



Portsmouth Water Limited

PR19 Draft Determination Representation



Delivering excellence
for our customers,
our people and our
environment



Table of contents	
Chairman's Foreword	1
1 HAVANT THICKET WINTER STORAGE RESERVOIR (HTWSR)	6
1.1 Introduction	8
1.1.1 Financeability (Part A of this response)	9
1.1.2 Regulatory Clarification (Part B of this response)	9
1.1.3 Timetable	9
1.1.4 Overall Approach to Our Response	10
1.1.5 Summary of References to Ofwat Draft Determination Areas	10
1.1.6 Summary of our response to the Draft Determination in respect of HTWSR	12
1.2 Part A: Financeability – Introduction	13
1.3 PRT.CMI.A1 The Impact of a Separate Price Control	14
1.3.1 Bespoke Features of the Price Control have a Negative Impact on Financeability	14
1.3.2 The Financeability of a Separate Price Control on a Standalone Basis is Uncertain	16
1.4 WACC for the HTWSR Price Control	17
1.4.1 Bespoke WACC has a Negative Impact on Financeability	18
1.4.2 The Proposed WACC Does Not Reflect the Risk Profile of HTWSR	18
1.4.3 A Lower WACC During Construction is Contrary to the Normal Profile of Returns for Infrastructure Projects	18
1.4.4 It is not appropriate to adjust the WACC to reflect Embedded Debt	19
1.4.5 A lower WACC exposes our Customers to Risk and discourages water trading	20
1.4.6 Advantages and Disadvantages of a Lower WACC	21
1.4.7 Financing Strategy	21
1.5 Duration of the Initial 10 Year Price Control	22

1.5.1	Bespoke 10-year price control has a Negative Impact on Financeability	22
1.5.2	Cost Information Provided	23
1.5.3	Additional Financing Risk	24
1.5.4	Operating Costs	24
1.5.5	Advantages and Disadvantages of a 10-year price control	24
1.5.6	Alternative Approaches Within the 10-year Price Control	25
1.6	PRT.CE.A1 Disallowed Costs	28
1.6.1	Disallowed Costs have a Negative Impact on Financeability	29
1.6.2	An efficiency challenge based upon the benchmarking data provided is not appropriate	30
1.6.3	The HTWSR Cost Estimate is based on a P50 Estimate	30
1.6.4	The Pre-Treatment Works are Appropriately sized	30
1.6.5	Opportunities	31
1.6.6	Visitors' Centre and Public Amenity Costs are a Necessary Condition of Planning Consent	31
1.6.7	Revenues for the Visitors Centre	33
1.6.8	Network enhancements	33
1.6.9	The Environmental Mitigation Capital Grant Scheme costs are necessary to support planning consent	34
1.6.10	Our proposed levels of contingency are in line with good industry practice	35
1.6.11	Final PR19 Financeability Assessment	36
1.6.12	RORE Analysis	36
1.6.13	Other Key Financeability Issues	36
1.7	Part B: Regulatory Clarification – Introduction	36
1.8	RCV	37
1.9	Performance Commitment	37
1.10	Cost Sharing	39

1.11	Economic Profit	39
1.11.1	Clarifications Required in Relation to Economic Profit	39
1.11.2	Changes to the WACC undermine our approach to setting Economic Profit	41
1.12	Export Trading Incentive	41
1.13	Revenue Forecasting Incentive (RFI)	44
1.14	Reconciliation Model	44
1.15	Input into BSA	44
1.16	Netting of Revenues	46
1.17	PAYG	46
1.18	Depreciation	46
1.19	Scope of Separate Price Control	46
1.20	Tax	46
2	FINANCEABILITY	47
2.1	Executive summary	47
2.2	Ofwat Interventions and Actions	48
2.3	Assessment of Financeability	50
2.3.1	Modification of the financeability assessment approach	52
2.3.2	Correction of model errors and changes in Company position	58
2.3.3	Consideration of financeability interventions needed (Core, Notional)	59
2.3.4	PAYG adjustments (Notional Core structure)	62
2.3.5	Further equity injections to fund Capex growth as a result of Ofwat Cost Sharing mechanisms	64
2.3.6	Assessment of financeability of the Core business	65
2.3.7	Assessment of financeability of the HTWSR price control (Notional) (WACC @ 3.26%)	65
2.3.8	Assessment of financeability of the Combined business (Notional)	66

2.3.9	Moving into the Combined business model in the actual capital structure	68
2.3.10	Bill levels and customer support	69
2.3.11	Financeability assessment in the Combined Actual structure	69
2.3.12	Financeability assessment in the Core Actual structure	71
2.3.13	Financeability considerations in relation to the HTWSR price control (WACC 3.26%)	76
2.3.14	Board assessment of financeability	77
2.4	Financial resilience	79
2.5	RoRE	84
2.6	Tax Update	91
3	COST ASSESSMENT	93
3.1	Cost Assessment - TOTEX	93
3.1.1	PRT.DD.CA1 - Havant Thicket	93
3.2	PRT.DD.CA2 - Resilience Schemes	94
3.2.1	MS003 – Resilience Farlington – Deficit Distribution Support	95
3.2.2	MS001 - Oil Spillage (VOC Monitors)	97
3.2.3	MS006 - Resilience Hoadshill to Gosport - Trunk Mains Support	99
3.2.4	MS007 - Resilience Nelson to Lovedean - Trunk Mains Support	101
3.3	PRT.DD.CA3 - Household Retail – Bill Size Cost Claim	103
4	DRAFT DETERMINATION ACTIONS AND INTERVENTION RESPONSES	106
4.1	Action Reference - PRT.OC.A20 stretch	106
4.2	Action Reference – PRT.OC.A24 – Definitions	112
4.3	Action Reference – PRT.OC.A38 – Definitions	113
4.4	Action Reference – PRT.OC.A42 Timing	114
4.5	Action Reference – PRT.OC.A43– Definition	115

4.5.1	Biodiversity Grants Scheme – August 2019 – Wording from our promotional materials: -	117
4.6	Action Reference – PRT.OC.A44 - Timing	121
4.7	Action Reference – PRT.LR.A1– Required	121
4.8	Action Reference – PRT.LR.A4 - Required	122
4.9	Action Reference – PRT.LR.A5 – Required	122
4.10	Action Reference – PRT.LR.C1 – Board Financeability Assurance	123
4.11	Action Reference – PRT.CMI.A1 – Separate Price Control	124
4.12	Action Reference – PRT.CE.A1 – Efficiency Challenge	124
4.13	Action Reference – PRT.CE.A2– Evidence Required	124
4.14	Action Reference – PRT.RR.A2 – Financial Resilience Assurance	125
4.15	Action Reference – PRT.RR.A3 – Financial Ratio Evidence	126
4.16	Action Reference – PRT.RR.C1 – Tax	126
4.17	Action Reference – PRT.RR.C5 – Updated RoRE analysis	127
4.18	Action Reference – PRT.PD.C002.01	127
4.19	Action Reference – PRT.PD.A6– Past Delivery	128
4.20	Action Reference – PRT.PD.A7– Past Delivery	135
4.21	Ofwat Action Reference – PRT.CA.A4 - Required	136
4.22	Action Reference – PRT.CA.A5 – Required	138
5	OTHER ISSUES	141
5.1	AMP6 Performance commitment: Water quality contacts – Challenge to level of penalty in Draft Determination	141
5.2	Consultation under section 13 of the Water Industry Act 1991 on proposed modifications to Condition B of the licences of 17 water companies	146
5.3	Our proposed approach to regulating developer services - treatment of diversions	147
6	accepted interventions	148

Chairman's Foreword

Portsmouth Water's Board has reviewed in detail the Draft Determination (DD) feedback from Ofwat and has responded to the actions raised within this document. We are grateful for this feedback and particularly appreciate the recent opportunities to engage with Ofwat colleagues face to face on the critical matter of the price control regulatory framework associated with the delivery of the Havant Thicket Winter Storage Reservoir (HTWSR). Whilst there is still much work left to do in a short timescale, these initial discussions have formed a strong basis for further dialogue and engagement.

