incentive rates in the FD (e.g. need to enter £3.125m/0.01 hour supply interruptions from FD as £312.5m per hour in the model). Therefore, we suggest adding space in the model for the user to input the incentive rate from the FD and show the conversion to the model input incentive rate.
- The model does not currently allow the user to input the tax position at PR19. This will be required for the tax calculation, and will not necessarily equal the 20% marginal tax rate currently hard-coded into the model.

### ***Scheme and asset health ODIs***

- 3.16 We support Ofwat's approach on the asset health and major scheme ODIs. We published our Outcomes Reporting Policy in March 2015,<sup>19</sup> in line with the requirement in Ofwat's FD, which provides further details on how we will monitor and assure performance against the major scheme and asset health ODIs.

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<sup>19</sup> Thames Water, <http://www.thameswater.co.uk/about-us/18579.htm>.

Section 4

## Service Incentive Mechanism

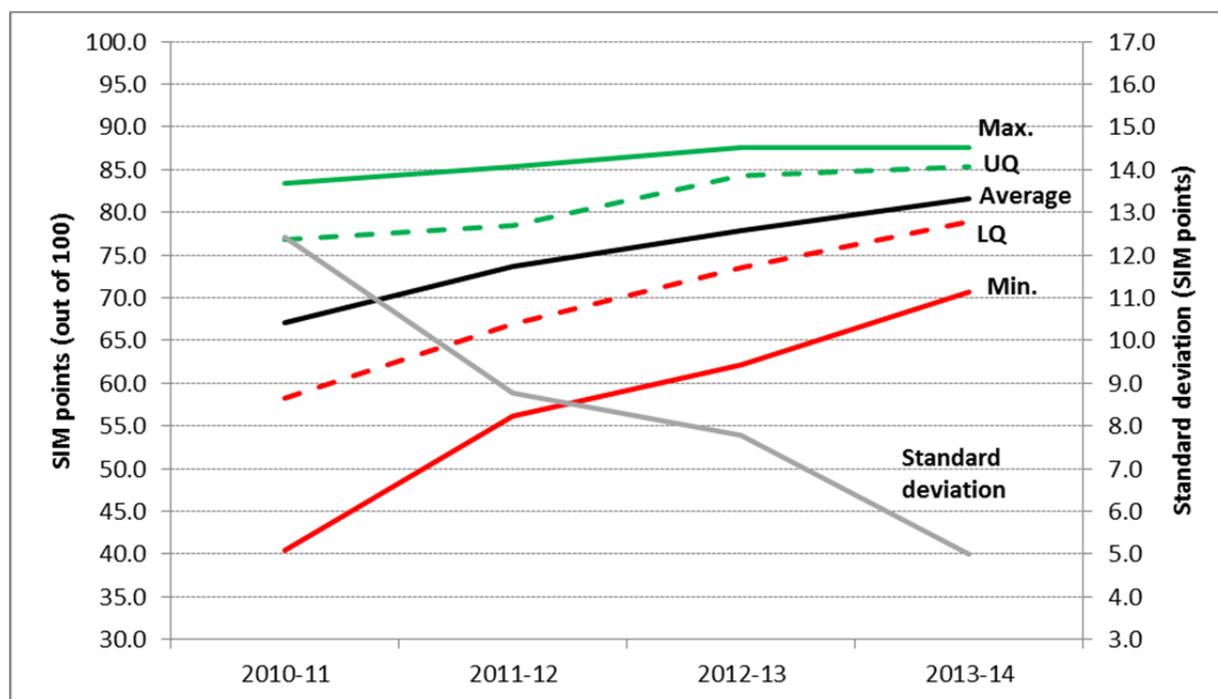
### ***Mapping company performance to SIM rewards and penalties***

- 4.1 For SIM in AMP6, we note that the methodology for mapping company performance to SIM rewards and penalties has not been specified in the draft rulebook or information notes. We propose an approach below.
- 4.2 In AMP5, SIM rewards and penalties were set based on a trend from a maximum reward of 0.5% appointee revenue for performance one standard deviation above the industry average SIM score, to a maximum penalty of 1.0% appointee revenue for performance two standard deviations below the industry average SIM score. For Thames Water, this led to an implied value per SIM point of c.£7m (2012-13 prices).<sup>20</sup>
- 4.3 The improvements in industry performance during AMP5 demonstrate that SIM has been operating reasonably effectively, leading to material rewards and penalties across the sector.
- 4.4 One of the striking trends in SIM scores is a convergence in company performance. We show this below in Figure 1. This is expected to continue even with the impact of the methodology change for CSAT and the unwanted contact score.

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<sup>20</sup> Calculated based on the total SIM value of 1.5% of appointee revenue of £1,871m in 2014-15 (2012-13 prices), divided by the total range of SIM points from 84 points (three-year industry average SIM score of 78 plus standard deviation of 7 SIM points) to 64 points (78 average less two time the 7 point standard deviation).