The Board's leadership, governance framework and risk management of this DD representation is set out in a new and updated Board Assurance Statement included within this submission. This updated document is based on Ofwat's specific DD comments. In summary, the comprehensive Board engagement process in place during the production of the PR19 Business Plan and the IAP Response has continued and the Board has engaged fully with senior management in discussing, challenging and debating the issues raised in the DD feedback. At the conclusion of this process, the Board reviewed and approved the Company's response contained within this document.

We are pleased that the Draft Determination confirms that our plan exceeds Ofwat's expectation in terms of Totex for AMP7 and we note that we are the only company with a Totex proposal which is lower than Ofwat's own assessment. We have consistently been assessed as cost efficient by Ofwat in recent price reviews although we note that that your assessment may be revised (marginally) for the Final Determination when you have reviewed both the 2018/19 cost and performance data and any company representations on the Draft Determinations.

We are also pleased that the Draft Determination recognises that the Company should receive an uplift to its cost of debt to reflect our relative ability to access to capital markets. We note that we are now the only company in the industry where this is applied. This is an issue we regularly discuss with customers and receive almost universal support for the uplift.

The main issues covered in this document are summarised below:

Financeability - following the publication of the DD we have changed our approach to financeability to align with Ofwat's approach. In our Business Plan we considered the Company 'Core' business and HTWSR as a single combined entity whereas for the DD representation we have mirrored the Ofwat approach, considering separately the 'Core' business and the 'Combined' business (Core + HTWSR) as a separate analysis, in both cases under notional and actual capital structures.

The analysis shows that in both notional and actual capital structures the Business Plan remains financeable for the Core business despite the not immaterial challenges. However, due to the level of uncertainty in relation to the HTWSR price control, the Board are unable to reach a conclusion, at this time, relating to the financeability of the Combined Business Plan.

The Board has proposed that, following a period of further intensive engagement and clarification with Ofwat in relation to key HTWSR regulatory mechanisms and processes, an updated Board financeability assessment of the Combined business will be provided by a date agreed with Ofwat in advance of the Final Determination.

HTWSR - we recognise the challenge Ofwat has set the sector in both managing its water resources more efficiently and looking beyond water company geographical boundaries in this drive for improved economic and environmental efficiency. We have responded positively to this key challenge by investing over the last two years in the HTWSR. Our investment has created the opportunity to deliver a regionally significant project that would be a realisation of Ofwat's ambition for the sector.

As you will be acutely aware infrastructure projects require the collective effort of all stakeholders to succeed. We therefore welcomed Southern Water's (SWS) relatively recent full engagement with HTWSR and Ofwat's support for HTWSR – not just in the consideration of the bespoke issues that the HTWSR raises, as set out in the DD, but also in the positive nature and quality of Ofwat's engagement since the publication of its DD. Ofwat's continuing commitment to this engagement will be essential if HTWSR is to progress and enable ourselves to supply water to SWS by the time SWS require this increased level of bulk supply from us for its customers in 2029.

Our response to the elements of the DD relating to HTWSR has been developed after very careful consideration of the factors that we have understood to have been relevant to Ofwat's thinking in formulating its DD in relation to HTWSR. These factors include:

- **ensuring that customers as a whole are appropriately protected** where a project's construction and commissioning period traverses AMP periods.
- **not intervening in commercial negotiations** between two parties but ensuring that the overall policy objectives of HTWSR are met through the regulatory framework.
- **providing an appropriate balance between risk and reward** in managing overall project costs and;
- **incentivising timely delivery.**

In considering the above factors, we have looked again at the regulatory and delivery structure that we had proposed for HTWSR which recognised the unique nature of the project that it not delivering water directly to Southern Water (other than in extreme drought conditions), but enables larger bulk supplies to be delivered to them from our existing and, in some cases, enhanced resources through our resilient transmission network. Accordingly we have sought to accommodate Ofwat's proposed position for the delivery of HTWSR in areas where we feel that it is appropriate and where the overall balance between all relevant factors is maintained. In some areas the acceptance of Ofwat's proposed position is unequivocal. In other areas we are proposing to accept Ofwat's position to some degree but will require some changes to meet, in our view, the appropriate

balance between all relevant factors, given the unique nature of the project. In certain specific areas, we have been unable to accept Ofwat's position. This is in cases where we feel that Ofwat's position undermines the fundamental deliverability of HTWSR and in addition, in our view, creates a significant imbalance of incentives within the regulatory and delivery framework for the project.

The detail of our consideration and responses are set out in this document. However in broad summary we:

- **are unable to conclude on our 'Combined' business financeability assessment** on account of the lower HTWSR WACC and regulatory uncertainty created by Ofwat's proposals contained in the DD.
- consider that the proposed HTWSR WACC when combined with the ten year price control, the proposed debt indexation mechanism and the overall setting of costs allowances at the outset of the price control **creates a materially uncertain regulatory and delivery environment both during and beyond the initial price control period**. This regulatory and delivery uncertainty is difficult for both ourselves and credit rating agencies to assess. As such this further exacerbate our concerns over the financeability of HTWSR.
- **believe the proposed WACC for HTWSR is too low by reference to benchmarks**, does not recognise the unique nature of the project, has been determined in a manner that we do not regard as transparent or fair, and rather than insulating our customers from risk it actually exposes them to undue risk.
- **recognise and accept the need for a separate price control** for the purposes of transparency, if correctly structured.
- **accept the need for the setting of cost allowances at the appropriate point** in the long-term project, prior to commencement of construction. Accordingly, we have proposed a time following granting of planning permission when we consider that the setting of the cost allowance for HTWSR is appropriate.
- **accept the need for an ODI relating to delivery of the reservoir itself**, although we need to agree details relating to this to ensure that completion by 2029 is indeed an appropriate timeframe, given the current critical position with the project timeline. The critical nature of the project timing underlines the importance of full and active collective engagement on HTWSR through the period to the FD.

Our deliberations have considered, as a whole, the regulatory framework for the delivery of HTWSR as well as the WACC and cost allowances. We have accepted positions and put forward proposals to be considered holistically. In doing so we have put aside any concerns of 'cherry picking' elements of our proposal and rejecting others. We do not believe such an approach is a productive way to progress our discussions, as it is only by looking at the project and the business in the round that we will be able to reach a satisfactory conclusion.

We are hopeful that our response to Ofwat's DD is received in the spirit that it has been developed; that is a spirit of engagement, compromise but also absolute

clarity in what is required in order to ensure that HTWSR is delivered on time, whilst both representing value for money and deepening our position as trusted service provider for both our and SWS's customers.

As an aside, in order to explain how the Havant Thicket reservoir is heavily embedded within PW's existing infrastructure and uses substantial elements of this infrastructure to facilitate the export to Southern, we have included a short animated video with this submission which we hope you will find helpful. The video was particularly well received during a recent Ofwat Board visit to PW led by the Chairman.