Figure 1 – Industry SIM scores during AMP5



Source: Thames Water calculations based on industry SIM data

- 4.5 For SIM in AMP6, Ofwat has stated its preference to “broadly maintain the current magnitude of financial exposure under the SIM for 2015-20 as this will continue to drive improvements in service delivery” and that “most respondents favoured retaining the current level of incentive as this has proven to be effective in improving the level of customer service across the sector”.<sup>21</sup>
- 4.6 Maintaining the current (i.e. AMP5) magnitude of the incentive refers to both how the incentive range is set – which Ofwat set out in its April 2014 conclusions on SIM – and how rewards and penalties are distributed within that range – which Ofwat has not yet confirmed. We consider that both of these aspects should be set out up front to ensure the incentive is transparent and effective in driving company decisions around trade-offs between benefits and costs for customers.
- 4.7 The convergence in SIM scores has reduced the standard deviation. Assuming that standard deviation will continue to be used to distribute rewards and penalties for relative performance, this means that the number of standard deviations associated with the maximum reward / penalty will need to be increased to continue to broadly maintain the magnitude of financial exposure from AMP5. We consider this to be in the interest of customers, as rewards and penalties could otherwise be as sensitive to sampling effects as to performance, meaning that companies are less inclined to improve performance when the SIM benefits could be more than offset by sampling uncertainty.

<sup>21</sup> Ofwat, “Service incentive mechanism (SIM) for 2015 onwards – conclusions”, April 2014, page 4.

- 4.8 To illustrate this, we have estimated that, under a central scenario, the standard deviation for SIM scores in AMP6 will be c.3.5 SIM points,<sup>22</sup> compared to 7 SIM points in AMP5. For Thames Water, this would produce a value per SIM point of c.£15m (outturn prices) in AMP6, compared to £7m (2012-13 prices) in AMP5, if calculated based on a maximum reward of industry average plus one standard deviation to a maximum penalty of industry average less two standard deviations.
- 4.9 To maintain an incentive on a similar scale to AMP5, the difference in standard deviations above therefore indicates that the maximum penalty and reward should be earned at twice the distance (i.e. two standard deviations above and four standard deviations below) from the industry average.
- 4.10 We would welcome clarity from Ofwat on how it plans to map SIM performance to rewards and penalties. We consider that publishing the methodology up-front will lead to more effective incentives, as it allows companies to more readily trade-off service improvements with the additional costs to customers, and therefore make efficient decisions in assessing which improvements will be cost-beneficial for customers.

### **Calculation of SIM**

- 4.11 We note that SIM scores, and the resulting rewards and penalties, can be sensitive to the specific calculation undertaken, including whether the annual and four-year average scores for CSAT, unwanted contacts and SIM points are rounded at different points in the calculation. The convergence in SIM scores mean that even small differences in SIM can have material financial implications.
- 4.12 As companies' SIM performance during AMP6 will be compared and benchmarked by Ofwat, companies, customers and stakeholders, we are keen to ensure these SIM calculations are conducted on a consistent basis. We note that Ofwat published further SIM guidance and a calculator on 26 March 2015.<sup>23</sup> We would welcome further detail to show how these scores will be used to calculate the overall SIM score for AMP6 and how this is converted into rewards and penalties.

### **Calibration for regional affluence/deprivation effects**

- 4.13 We have a concern that the current approach to SIM does not take proper account of regional affluence/deprivation effects. In particular, we have increasing evidence that the propensity of customers to award good or bad customer service scores for any given level of service is correlated strongly with affluence, with customer in less affluent regions giving materially better scores for any given level of performance than customers in more affluent regions. The direct, uncalibrated, link between SIM score and the prices faced by customers

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<sup>22</sup> We have estimated this based on forecast performance across the industry with continuing improvements in unwanted contact score and CSAT, taking account of the change in SIM methodology in AMP6. This further reduction seems more than plausible given the standard deviation has reduced from 12.4 SIM points in 2010-11 to 5.0 SIM points in 2013-14, a reduction of 7.4 SIM points over only three years.

<sup>23</sup> Ofwat, "IN 15/03: Service incentive mechanism – guidance for collating customer service information for calculating the SIM score", 26 March 2015.



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means that customers in poorer regions can face increased water prices merely because they are poorer, and equally customers in affluent regions can face lower prices merely because they are more affluent. We do not believe that this is in the interests of customers.

- 4.14 We do not believe that this is a water industry specific phenomenon. For example, the Consumer Action Monitor report, published last year by the Ombudsman Services shows complaint figures per head to be strongly (anti)correlated with affluence.<sup>24</sup> This is fully consistent with, for example, research we have commissioned for other purposes that suggests that the net promoter scores for a range of energy and communications companies are markedly lower in TWUL's region than in other areas.
- 4.15 As we collect further evidence in this area, we would welcome the opportunity to work with Ofwat to suggest ways in which SIM could be improved going forwards to account for these regional affluence/deprivation effects and create a level playing field for customers.

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<sup>24</sup> Consumer Action Monitor, "Ombudsman Services", January 2014, page 4.

Section 5

## Wholesale totex performance mechanism

### **General approach**

- 5.1 We agree that the general approach to totex cost sharing as documented in the consultation is in line with our understanding of the purpose of the mechanism, as defined in the PR14 methodology.
- 5.2 We support Ofwat's approach of deflating actual totex to 2012-13 prices using actual RPI in order to compare to the cost allowances in the final determination.
- 5.3 We support Ofwat's approach of adjusting actual totex to ensure it is on the same basis as the cost allowances within the menu in the final determination. We note that there will need to be clear definition of the costs to exclude from actual totex, to ensure clarity.
- 5.4 We note Ofwat's proposal to allocate the totex sharing adjustment between RCV and revenue using the weighted average PAYG rates set in the final determination, unless companies justify why a change in these rates would be in customers' interests. We are not directly challenging this approach, in particular because it still acknowledges the importance of allowing companies the opportunity to change the PAYG rates, in line with customers' interests. However, we note that the same result may be achieved more simply. For example, all the AMP6 totex adjustment may be allocated to RCV (simplifying the AMP6 totex menu sharing). When companies then propose their PAYG rate for AMP7 totex, this could reflect customers' interests, by considering the nature and amount of the totex that was actually incurred in AMP6. Given companies will have to do this anyway in considering their proposed AMP7 PAYG rates, this approach would also ensure companies only have to justify one set of PAYG rates, rather than two (i.e. if they also have to justify the appropriate PAYG rate for the totex sharing adjustment).
- 5.5 We support Ofwat's approach to adjust for the time value of money. We note, however, that it is not clear how this will be applied for the revenue component of the totex adjustment. The spreadsheet calculates the revenue adjustment (including the time value of money) to be applied as at the end of AMP6. However, additional clarity could be provided on how this adjustment should be profiled over AMP7, and the associated approach to reflecting the time value of money.

### **Spreadsheet model**

- 5.6 We have the following comments following our review of the spreadsheet model:
  - When calculating the Totex under / (over) performance in section 3.3 of the Calcs tab the calculation refers to "Actual.Totex.Water", from Section 2.3 of the Inputs tab. "Actual.Totex.Water" reflects the actual totex before adjustments. For the totex sharing



calculation to operate correctly, we would expect the Totex under / (over) performance calculation to reflect the actual totex after adjustments. This adjustment applies similarly to Sewerage.

- The inputs for transition expenditure are included in columns associated with AMP6 years. By definition, transition expenditure can only be spent prior to AMP6. To ensure transition expenditure is captured correctly, the inputs should be associated with the final two years of AMP5, i.e. 2013-14 and 2014-15, when transition expenditure may be spent. For converting this into the appropriate adjustment to actual totex, the transition expenditure input into years 2013-14 and 2014-15 may be inflated into 2015-16 prices, and included as an adjustment in outturn prices in 2015-16.

Section 6

## Wholesale revenue forecasting incentive mechanism

- 6.1 The draft rulebook confirms that the wholesale revenue forecasting incentive mechanism (“WRFIM”) works as set out in the PR14 FD, policy chapter A7 - risk and reward, i.e.:
- no in period adjustment i.e. the WRFIM will be applied to allowed revenues at the next price review;
  - that WRFIM will generate an adjustment at PR19 to take account of differences between actual and projected revenues for each year of AMP6;
  - that penalties will be applied that take account of wholesale WACC, RPI and the penalty rate of 3% where the variance exceeds +/- 2% of allowed wholesale revenue (sliding scale where revenue is between 2 to 3% variation);
  - for 2018-19, PR19 will be able to use actual information in its calculations; and
  - for 2019-20, updated forecasts rather than actuals will be used.
- 6.2 We provide comments on the spreadsheet and specific workings of the WRFIM below. This includes a particular concern that the mechanism, as is, provides an incentive for companies to slightly over-recover against allowed revenues during AMP6, which is an unintended consequence that would not be in the interest of customers.

### ***Under and over recovery of allowed revenue inconsistency***

- 6.3 The wording in companies’ licences and the workings of WRFIM mean that companies can be penalised, through the forecasting error penalty adjustment, when they under-recover revenues in a previous year without the ability to use tariffs to unwind this revenue under-recovery. The WRFIM would therefore penalise companies even though they cannot take action to avoid the penalty.
- 6.4 An example of this could be if a company under-recovered in 2015-16 by 2% of allowed revenue. This would notionally increase the allowed revenue in 2017-18. However, when setting 2017-18 tariffs, companies’ licences would only allow them to set tariffs to recover the FD allowed revenue and not the notionally increased allowed revenue, thereby generating a penalty in 2017-18. We demonstrate this in a worked example below.
- 6.5 This circumstance could also apply a year earlier in 2016-17 if the 2014-15 blind year adjustment from AMP5 generated notionally higher allowed revenue in 2016-17. Under their licences, companies would not be able to reflect the notionally higher allowed revenue in 2016-17 tariffs as the tariffs should be set to only recover the FD allowed revenue.



- 6.6 Given the uncertainty in actual revenue recovered (e.g. due to forecasting errors around the impact of metering programmes, bad debt, etc), this provides companies with an incentive to set tariffs to avoid any under-recovery of revenues and avoid an over-recovery of revenues leading to a penalty, i.e. incentivised to recover between 100% and 102% of allowed revenue. This bias towards over-recovery of revenues in AMP6 is an unintended consequence that would not be in the interest of current customers.