Per Capita Consumption (PCC) Reduction – whilst in general we have fully accepted Ofwat's changes within our PR19 ODI regime and whilst we fully understand and accept the need for improvements in water efficiency on the part of PW's customers, we believe the 5% PCC reduction target proposed in our Business Plan is already ambitious and stretching and is supported by customers as delivering the best-cost solution. We do not feel the 6.5% target proposed is reasonable for a range of reasons which fail to consider PW's very specific local circumstances as summarized below:

- **Current PW PCC performance is already efficient for the region** - analysis of draft Water Resource Management Plans show this is the case even though our neighbouring companies have 90%+ levels of meter penetration compared with 35% at the start of AMP7 for PW.
- **The impact of metering will be limited due to our lowest in sector charges** - there is a very weak economic incentive for PW customers to opt for a meter and most who would gain from a meter financially have already opted.
- **Metering penetration needs to be at least 50% to achieve significant PCC reduction** – independent studies based on South East region water companies have shown that the impact of metering on PCC is quite limited until you achieve a penetration level of at least 50%.
- **PW's inability to compulsory meter limits our options relative to neighbours** - we do not have the right to compulsory meter in spite of several attempts in the past to convince DEFRA of the need for this.
- **PW's starting point is likely to be higher than previously expected** following hot weather last year and this summer.
- **There has been limited consideration of PW's historical position** with surplus water balances, low charges and low drivers for metering.
- **Our customers do not support anything other than widespread compulsory metering** - we have limited support from customers for anything other than widespread universal metering which is seen as fair and has already had significant publicity in the region over the last few years, as a result of Southern Water, South East Water and Affinity Water South East (Folkestone and Dover) – who do compulsorily meter.

We would request that Ofwat reconsiders its position and accepts our original business plan 5% reduction proposal as demanding and challenging.

Water quality contacts – in the spirit of openness and transparency, PW has explained to Ofwat on a number of occasions over the last few years that our water quality contact numbers were historically being under reported by c.40% – this was discovered following a business process review required as a prerequisite to the installation of a new CRM system in 2012. Our ODI target at PR14 was based on the incorrect (ie lower) figures; in spite of this we accepted the target which was particularly challenging in the light of the corrected ‘actual’ figures post new CRM. In the meantime, in spite of this difficult starting position, we have made very substantial improvements in AMP6 and DWI has ranked us as best in the industry for 3 of the last 4 years. Our 2018 performance is 25% better than the second ranked company and we are now setting the benchmark for the industry for AMP7 ODI performance.

In spite of this, we find ourselves in a somewhat illogical position of facing what seems to be an abnormally large penalty of £1.9m for AMP6. This is based on revised incentive rates set at PR14 by Ofwat post our original business plan submission. **We believe the scale of this penalty is an unintended consequence of changes made by Ofwat at this time.**

Given our industry leading performance in the intervening period we believe it would be fairer if our penalty could be based on our original PR14 business plan submission resulting in a figure of £483k. Our Board and our CCG both feel strongly that the level of penalty in the DD is illogical and unfair particularly in the light of our excellent AMP6 performance and the penalty levels now proposed by Ofwat for AMP7. The difference is stark - according to our calculations, the AMP7 penalty rate equates to around £100 per contact compared with the proposed penalty for AMP6 for PW of £5000 per contact. We would request that Ofwat reconsiders its position on this and accepts our suggestion of a fairer level of penalty for AMP6.



Mike Kirk
Chairman – Portsmouth Water.

1 HAVANT THICKET WINTER STORAGE RESERVOIR (HTWSR)

Executive Summary

We recognise the challenge Ofwat has set the sector in both managing its water resources more efficiently and looking beyond water company geographical boundaries in this drive for improved economic and environmental efficiency. We have responded positively to this key challenge by investing over the last two years in the HTWSR. Our investment has created the opportunity to deliver a regionally significant project that would be a realisation of Ofwat's ambition for the sector.

As you will be acutely aware infrastructure projects require the collective effort of all stakeholders to succeed. We therefore welcomed Southern Water's (SWS) relatively recent full engagement with HTWSR and Ofwat's support for HTWSR – not just in the consideration of the bespoke issues that the HTWSR raises, as set out in the DD, but also in the positive nature and quality of Ofwat's engagement since the publication of its DD. Ofwat's continuing commitment to this engagement will be essential if HTWSR is to progress and enable ourselves to supply water to SWS by the time SWS require this increased level of bulk supply from us for its customers in 2029.

Our response to the elements of the DD relating to HTWSR has been developed after very careful consideration of the factors that we have understood to have been relevant to Ofwat's thinking in formulating its DD in relation to HTWSR. These factors include:

- **ensuring that customers as a whole are appropriately protected** where a project's construction and commissioning period traverses AMP periods.
- **not intervening in commercial negotiations** between two parties but ensuring that the overall policy objectives of HTWSR are met through the regulatory framework.
- **providing an appropriate balance between risk and reward** in managing overall project costs and;
- **incentivising timely delivery.**

In considering the above factors, we have looked again at the regulatory and delivery structure that we had proposed for HTWSR which recognised the unique nature of the project that it not delivering water directly to Southern Water (other than in extreme drought conditions), but enables larger bulk supplies to be delivered to them from our existing and, in some cases, enhanced resources through our resilient transmission network. Accordingly we have sought to accommodate Ofwat's proposed position for the delivery of HTWSR in areas where we feel that it is appropriate and where the overall balance between all relevant factors is maintained. In some areas the acceptance of Ofwat's proposed position is unequivocal. In other areas we are proposing to accept Ofwat's position to some degree but will require some changes to meet, in our view, the appropriate balance between all relevant factors, given the unique nature of the project. In certain specific areas, we have been unable to accept Ofwat's position. This is in

cases where we feel that Ofwat's position undermines the fundamental deliverability of HTWSR and in addition, in our view, creates a significant imbalance of incentives within the regulatory and delivery framework for the project.

The detail of our consideration and responses are set out in this document. However in broad summary we:

- **are unable to conclude on our 'Combined' business financeability assessment** on account of the lower HTWSR WACC and regulatory uncertainty created by Ofwat's proposals contained in the DD.
- consider that the proposed HTWSR WACC when combined with the ten year price control, the proposed debt indexation mechanism and the overall setting of costs allowances at the outset of the price control **creates a materially uncertain regulatory and delivery environment both during and beyond the initial price control period**. This regulatory and delivery uncertainty is difficult for both ourselves and credit rating agencies to assess. As such this further exacerbate our concerns over the financeability of HTWSR.
- **believe the proposed WACC for HTWSR is too low by reference to benchmarks**, does not recognise the unique nature of the project, has been determined in a manner that we do not regard as transparent or fair, and rather than insulating our customers from risk it actually exposes them to undue risk.
- **recognise and accept the need for a separate price control** for the purposes of transparency, if correctly structured.
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- **accept the need for an ODI relating to delivery of the reservoir itself**, although we need to agree details relating to this to ensure that completion by 2029 is indeed an appropriate timeframe, given the current critical position with the project timeline. The critical nature of the project timing underlines the importance of full and active collective engagement on HTWSR through the period to the FD.

Our deliberations have considered, as a whole, the regulatory framework for the delivery of HTWSR as well as the WACC and cost allowances. We have accepted positions and put forward proposals to be considered holistically. In doing so we have put aside any concerns of 'cherry picking' elements of our proposal and rejecting others. We do not believe such an approach is a productive way to progress our discussions, as it is only by looking at the project and the business in the round that we will be able to reach a satisfactory conclusion.