**WRFIM worked example:**

- 6.7 We provide below a worked example, showing how a 2% under-recovery of revenue in 2015-16 can lead to penalties in year 3 and year 5.
- 6.8 We start by assuming that there is a 2% (£17.2m) under-recovery in 2015-16 for wholesale water revenues [1], and in all other years recovered revenue is equal to allowed revenue from the FD (inflated from 2012-13 prices to outturn prices).

**Figure 2 – Step [1] in WRFIM model**

Allowed revenue										
£m 3dp	Allowed revenue - water	12/13 price base				790.70	790.10	790.30	792.50	799.40
£m 3dp	Allowed revenue - wastewater	12/13 price base				898.40	894.40	887.80	880.40	862.50
Recovered revenue										
<b>To be completed at the end of PR14&gt;&gt;</b>										
£m 3dp	Recovered revenue - water	Outturn price base				843.26	883.89	914.18	948.81	988.65
£m 3dp	Recovered revenue - wastewater	Outturn price base				977.68	1,000.58	1,026.96	1,054.04	1,066.69

Source: Thames Water workings in Ofwat published WRFIM model

- 6.9 As a result of the 2% revenue under-recovery in 2015-16, the adjusted allowed revenue two years later in 2017-18 [2] increases by £23.9m. However, under the current conditions of the licence, the revenue that the company can recover in 2017-18 [3] can be no higher than allowed revenue in the FD, i.e. £914.2m.
- 6.10 This leads to a penalty for under-recovery in 2017-18 of 1.64% revenue [4] and in 2019-20 of 3.00% revenue [5].
- 6.11 Therefore, the £17.2m revenue under-recovery in 2015-16, which is within the 2% threshold, leads to a penalty for the company, despite it recovering revenue within the 2% threshold and complying with its licence conditions.



Figure 3 – Steps [2] to [5] in WRFIM model

1 WRFIM calculation										
Calculate an adjusted allowed revenue using penalty and/or blind-year adjustment										
<b>Allowed Revenue</b>										
£m 3dp	Allowed Revenue (12/13 price base)	12/13 price base				790.700	790.100	790.300	792.500	799.400
£m 3dp	Allowed Revenue (Outturn price base)	Outturn price base				860.472	883.894	914.178	948.808	988.652
Adjust allowed revenue by RFIM adjustment										
<b>Applied RFIM adjustment</b>										
£m 3dp	AMP6 forecasting incentive adjustment including over / under recovery true up	Outturn price base				-		23.902		37.383
£m 3dp	<b>Adjusted Allowed Revenue</b>	Outturn price base				860.472	883.894	938.080	948.808	1,026.035
£m 3dp	Revenue Recovered	Outturn price base				843.263	883.894	914.178	948.808	988.652
£m 3dp	Over (+) / Under (-) recovery	Outturn price base				(17.209)	-	(23.902)	-	(37.383)
% 2dp	% (under) / over recovered					(2.00%)	-%	(2.55%)	-%	(3.64%)
<b>RFIM adjustment</b>										
Boolean	Is a penalty required?					FALSE	FALSE	TRUE	FALSE	TRUE
% 2dp	Penalty rate magnitude					-%	-%	1.64%	-%	3.00%
(+1/-1)	Penalty rate signage					(1)	(1)	(1)	(1)	(1)
% 2dp	Applied penalty rate					-%	-%	(1.64%)	-%	(3.00%)
£m 3dp	<b>RFIM adjustment – to be applied after two year lag</b>	Outturn price base plus 2 years				-	-	23.902		37.383
£m 3dp	<b>RFIM adjustment</b>	Outturn price base						23.902		37.383
Performance is outside +/-6% variance level										
Boolean	Is more detailed variance analyses required to be submitted?					FALSE	FALSE	FALSE	FALSE	FALSE

Source: Thames Water workings in Ofwat published WRFIM model

- 6.12 A simple and pragmatic solution to avoid these perverse incentives, without requiring a licence modification, would be for any under-recovery of revenue to be excluded from the notional allowed revenue for the purpose of calculating the forecasting error penalty adjustment (but included when calculating the final revenue true-up at PR19). In this case, the mechanism would still provide an incentive against material under-recovery of revenue in each year and all revenue differences would still be trued up at PR19.
- 6.13 We note that where a company over-recovers against the FD allowed revenue, its licence will allow it to set tariffs in future years to generate less revenue, thereby offsetting previous years over-recovery to avoid the revenue forecasting error penalty. This means the adjustment to notional allowed revenue during AMP6 could be one-sided (for over-recovery of revenue only) only, rather than two-sided, to protect customers.

***Correction for changes in relative inflation (November RPI compared to year average RPI)***

- 6.14 The K factors set in the FDs define the wholesale allowed revenue. In order to calculate the K factors, the revenue allowance in 2012-13 prices was inflated by the forecast year average RPI, and then deflated by the forecast November RPI. Actual allowed wholesale revenues will reflect the K factors as defined in the FDs, and the actual November RPI.<sup>25</sup>
- 6.15 To the extent that there is a change in the difference between forecast November RPI and the forecast year average RPI (i.e. the indices used to set the final determination K factors) and the difference between the actual November RPI and actual year average RPI, actual allowed revenue in outturn prices (using the K factors and actual November RPI) will not reflect the revenue allowance in 2012-13 prices inflated by actual year average RPI.
- 6.16 The AMP5 Revenue Correction Mechanism (RCM) included an adjustment to correct for any change in such relative inflation movements, through the adjustment applied to revenue in the subsequent AMP. However, it is not clear whether such an approach is to be continued for AMP6 revenues.
- 6.17 On balance, we would expect there to be a correction, such that AMP6 wholesale revenues plus an adjustment to revenue applied in AMP7 reflect applying the actual year average RPI to the AMP6 revenue allowance in 2012-13 prices. However, we would particularly welcome clarity of Ofwat's intentions as to whether there will be a correction or not.

***Treatment of blind year (2019-20)***

- 6.18 We agree it is reasonable to make an adjustment in PR19 for the blind year (2019-20) based on forecast outturns for that year, to reduce the scale of potential adjustments in PR24 and maintain a more direct link between company performance and bills. However

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<sup>25</sup> This means that if the difference between the forecast November RPI and the forecast year average RPI (i.e. the indices used to set the final determination K factors) is the same as the difference between the actual November RPI and actual year average RPI, then the actual allowed revenue in outturn prices (using the K factors and actual November RPI) will reflect the revenue allowance in 2012-13 prices inflated by actual year average RPI.

this should not include any penalty adjustment on the basis that the numbers are forecasts and not actuals.

### ***Tax treatment***

- 6.19 The tax treatment places risk of tax rate changes during AMP6 on companies. This is outside company control, so the mechanism should keep companies neutral to tax rate changes. Therefore, we suggest adjusting for tax at two points in time – for the position at PR14 and at PR19 – to take account of any changes in marginal tax rates.

### ***Thames Tideway Tunnel***

- 6.20 The separate price control for the Thames Tideway Tunnel Infrastructure Provider (“IP”) requires the IP to notify Thames Water of the “IP charge” for inclusion in its wholesale wastewater tariffs. Revenue collected will be passed to the IP in accordance with the revenue agreement between Thames Water and the IP.
- 6.21 Under the IP price control, variations between the amount of the IP charge and the amount collected and passed to the IP will be taken account of in the true-up mechanism where unrecovered amounts are included in a subsequent years IP charge. This is different to the WRFIM, where any or over recovery is reflected at PR19 rather than in-period adjustments to revenue.
- 6.22 As there is a separate price control and revenue true-up mechanism for TTT IP revenues, to reflect the specific risks associated with the collection of these revenues, we consider that the calculation of penalties in WRFIM (where over or under-recovery is greater than 2% of revenues), should exclude TTT IP revenues.

### ***Capital contributions within revenue price control***

- 6.23 We note that the FD confirmed the methodology that *“although we have decided not to allow automatic adjustments to allowed revenues for demand variations in wholesale controls, if demand for connections is unexpectedly high then we would nevertheless consider allowing extra revenue to compensate for the loss of price control revenue on a case-by-case basis”*.<sup>26</sup> Further to the aim of providing greater clarity to customers, companies and wider stakeholders, it would be helpful if the criteria to be considered when making such case-by-case adjustments to allowed revenue were clearly identified.

### ***Spreadsheet model and rulebook***

- 6.24 An examination of the Ofwat excel model suggests that some of the inflation calculations may not be correct, as follows:

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<sup>26</sup> Ofwat, “Final price control determination notice: policy chapter A3 – wholesale water and wastewater costs and revenues”, December 2014, page 47.



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- WRFIM-water tab cell L39 (and hence N41) inflates cell L30 by applying the RPI movement from 2012-13 to 2016-17 and then 2012-13 to 2017-18 prices. As cell L30 is already at 2015-16 prices, the indexation applied should be from 2015-16 to 2016-17 and then from 2016-17 to 2017-18 prices.
  - Similar indexing issues will apply in future years and also in the WRFIM wastewater tab.
  - The top line of page 52 of the draft rulebook makes reference to the “revised COPI index”. Could Ofwat confirm why COPI is relevant to the WRFIM calculation?
  - The Ofwat excel model ‘Data sheet’ sheet rows 27 and 28 requires the allowed revenue for water and wastewater to be entered at 2012-13 price base. If this is taken from the wholesale allowed revenue shown in the FD company-specific appendix, e.g. water Table A2.10 final row, the re-pricing applied in the Ofwat excel spreadsheet will not generate the correct allowed revenue to be used as the basis for companies’ price setting. Page 50 of the draft rulebook notes that the annual allowed revenue should reflect the allowed revenue as per the licence. As such, the appropriate calculation of allowed revenue in outturn prices would be the starting point as notified to companies in the “Final determination of price controls” letters, adjusted each year to reflect the “K” factors and the movement in November to November RPI, in line with the licence requirements.