We are hopeful that our response to Ofwat's DD is received in the spirit that it has been developed; that is a spirit of engagement, compromise but also absolute clarity in what is required in order to ensure that HTWSR is delivered on time, whilst

both representing value for money and deepening our position as trusted service provider for both our and SWS's customers.

As an aside, in order to explain how the Havant Thicket reservoir is heavily embedded within PW's existing infrastructure and uses substantial elements of this infrastructure to facilitate the export to Southern, we have included a short animated video with this submission which we hope you will find helpful. The video was particularly well received during a recent Ofwat Board visit to PW led by the Chairman.

1.1 Introduction

We **strongly welcome Ofwat's support for the Havant Thicket Winter Storage Reservoir Project (HTWSR)**; the Draft Determination underlines the importance of the HTWSR for Ofwat and other stakeholders in terms of how water resources can be more effectively shared across company borders in the South East, and also as a pathfinder for other projects.

We have already demonstrated success in supplying our surplus water to Southern Water (SWS) through the two existing bulk supply agreements with them representing total transfers of up to 30 million litres per day. Our Board is strongly committed to helping Ofwat to deliver on its policy imperative to **support cross border water trading and to reduce bills for Customers**. This is particularly important in the water resources stretched south East of England.

The proposed bulk supply of additional water to SWS is facilitated by construction of HTWSR and associated assets. Unlike other reservoirs HTWSR is not a standalone asset; it is fully integrated into our infrastructure and relies **heavily on the use of many of our existing assets**. To help demonstrate this integration and the technical nature of the project we have developed a short video, which is included in Appendix 1.1. Water from HTWSR, once built, will in the large part be used to supply our own customers, so that water from other sources, including the River Itchen, can be released to support the bulk transfer to SWS via our western boundary into SWS's Hampshire region. Construction of HTWSR allows us to guarantee the bulk supply is **resilient to a severe (1:200 year) drought**.

We appreciate the efforts of the Ofwat team in considering the complex issues relating to HTWSR and we are grateful for the recent dialogue post the issuing of the Draft Determination. We do, however, set out here in very clear terms our **material concerns with aspects of the Draft Determination**. The Draft Determination contains untested departures from the orthodox and established regulatory regime and the published PR19 Final Methodology. Ofwat has also helpfully acknowledged, in the meetings we have had to date, that the Draft Determination does not comprise a fully developed proposition and greater detail is required. In order to help facilitate this, in parallel with this Draft Determination representation we have provided you with a series of clarification questions via the usual channels. We also consider that it is agreed that further sustained engagement outside the usual process is required in order to finalise the regulatory and delivery structure for the Project.

We hope that, **through open and sustained dialogue**, the challenges of delivering HTWSR can be addressed, and with that in mind, **we are keen to work together to make progress in the interests of all parties**. We have set out an ambitious timetable for resolution of these issues within this response. Time is already short and we consider that this timetable must be met if we are to satisfy the requirements of our Board, Ofwat and SWS in relation to progress of the project.

We focus our representation in three main areas, as set out below:

1.1.1 Financeability (Part A of this response)

Our overall financeability assessment concludes that, **given there is significant uncertainty as to key aspects of the separate price control, the Board is unable to conclude on the overall financeability of the Combined Business Plan at this time**. Further there are certain areas of Ofwat's proposed treatment of HTWSR which we consider will result in significant financeability challenges. Where this latter scenario is the case this response sets out an alternative proposal that we believe would if accepted be financeable.

We have set out our key financeability concerns in Part A of this response, including **qualitative analysis to support our view that the appropriate WACC for HTWSR is, as a minimum, the Company's wholesale WACC of 3.26% for the forthcoming price review period**. We also consider that the WACC for HTWSR should be our Company specific wholesale WACC in each subsequent price review period. If a different view were to be taken by Ofwat in relation to the WACC for HTWSR or the applicability of our Company specific wholesale WACC in subsequent price review periods we would strongly advocate a WACC position at the higher end of the range established by the EY analysis referred to in section 1.4 for the forthcoming price review period. Furthermore, such a position would necessitate a considerable adjustment of our overall representation.

Our overall financeability assessment, is set out in Chapter 2.

1.1.2 Regulatory Clarification (Part B of this response)

There is significant uncertainty in the current Ofwat proposals in respect of the proposed price control framework and associated key assumptions. **We require clarification in these areas to ensure we have the appropriate level of regulatory certainty to facilitate investment on a basis that represents value for customers**.

1.1.3 Timetable

We have committed significant time and resource to facilitate this important and regionally significant project. We have already spent c.£3m in development costs. We have a capable and experienced team in place to further progress HTWSR as set out in our IAP response. Through reliance on Ofwat's position on Transition Spend, as well as our arrangements with SWS relating to development cost expenditure, we will continue to progress activities relating to HTWSR (including

further ground investigation, programme development and finalising the commercial arrangements relating to the tender of the main works contracts) whilst at the same time progressing the regulatory discussion with yourselves.

Until recently we have been discussing the Bulk Supply Agreement (BSA) with SWS, but now **we are unable to make any further substantive progress on key areas until we have clarity around the separate price control regulatory mechanisms, the approach to economic profit and the WACC for HTWSR.** Many of the remaining BSA issues relate to risk, and therefore the uncertain position in relation to the regulatory framework, the WACC and Economic Profit (EP) means that we are unable to make progress on key risk positions such as damages payable to SWS for failure to supply water. We need regulatory clarity so that we can progress the key commercial aspects of HTWSR. **The project is already on a tight timescale;** all aspects of our construction programme (site preparation/environmental mitigations, construction, filling the reservoir) post planning permission are weather and environment dependent and there is **limited potential to incorporate further delay** to meet SWS's 2029 deadline for securing new water supplies. Considerable progress has been made on the project, and, once we have regulatory certainty, we can rapidly proceed to final agreement of the BSA. A detailed engagement plan setting out the timetable for engagement with Ofwat to discuss and agree key issues is detailed in section 1.15

1.1.4 Overall Approach to Our Response

In our response we are **seeking to balance a range of issues to meet the needs of various stakeholders;** including our Appointed Business, our customers, SWS's customers, Ofwat, Investors and Lenders. **Throughout this document, where possible, we have suggested alternative workable proposals that seek to balance the needs of the stakeholders, and we would like to engage further on this.** To support this engagement we have as mentioned above set out a detailed proposed engagement timetable within this response.