Section 7

## PR09 reconciliation

### ***Blind year reconciliation***

- 7.1 Ofwat has proposed to apply a materiality threshold that would need to be exceeded before applying blind year adjustments. We consider that applying a materiality threshold to decide whether to make the adjustment for the blind year is unnecessary. Applying a materiality threshold does not reduce the regulatory burden, as it requires a test against materiality in addition to calculating the impact of the blind year for each mechanism. In addition, applying a materiality threshold may act against customers' interests.
- 7.2 The calculation of the materiality thresholds appears to have been set by considering historic variation (for revenue adjustments) and historic serviceability shortfalls (for RCV adjustments). There does not appear to be evidence that using these materiality thresholds in this context is in customers' interests.
- 7.3 The consultation proposes that the materiality thresholds for RCV adjustments should be 0.5% of company opening RCV. We note that in the accompanying spreadsheet the materiality calculation is performed at service level. Clarity on whether the materiality for RCV adjustments will be tested on a company level or a service level would be welcome, should the materiality test be retained.
- 7.4 We note that the "Consultation on the PR14 reconciliation rulebook" specifies that qualifying land sales are included within the blind year adjustment (page 55). However, the "Ofwat PR14 reconciliation rulebook – draft for consultation" does not include land sales within the blind year adjustment (page 63). Clarity on whether these are included in the blind year adjustment would be welcome.
- 7.5 We note that the Opening RCV (2014-15) in Inputs – water and Inputs – waste is not fully defined. For clarity, it would be useful to understand whether this relates to the 2014-15 year average RCV, the closing year end RCV (i.e. before midnight adjustments), or the opening AMP6 RCV (i.e. after midnight adjustments).

### ***COPI updates***

- 7.6 We support Ofwat's proposal to adjust COPI in the PR09 incentive mechanism models when the updated index is available.
- 7.7 We note that there is uncertainty over how the COPI indices may be revised, following the program of work to revise the calculation of COPI. Should there be significant changes to historic indices, or if the COPI series is discontinued, a further consultation may be required to ensure the most appropriate approach is identified.

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***Timetable***

- 7.8 We are keen to work with Ofwat on a timetable to close out our reporting for 2010-15, and to finalise the impact that closing figures for our 2010-15 performance will have upon PR19.
- 7.9 We enquired about the timing of the reconciliation recently and Ofwat responded that “we haven’t landed on specific timing (given the [COPI] issue) and we will be looking at the responses on the Rule Book before making a decision”.<sup>27</sup>
- 7.10 Ofwat has set out the reason for a potential delay being the issue on suspension of COPI by BIS due to concerns with the reliability of new indices. Ofwat have also set out three options for Companies to consider on pages 58-9.
- 7.11 As set out above, we agree option 1 to adjust COPI when updated data become available, though recognise this option has uncertainties regarding how and when COPI will be updated.
- 7.12 Recognising these uncertainties, to enable us to plan effectively it would be helpful to have a draft timetable for the non-CIS closure of 2010-15. We propose the following for consideration:
- 19 June 2015 – Ofwat issues final tables for companies to populate 2014-15 data.
  - 28 August 2015 – Companies submit (non-CIS W3A, W17, W20, W21, S3A, S17, S20, S21)) tables to Ofwat for 2010-15 closure.
  - 16 August 2016 – Companies submit CIS data tables pending availability of appropriate index.

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<sup>27</sup> Email from Shane Anderson to Clare Carlaw Thursday, April 23, 2015.

Section 8

## Retail household revenue mechanism

- 8.1 We welcome the clarity from Ofwat that it intends to true-up at PR19 for differences between actual and forecast revenues per customer, as well as differences between the actual and forecast number of customers, which we agree with Ofwat is in customers' interest.
- 8.2 While we support the broad principles of the mechanism, we provide specific comments below on the treatment of time value of money adjustment, the treatment of taxation and the spreadsheet model.

### ***Time value of money***

- 8.3 Ofwat has stated that its preferred option is to only make financing cost adjustments for material differences between allowed and outturn revenues and that materiality will not be defined at this stage.
- 8.4 We do not consider the use of a materiality threshold or the uncertainty around the materiality threshold to be in the interest of customers. As the time value of money adjustment will need to be calculated (even if only for the materiality calculation) and any modelling will need to include a placeholder for time value of money adjustments, there is minimal additional effort in making adjustments in all cases, not only those assessed to be material. Moreover, this increases the risk of reduced customer benefits from over-collection of revenues reducing customer benefits up to the materiality threshold. We would therefore recommend removing the materiality test.
- 8.5 If Ofwat does choose to maintain the materiality test, then we recommend that the rulebook sets out how this will be calculated. The rulebook is a helpful step in providing certainty ahead of the next price review, to help drive the right behaviours for customers during AMP6. The uncertainty could create perverse incentives (e.g. companies incorrectly estimating what adjustments would be material for the purpose of business planning and customer engagement), to the detriment of customers and stakeholders. This uncertainty is at odds with the rest of the rulebook, which is generally clear and transparent.

### ***Treatment of taxation***

- 8.6 The tax treatment places risk of tax rate changes during AMP6 on companies. This is outside company control, so the mechanism should keep companies neutral to tax rate changes. Therefore, we suggest adjusting for tax at two points in time – for the position at PR14 and at PR19 – to take account of any changes in marginal tax rates.