1.1.5 Summary of References to Ofwat Draft Determination Areas

Ofwat Reference	Summary of Ofwat Required Interventions	Representation Chapter Reference
PRT.CMI.A1	We are intervening to propose a separate control related to the Havant Thicket reservoir. Further information is provided in 'Havant Thicket Policy Issues.'	1.3 We have set out the key areas where we need regulatory clarification in Part B, including a proposed timetable to complete. We have set out our key financeability concerns and suggested remedies in Part A. We have commissioned external advice from EY on

		the proposed level of the WACC which is appended to this response.
PRT.CE.A1	<p>In assessing the Havant Thicket reservoir development scheme we apply an efficiency challenge and exclude costs relating to assets such as car parks from which Portsmouth Water may earn an income and that are not directly related to making a transfer of water to Southern Water.</p> <p>Company to provide further detail regarding how assets relating to the Havant Thicket reservoir development with the potential to earn income will be treated in the bulk supply agreement with Southern Water.</p>	<p>1.6</p> <p>We have provided further information on the breakdown and justification for the costs in section 1.6</p>
PRT.RR. C1	<p>We have set the tax allowance to zero in the separate control for Havant Thicket in the draft determination. We expect the company to provide updated tax information for each control as part of any representations on the draft determination along with evidence of the assurance, consistent with our expectations on the original business plan information. We have not taken account of the information on tax provided by Portsmouth Water for the Havant control in its query response to PRT-DD-RR-004 at this stage.</p>	<p>1.20</p> <p>We have undertaken additional analysis and external assurance in relation to the tax treatment of the separate price control. This has been reflected in updated Ofwat tables.</p>
PRT.CMI.A1	<p>We still have concerns about the residual risks to Portsmouth Water customers, because:</p> <ul style="list-style-type: none"> • the potential impact on customers is high if they are left with stranding risk because this is a significant project relative to the size of the company; and • the agreement with Southern Water has not been finalised and We are intervening to propose a separate control related to the Havant Thicket reservoir. Further information is provided in 'Havant Thicket Policy Issues.' 2 so the terms are still mutable. We additionally have 	<p>We are not able to provide BSA income for reasons set out in section 1.1.2.</p>

	concerns for the protection of both companies' customers regarding the inclusion of assets with the potential to earn income within the commercial arrangements and consider further detail of the companies proposed approach in this area is required.	
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1.1.6 Summary of our response to the Draft Determination in respect of HTWSR

A summary of our response to the key issues from the Draft Determination is set out in the following table:

Area	Acceptability	Summary Rationale	Section Reference
Separate Price Control	Potentially Acceptable , provided that it is for cost transparency reasons only and wider challenges in respect of the detail of the separate price control are addressed	We accept that a separate price control can have benefits for cost transparency. However, we do have financeability concerns about new bespoke aspects of the regulatory framework.	1.3
Lower WACC	Not Acceptable	This raises significant challenges in respect of financeability.	1.4
10-year duration for price control	Potentially Acceptable , provided that the detail of the mechanic is fully developed and there are appropriate re-set mechanisms	We recognise the challenges of differentiating between cost slippage and cost increases at PR24. It will be necessary to develop sufficient mitigants to ensure what has been proposed does not adversely impact the Company – for example it is too early to fix costs for 10-years and setting a 10 year WACC gives us financeability concerns. We have not developed at this time an operating model so are unable to accurately estimate opex (which will be required at the end of the initial ten year period of the price control).	1.5
Disallowed Costs	Partially Acceptable . We	Our cost estimate is appropriate for the present stage of the project. However, we propose an alternative cost re-set mechanism for capex costs that we	1.6

	accept an efficiency challenge of £1.6m.	consider represents a better balance of risk between our interests and those of SWS customers.	
Performance Commitment	Acceptable in principle subject to agreement of detail	We have set out principles in relation to a time-related penalty only ODI.	1.9
Cost Sharing	Not acceptable.	We consider there are logical inconsistencies with what has been proposed. We also consider there is a significant level of further detail required in respect of Ofwat's proposals.	1.10
Economic Profit	Inconclusive.	We also consider there is a significant level of further detail required in respect of Ofwat's proposals. We welcome discussions we have had on this issue with you and welcome continued dialogue. We need to work with Ofwat to establish an economic profit framework that appropriately incentivises investment by providing clarity concerning the mechanism and timing for realisation for the incentive.	1.11

1.2 Part A: Financeability – Introduction

Financeability issues are set out in sections 1.2 to 1.6.

- Our view is that **it is not possible to conclude on the financeability of HTWSR based on the Draft Determination because there are a number of bespoke regulatory approaches and mechanisms which have not yet been fully defined.** Our analysis for this is set out in Chapter 2.
- Our view is that a separate price control may not be a significant issue, but that **any separate price control must, from a regulatory perspective, be treated consistently with Business as Usual (BAU) water for it to be financeable** and the full detail of any such separate price control must be acceptable; further detail is set out in section 1.3.
- The proposed **lower WACC for HTWSR is a significant financeability issue as well as distorting the balance of fairness between our customers and SWS customers;** further detail in this regard is set out in section 1.4.
- We recognise that a 10-year price control may have some benefits, though there are **some financeability challenges associated with this new structure;** further detail on these are set out in section 1.5.
- We welcome Ofwat's challenge concerning the efficiency of costs, however **we do not agree with Ofwat's decision to disallow costs in certain areas;** we provide further detail to support our view in section 1.6.

- To address our concerns relating to the timing of setting the proposed cost allowance for HTWSR we have **suggested alternative proposals to set costs** in section 1.5.6.
- We have provided an assessment of financeability in Chapter 2, together with the conclusion from the Board in the Board Assurance Statement.
- There are a number of other clarification points set out in section 1.7 to 1.20, which will need to be resolved through the PR19 process to avoid introducing further uncertainty; these points in themselves are presently considered to represent a significant financeability issue.
- **Our financeability assessment in Chapter 2 does not assume any EP.** This is because of the uncertainty over the regulatory framework as well as the nature of economic profit itself being of a different character than that of revenue derived from the WACC. We provide further detail in section 1.11.

1.3 **PRT.CMI.A1 The Impact of a Separate Price Control**

This section addresses PRT.CMI.A1:

We are intervening to propose a separate control related to the Havant Thicket reservoir. Further information is provided in ‘Havant Thicket Policy Issues.’

We accept that there is a case for a separate price control driven by the need to demonstrate transparency and customer protection. However, our view is that the proposed bespoke features of the separate price control, in particular the WACC and regulatory mechanisms relating to the 10-year duration, provide material regulatory uncertainty over future price controls for financiers and credit rating agencies. Our view is that a divergence from BAU water industry positions and PR19 methodology has a material negative impact on financeability – this is discussed in more detail in section 1.3.1.

We are unable to conclude that the separate price control is financeable on a Standalone Basis – we set out the reasons for this in section 1.3.2.

1.3.1 **Bespoke Features of the Price Control have a Negative Impact on Financeability**

Regulatory certainty is a key consideration for assessing financeability. We consider that many of the proposals contained in the Draft Determination are bespoke to the HTWSR. This results in significant uncertainty concerning the financeability of the project.

Fitch’s “Credit Rating Guidelines for Regulated Utility Companies” states that “Among the largest risks of regulated utilities are unfavourable regulatory policy and unpredictable regulatory outcomes (lack of “transparency” in the regulatory process)”. This concern was illustrated by the significant coverage of the transparent regulatory process within the Thames Tideway Tunnel (TTT) Bond Prospectus¹.

¹ https://www.rns-pdf.londonstockexchange.com/rns/7680Z_-2016-5-31.pdf

As Ofwat colleagues are aware, in the development of the model for delivery of the TTT, one of the few projects with a bespoke regulatory framework, the issue of minimising regulatory uncertainty was one of the key drivers in developing a financeable model.