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***Spreadsheet model***

- 8.7 The rulebook does not specify the application period of the net adjustment, i.e. whether it will be spread over AMP7 or applied in a single year. It might be preferable to spread the adjustment to smooth any impacts on customer bills.
- 8.8 The customer numbers are specified to be input to the spreadsheet ("Inputs" tab) in millions, with zero decimal places. We note, however, that the PR14 FD models used the number of customers to the nearest single customer. To maintain consistency with the revenue in the PR14 FD, we recommend that customer numbers entered in millions are entered to six decimal places.

Section 9

## Thames Tideway Tunnel uncertainty mechanism

- 9.1 We welcome the additional clarity the rulebook provides over the information included in the Final Determination. There are, however, some areas where we believe additional clarity would be beneficial, which we have set below.
- 9.2 Firstly, we believe it would be beneficial for Ofwat to provide greater clarity on its proposed approach for logging up at PR19, which it states will be similar to the mechanism used in the change protocol included in the PR09 price controls (page 60).
- 9.3 Secondly, the rulebook states that scope swap costs “will be remunerated at PR19” whereas costs under the Notified Item for unsuccessful Infrastructure Provider (“IP”) Procurement “will be rolled into the RCV” (page 61). It would be useful for the rulebook to clarify whether this is the same treatment (i.e. whether scope swap costs will also be rolled into the RCV).
- 9.4 Furthermore, we consider that additional clarity would also be helpful in relation to the eligibility of costs under the Notified Item for scope swaps. The paragraphs below set out our understanding of this Notified Item and we believe that this should be reflected in the PR14 rulebook.
- 9.5 The Notified Item for scope swaps will apply to costs that arise from the reallocation of scope from the IP to Thames Water to secure efficient project delivery in the light of any delay to the appointment of the IP. Thames Water must demonstrate that such scope swaps are efficient, in the interest of customers, and meet the additional conditions set out in Thames Water’s FD letter.<sup>28</sup>
- 9.6 Therefore, if IP licence award is delayed beyond 1 July 2015, the following costs would be eligible for recovery under the Notified Item for scope swaps (subject to meeting the conditions above):
- construction works that would have been carried out by the IP (originally in the IP’s scope of work), incurred at any time to prevent a significant impact on the Thames Tideway Tunnel Project timetable; and
  - IP/Project Management Contractor (PMC) staffing and organisation running costs incurred after the date to which Ofwat provided funding in the FD (a central view of the timing of IP licence award), which we understand to be 1 November 2015.
- 9.7 We believe that the above clarification of the Notified Item for scope swaps should be reflected by Ofwat in the PR14 rulebook.

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<sup>28</sup> These are that Thames Water is permitted to carry out the works under the Preparatory Works Notice, and that the need for and scope of the works is evidenced to Ofwat’s satisfaction.

Section 10

## Water trading incentives

- 10.1 We have reviewed the spreadsheet model published on 21 April 2015.
- 10.2 We note that Ofwat has set a cap on the incentive at 100% of the discounted economic profit in AMP6, with the discounting applying from the start of AMP6. This will lead to stronger incentives for water exporting at the start of AMP6 than towards the end of AMP6, for example the incentive on a new trade in 2019-20 will be capped at 100% of the discounted benefits for 2019-20 only. This potential weakening of incentives could discourage new trading which would not be in customers' interests.
- 10.3 To encourage new trading throughout AMP6 and broadly maintain consistency and intergenerational equity, Ofwat should instead consider changing the cap to be, for example, 100% of the economic profit over the first five years of the trade or 100% of the undiscounted economic profit in AMP6.
- 10.4 We provide below a few additional comments on the spreadsheet:
- The export incentive calculation does not show the indexation, time value of money or taxation calculations.
  - The RPI input for the import incentive is rounded to the nearest integer, leading to a loss of precision.
- 10.5 We have not commented on the definitions and sources for inputs and calculations, as Ofwat has not yet published this information.

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Section 11

## Other comments on draft rulebook

- 11.1 In its assessment of options for each mechanism, Ofwat assumed that “*financeability at PR19 will be assessed before taking account of the impact of PR14 reconciliation mechanisms*”.<sup>29</sup>
- 11.2 We agree with the principle that this is the appropriate treatment for incentives that reflect companies’ cost and operational performance, as it aligns with assessing financeability for a notionally efficient company.
- 11.3 For true-ups that reflect items fully outside company control, which would therefore affect a notionally efficient company (e.g. for differences between forecast and actual price inflation and property numbers), it may be appropriate to account for the impacts of these true-ups before assessing financeability. We propose that this be considered as the PR19 methodology is developed.

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<sup>29</sup> Ofwat, “Consultation on the PR14 reconciliation rulebook”, March 2015, page 10.