The features of the TTT structure are well known to Ofwat, but below we re-emphasise the facets of that structure designed to minimise regulatory uncertainty:

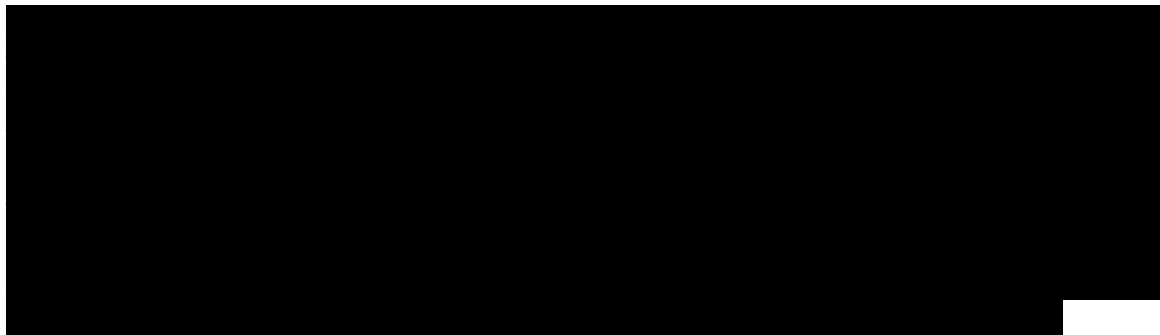
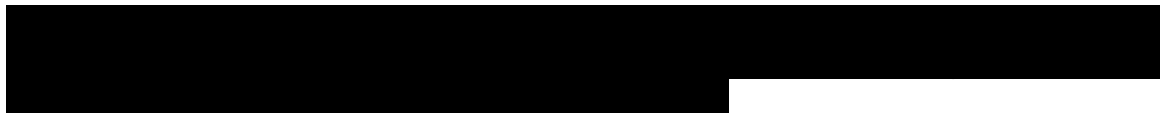
- Log up of revenues to a probability remote cost outturn threshold;
- Revenue building blocks frozen for overall construction period;
- Very limited retrospective regulatory review of costs in terms of scope (only basis being gross negligence/wilful misconduct);
- Economic guidance providing parameters for assessment of the WACC and regulatory framework post construction (plus a further period of time); and
- A full project cost and risk estimate, which was heavily scrutinised by Ofwat as well as during the competitive process, covering the entire construction period.

We are not proposing that the features of the TTT project are replicated for the HTWSR, given that this process will take further additional time. In some cases our context doesn't warrant a full transfer of such features. However, we believe that the TTT model does support our view concerning the degree of required regulatory certainty to support financeability where bespoke and project specific arrangements are being implemented.

The additional bespoke features of the proposed separate price control mechanism that we consider materially increase financeability risks from a credit rating perspective, are analysed in Appendix 1.3.1a and summarised as follows:

Area	Increase in Risk Factors
10-year duration of price control	<p>Absence of reset mechanism at year 5 to allow for flex for pricing to reflect:</p> <ul style="list-style-type: none"> • mature assessment of cost and programme • maturity of design and engagement with the construction market • mature assessment of ground condition risk • mature assessment of asset protection risk • planning conditions • unforeseen consenting obligations • operating costs assumptions for a new asset • changes in law • movements in costs • longer timeframe over which inflation indices may change • longer timeframe of exposure to political uncertainty • longer timeframe of exposure to changes in tax policy

WACC Uncertainty	<ul style="list-style-type: none"> • Precedent of a separate price control with its own WACC raises uncertainty over the level of the WACC that will apply in future price control periods • A 10-year WACC adds other uncertainties not considered in Ofwat's current assessment of the industry WACC • Revenues and financeability materially impaired as a consequence of reduced WACC
Disallowed Costs	<ul style="list-style-type: none"> • Revenues required in order to fund the project reduced as a consequence of disallowed costs
Other	<ul style="list-style-type: none"> • A bespoke price control provides a new regulatory framework, unsupported by guidance or consultation, increasing actual and the perception of regulatory risk • Separate price control does not provide financial track record that can be considered in assessment of financial robustness • For a separate price control to be financeable in its own right, equity will need to be separately identified for the Core Business and HTWSR.



1.3.2 The Financeability of a Separate Price Control on a Standalone Basis is Uncertain

We have undertaken the financeability assessment based on the approach set out in the PR19 guidance, taking account of the primary financial ratios set out in table 11.1 of the PR19 guidance. Our assessment of the notional standalone structure is set out in Chapter 2.3.7 and the actual standalone structure is set out in Chapter 2.3.13.

Whilst it is possible to consider standalone financeability using quantitative analysis of key indicators such as cashflow and financial ratios, our view is that the novelty of mechanisms creates regulatory uncertainties that adversely impact our overall assessment. Considering this wider range of factors, we are unable to conclude that the separate price control is financeable on a standalone basis.

We have concerns over the application of Ofwat's standard notional assessment to novel regulatory arrangements.

We consider the main issues that result in uncertainty over the view that credit ratings agencies will take are as follows:

- Divergence from BAU water risk and absence of precedent for approach - as noted in section 1.3.1, views of credit rating agencies become less predictable for bespoke regulatory approaches; and
- Lack of business track record – for a separate price control, we will not be able to demonstrate a track record of stable operational cash flows.

The precedents for raising finance on a standalone basis are not appropriate comparisons to HTWSR:

- Project Finance / PFI/PPP projects provide a precedent for raising finance on a standalone basis; however, we do not consider that this is an appropriate comparison because Project Finance / PPP projects include risk pricing and long term revenue certainty within the contract structure which does not exist in our proposals. We will be unable to demonstrate to credit rating agencies that risk is adequately priced to support raising finance in the same way as a DPC project might.
- Thames Tideway Tunnel (TTT) provides a precedent for raising finance on a standalone basis; however, we do not consider that this is an appropriate comparison for a number of reasons including the fact that actual financeability (generally and of the regulatory framework to support finance raising) was tested in a competitive environment.

1.4 **WACC for the HTWSR Price Control**

We do not agree with the case for a lower WACC for HTWSR. Our view is that:

- The bespoke WACC will have a negative impact on financeability – see section 0;
- The proposed WACC is not in line with the risk profile of HTWSR – see section 1.4.2;
- A lower WACC during construction is contrary to the normal profile of returns on infrastructure projects – see section 1.4.3;
- It is not appropriate to adjust the WACC to reflect embedded debt – see section 1.4.4; and
- The lower WACC exposes our own customers to risk and disincentivises water trading – see section 1.4.5.

We commissioned EY to undertake analysis relating to the appropriate WACC for a project such as HTWSR. Their full report is included in Appendix 1.4.

The above factors supported by EY's analysis lead us to propose **that the WACC for the separate price control should be at least equal to the Company's wholesale WACC. We also consider that the WACC for HTWSR should be our Company specific wholesale WACC in each subsequent price review period.**

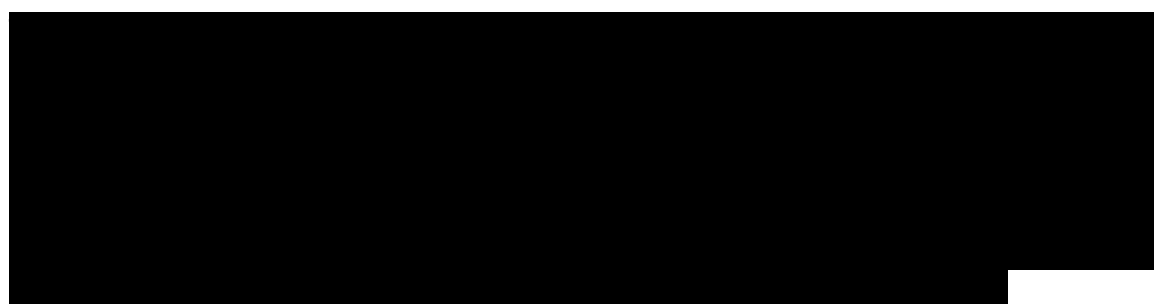
If a different view were to be taken by Ofwat in relation to the WACC for HTWSR or the applicability of our Company specific wholesale WACC in subsequent price review periods we would strongly advocate a WACC position at the higher end of the range established by the EY analysis referred to above for the forthcoming price review period. Furthermore, such a position would necessitate a considerable adjustment of our overall representation.

1.4.1 Bespoke WACC has a Negative Impact on Financeability

Reference to Ofwat's own analysis shows that there is a negative impact on our notional financial ratios – set out in section 1.4.5 and Chapter 2.3.8.



1.4.2 The Proposed WACC Does Not Reflect the Risk Profile of HTWSR



Ofwat's proposed WACC appears to have only been considered from an imbalanced and "downwards only" perspective. BAU WACC reflects a "business as usual" water risk base. While Ofwat may make adjustments for embedded debt there are a number of aspects of HTWSR that have additional risk such as:

- SWS counterparty risk; comfort is derived from license conditions, and the protections that we are building into the BSA. However, there remains a risk, and we need to ensure that this is remote from our own customer base.
- SWS will be looking for significant damages for our own failure to supply. We are negotiating what we consider an appropriate level of damages. However, the erosion of financial headroom impairs our ability to undertake an appropriate analysis to conclude what we consider as an appropriate level of damages.
- While some of these matters set out above may (to some extent) have other mitigants in the commercial arrangements that we are discussing with SWS (such as for example credit support from SWS in relation to its payments under the BSA) we consider they should not be overlooked in determining an appropriate WACC for the project.

1.4.3 A Lower WACC During Construction is Contrary to the Normal Profile of Returns for Infrastructure Projects

Ofwat's approach appears to be contrary to the normal profile of returns for infrastructure projects, where risks are more material during construction (primary

phase) than in the operations (secondary) period. EY 'Infrastructure Investments' report (2015) states that "*Higher risk is associated with construction-phase projects due to completion and usage risks.... the primary phase of an infrastructure project poses much greater risk in terms of both variety and magnitude than the second phase.*"²

There is significant independent evidence to support this;

- from a debt perspective in the UK PFI/PPP market several re-financings have taken place post construction since 2015 (notably, the refinancing of significant portfolios held by Equitix and Amber as well as the Highways Agency refinancing of the M25); and
- from an equity perspective, secondary market transactions for equity in UK PFI/PPP typically occur post construction and result in significantly lower returns to investors.

The analysis set out in section 6 of the EY report provides further evidence for a higher WACC during the construction period.

1.4.4 It is not appropriate to adjust the WACC to reflect Embedded Debt

If Ofwat was to apply the embedded debt adjustment to all water companies on a clear and consistent basis, this would be less challenging for us. However, Ofwat has stated that it has no policy in this area. As far as we are aware Ofwat has not made adjustments to other water companies' cost of debt to reflect different proportions of embedded debt. We therefore consider that the proposed approach appears to discriminate against the Company compared with other water companies and creates regulatory uncertainty from the perspective of prospective financiers across the sector.

Given that we consider the proposal is inconsistent with Final PR19 methodology³ our view is that this will itself be of concern to credit rating agencies and lenders, as it will relate to the predictability or otherwise of the regulator in future regulatory determinations.

Furthermore we consider the approach taken in respect of embedded debt and setting a lower WACC may be unduly prejudicial to smaller water companies:

- Small companies tend to issue debt infrequently (due to high relative transaction costs and minimum scale to corporate bonds). In addition, their investment programmes have been smaller than the WaSCs;
- As a result their new debt as a % of industry average tends to be low;

² [https://www.ey.com/Publication/vwLUAssets/EY-infrastructure-investments-for-insurers/\\$FILE/EY-infrastructure-investments-for-insurers.pdf](https://www.ey.com/Publication/vwLUAssets/EY-infrastructure-investments-for-insurers/$FILE/EY-infrastructure-investments-for-insurers.pdf) Page 19

³ Paragraph 10.7.1 of Ofwat's Final Methodology states: "The actual cost of embedded debt varies significantly between companies, and we expect that this will drive a range of under and outperformance relative to our allowance over the period 2020-2025. This range of performance is driven by the financing arrangements of each company and the timing and tenor of debt issuance. This is consistent with our long-held policy that companies and investors should bear the risk associated with their financing arrangements, not customers."

- During the last 10 years of falling interest rates they have generally therefore been penalised by Ofwat applying an industry wide % of new and embedded debt.
- Ofwat's basis for reducing the WACC is that this will be funded by new debt. It appears to us that Ofwat would have been less likely to apply a bespoke WACC had HTWSR been delivered by a large company, because the expenditure would not have caused a big shift in the new debt % as it would for the Company in respect of HTWSR (by way of reference, Thames Water was not administered a discount to its WACC in respect of the TTT price control on account of embedded debt); and
- Under the proposed embedded debt adjustment, the Company receives an adjustment for low cost new debt for a number of periods but does not get a benefit for periods when there is a high ratio.

1.4.5 A lower WACC exposes our Customers to Risk and discourages water trading

We have considered the impact of HTWSR on our key financial covenants in the combined business (notional), which is set out in Chapter 2. The conclusion of our analysis, and of Ofwat's analysis is that adding in the HTWSR to the notional structure will negatively impact on our ratios. This negative impact is a 'cost' that is borne by our customers and represents an inappropriate transfer of value from our customers to SWS customers.

Ofwat's own financeability modelling using the notional structure as set out below demonstrates a degradation of key financial metrics when the separate price control is combined with the "core" business. This negative impact is a 'cost' that is borne by our customers and represents an inappropriate transfer of value from our customers to SWS customers.

NOTIONAL STRUCTURE	Core business	Including HTWSR	
Pre legacy adjustments	Average	Average	
Cash interest cover - Appointee	3.64	3.36	-0.28
Adjusted cash interest cover ratio (Ofwat) - Appointee	1.50	1.44	-0.06
Adjusted cash interest cover ratio - Appointee (Alternative)	1.44	1.39	-0.05
Funds from operations / net debt (Ofwat) - Appointee	9.20%	8.12%	-1.08%
Funds from operations / net debt - Appointee (Alternative)	8.29%	7.34%	-0.95%
Retained cash flow / debt - Appointee	7.13%	6.35%	-0.78%
Return on capital employed (ROCE) - Appointee	3.52%	3.44%	-0.08%
Return on capital employed (ROCE) (building blocks) - Appointee	3.01%	2.94%	-0.07%
Base RoRE Appointee	4.29%	4.28%	-0.01%

Moreover, Ofwat's approach means that we will be required to provide water to SWS at a discount when compared to a scenario where the water supply was to our own customers. We consider that providing water at a cheaper financing rate to SWS customers than our own customers is inequitable to our customers and may be seen as unfair by our customers.

1.4.6 Advantages and Disadvantages of a Lower WACC

We consider that the key Advantages and Disadvantages of the lower WACC to each stakeholder are as follows:

	Key Advantages	Key Disadvantages
Our Customers	None	Transfer of risk to our customers
SWS Customers	Potentially lower cost of water than SWS supply	Uncertainty of HTWSR deliverability
The Company	None	Reduced returns Uncertainty of financeability
SWS	Lower cost of water than SWS supply, and releases Totex headroom for expenditure elsewhere (potentially where there are inefficiencies)	Uncertainty of HTWSR financeability

Our view is that benefits to SWS customers should be balanced against the negative impact on our customers. Our customers will be adversely affected through a deterioration in financeability headroom (i.e. reducing headroom on ratios increases risk for our customers, potentially increasing the costs of finance for the core business).