## Annex 1: CIS model chronology

Date	Event	Notes
Nov-08	Ofwat published CIS illustrative worked example	Undertakes calculation net of CCD and IRC. Does not mention treatment of inflation for the RCV true-up and associated financing costs.
Nov-11	IN11/08: Changes to COPI	Provides a simple illustration of how changes in COPI affect the CIS mechanism. Calculation of RCV true-up is in line with IN12/08 illustrative model. No calculation of financing cost adjustment.
Jan-12	Letter from Nick Fincham to Keith Mason re: AMP4 & AMP5 adjustment mechanisms	Asks how short-falling will be treated. Also asks for clarity on detail of all mechanisms.
Feb-12	WaterUK letter to Keith Mason	Asks for better understanding of CIS and RCM mechanisms
Mar-12	Reply from Keith Mason to Nick Fincham	Confirms short-falling will be one-sided CIS adjustment. Notes that a CIS model will be published prior to Autumn 2012.
Jul-12	IN12/08: The capital incentive scheme (CIS) and the revenue correction mechanism (RCM) – frequently asked questions	Includes a note, an illustrative model, and a flowchart. Confirms that CIS will operate gross of CCD and IRC, as this is simpler than a net adjustment. An illustrative model is provided and the note confirms that a full true-up model will be provided in Autumn 2012. The illustrative model appears to have the same approach to the RCV true-up as the final CIS model. It does not contain any calculation of the financing cost adjustment.
Oct-12	IN12/10: Changes to COPI	Refresh of IN11/08 following further changes to COPI index. Publishes the same illustrative model as IN11/08.
Nov-12	Ofwat publish spreadsheet model	The calculations in the CIS model as used in the FD are the same as per this model. This same model was issued as part of the January 2013 PR14 methodology consultation.
Nov-12	Clarification on licence modifications	Confirms RCV at 31 March 2015 protected for efficiently incurred capex. "Ofwat's approach to the evaluation as to whether capital expenditure has been efficiently incurred will not change as a result of modification to the licence".
Jan -13	PR14 Methodology Consultation	Including the same CIS model as published in November 2012.
Apr-13	Letter from Nick Fincham to Keith Mason regarding CIS	Queries reward / penalty calculation and revenue true-up. Suggests alternative revenue true-up so financing cost adjustment just reflects capex over/underspend, rather than also changes in real price effects.
Jul-13	Setting price controls for 2015-20 – final methodology	Confirmation of use of legacy tools, including the CIS model, in line with January 2013 methodology consultation.

Aug-13	Reply from Keith Mason to Nick Fincham	"The spreadsheet model performs the CIS true up calculations in accordance with the approach set out in Information Notice 12/08 ... The detail of the flowchart is explicit about the inflation treatment in the CIS mechanism as this was one of the main topics in the frequently asked questions we were receiving ...We believe that the indexation treatment set out in IN12/08 and embodied in the published CIS true-up model achieves this given what is currently known about actual RPI and COPI".
Feb-14	PR14 Feeder Model	Reissuance of November 2012/January 2013 feeder model as part of PR14 Financial Model pack, including explanatory note. "This feeder model is in line with CIS spreadsheet published in January 2013."
Apr-14	Ofwat legacy workshop	"In revising their business plan submission, companies should: Use the CIS published on our website which applies Ofwat methodology as intended".
Apr-14	Ofwat publish further information on reconciling 2010-15 performance.	Instructs companies to use the published CIS models.
Aug-14	DD published	Includes original CIS calculation. No mention of change in approach to inflation.
Nov-14	Ofwat board meeting	"To change to the established methodology for the CIS would be inconsistent with the position adopted since 2012 ... A clear expectation has been set in recent years about how the CIS would operate. A change would be perceived as a retrospective adjustment ... The Executive recommended to Board that no change is made to the Draft Determinations CIS methodology for the Final Determinations, recognising that companies have made decisions on financeability based on their Draft Determinations".
Dec-14	Ofwat board meeting	"The Executive recommended that position on CIS be maintained as at draft determinations. The Board endorsed this recommendation but mandated the Executive to review company RCVs as part of PR19 to ensure that they are appropriate and consistent with a broader package of changes that Ofwat expects to make".
Dec-14	FD published	Included comment that Ofwat was considering a change in approach to inflation: "For the period beyond 2015-20, we would like to engage with stakeholders and consider whether this approach to adjusting for inflation, which may have resulted in a slightly different 2015 opening RCV (as a result of indexation) for all companies, is in the long term interests of customers".

## Annex 2: Financing cost example

Suppose a company spends in line with the PR09 FD capex allowance, and that COPI is in line with the PR09 FD assumption, but that RPI is different. Should there be a financing cost adjustment?

Example financing cost calculation, showing implication of actual RPI different from PR09 FD assumption	PR14 CIS	
	model approach	Alternative approach
Funded capex (07/08 prices)	1,000.0	1,000.0
COPI (PR09 FD)	0.96	0.96
RPI (PR09 FD)	1.04	1.04
Actual capex (outturn prices)	964.7	964.7
COPI (Actual)	0.96	0.96
RPI (Actual)	1.09	1.09
WACC	5.1%	5.1%
Actual capex (outturn) * (1/RPI)	888.6	888.6
Funded capex * RPE (FD)	926.4	926.4
Funded capex * RPE (actual)	888.6	888.6
Difference for financing cost adjustment	(37.8)	-
Financing cost adjustment	(1.9)	-

In this example Ofwat's PR14 CIS approach generates a financing cost adjustment when a company spends in line with the PR09 FD assumption with the only change being a different RPI than assumed in the FD.