We understand that Ofwat considers that the lower WACC is proposed partly in view of Ofwat duty to customers as a whole. We do not consider how the application of that duty in this context is fair.

1.4.7 Financing Strategy

Our preferred financing approach will involve a blend of debt and equity.

Equity will be injected into the Company in advance of debt to fund the initial stages of development. Debt in the form of a bank loan through a capex facility which will be drawn down to support construction of the reservoir. Debt tenor will match the regulatory time periods so as to allow us match the allowed cost of debt as determined in each regulatory period. Target gearing level will be consistent with the notional gearing at 60% debt 40% equity.

We expect the debt to be refinanced after the construction period, once HTWSR is fully operational at which point a more stable package in the form of a term loan or a bond will be introduced.

We do not consider that it is appropriate to adjust the WACC for embedded debt as this appears to assume that our financing strategy will be to raise equity and debt in equal proportion throughout the 10 year price control period. In practice, we do not expect our actual financing approach to match this assumption. In the circumstances set out above, where equity is injected in advance of debt, we note that proposed reduction in WACC occurs at a time when our financing costs are increased.

1.5 Duration of the Initial 10 Year Price Control

Whilst we recognise some of the benefits of a 10-year price control (particularly in relation to the difficulty of differentiating between overspends and timing slippages) we have material financeability concerns in respect of this; these concerns are set out as follows:

- The bespoke 10 year price control is not in line with BAU Regulated Water Industry practice and will be of concern to credit rating agencies and lenders – see section 1.5.1;
- We have not been asked to provide 10 year cost information for the purposes of setting a price control – see section 1.5.2;
- The 10-year price control exposes us to additional cost of capital risks – see section 1.5.3;
- We have not provided operating (and potentially capital) cost estimates to cover the full duration of the separate price control – see section 1.5.4; and
- There is a strong link between the proposed 10-year duration of the separate price control and the arguments that we make on disallowed costs in section 1.6.

In the spirit of developing a balanced and workable approach to the regulatory framework, we have suggested some alternative approaches that increase customer protections but retain the advantages of a 10-year price control. This is set out in section 1.5.6.

We have summarised the key advantages and disadvantages of a 10-year price control in section 1.5.5.

1.5.1 Bespoke 10-year price control has a Negative Impact on Financeability

We consider there are significant financeability risks in Ofwat's proposed duration of the separate price control. Aside from the main issue of the bespoke nature of the regulatory framework, the other key areas of concern from a financeability perspective are in relation to the absence of a reset mechanism to allow for adjustments to pricing to reflect:

- A mature assessment of cost and programme;
- A maturity of design and engagement with the construction market;
- A mature assessment of ground condition risk;
- A mature assessment of asset protection risk;
- The outcome of planning Reserved Matters;
- Unforeseen consenting obligations as a result of detailed design;

- Operating costs assumptions for a new asset;
- Unforeseen changes in law;
- Risk of changes in the financing market relative to the WACC;
- A longer timeframe over which to assess and manage interest rate risks;
- A longer timeframe over which inflation indices may change;
- Outcome of totex under / overperformance sharing;
- A longer timeframe of exposure to political uncertainty; and
- Longer timeframe of exposure to changes in tax policy.

We accept that there would be some revenue certainty benefit provided through a 10-year price control, but we do not consider that this offsets the downside risks which relate to the an appropriate quantum of cost allowance and holding and managing risk for an unusually long duration as set as set out above.

1.5.2 Cost Information Provided

The level of cost maturity is robust and suitable for a project at the present stage of its maturity, but not suitable to set effective and suitable cost allowances now for a 10 year period. We are planning to develop our cost, risk and programme estimates further over the coming months in line with good industry practice, project design and cost development principles. Key activities in this regard include:

- Ground Investigations and Surveys – we currently have limited on-site ground investigation survey data; the information that we have has recently been reviewed by our expert technical advisers, Atkins. They have identified the need for further on-site ground investigations to provide additional detail required to further understand the geological ground condition risks to project costs and programme. These include further clarity on where geological faults, if any, lie; confirming the amount of useable material, identifying the need for further material imports, and supporting the development of a materials handling plan.
- Planning Consent - we set out our approach to securing planning consent in our Business Plan and response to the IAP, which we developed in consultation with and with agreement of the lead Local Planning Authority, Havant Borough Council. We intend to submit an application for hybrid planning consent, comprising part full and part outline consent with Reserved Matters. Initial discussions with the lead LPA have clarified that our current assumptions on the project scope and likely Reserved Matters is appropriate for this stage of maturity. We cannot entirely finalise the entire scope and thereby cost of the Reserved Matters until we complete detailed discussions with the lead LPA as part of the pre-application process.
- Tender prices - we do not have tendered prices for the main construction works (and do not plan to have such prices until well into the procurement process) to support benchmarked cost estimates. This was a key factor that supported the establishment and acceptability of the TTT price control.

The duration of the separate price control period leaves us more exposed to currently unforeseeable cost overruns (as the totex performance reconciliation takes place at the end of the separate price control) which is a significant

financeability issue, particularly for investors, given the absence of any additional risk pricing to mitigate the impact.

1.5.3 Additional Financing Risk

The proposed duration of the separate price control period leaves us more exposed to risk of movements in cost of debt over that period. Furthermore we do not believe debt of the required volume or tenor is particularly deep. Options for mitigating this risk include injecting equity or raising the debt upfront, which would be highly inefficient or by hedging upfront, which is likely to have an additional cost. All mitigations will increase our costs.

1.5.4 Operating Costs

Operating costs are likely to be incurred during the final year of the 10-year price control. These have not currently been provided as we have not as yet finalised an operating model for the Project. It is therefore essential that a price control mechanism is available to set and review opex for the price control.

1.5.5 Advantages and Disadvantages of a 10-year price control

We consider that the key Advantages and Disadvantages of the 10-year duration of the price control to each stakeholder are as follows:

	Key Advantages	Key Disadvantages
Our Customers	No Advantages	Additional risk of financeability
SWS Customers	Increased certainty over cost allocation for future price controls Higher risk transfer than BAU water	Additional risk of financeability Need for greater risk protection in cost allocation
The Company	Increased certainty over allowed costs for future price controls	Uncertainty of financeability Increased risk of divergence in allowed costs
SWS	Increased certainty over cost allocation for future price controls	Uncertainty of financeability Would share in 50% of cost inefficiencies, where the initial cost allocation is premature. Need for greater risk protection in cost allocation
Ofwat	Ability to set ODI No need to differentiate between overspend and timing differences at PR24	Uncertainty of financeability Bespoke regulatory framework may undermine future projects

In summary we do recognise that there are potential additional benefits of a 10-year price control in providing increased certainty of cost allocation for future price controls to SWS Customers and the Company. This however should be balanced against the disadvantages to our customers and the Company of both the financeability risks and the fact that our cost submissions were not intended to be used or indeed are appropriate to be used as the basis for an overall project cost allocation.

1.5.6 Alternative Approaches Within the 10-year Price Control

There are possible measures that could be adopted to mitigate some of the risks of a 10-year price control.

We have raised a number of clarification questions with you in this regard and would welcome further discussions about these measures following the submission of our response to the Draft Determination.

A forward looking only reassessment of allowed expenditure (for the remainder of the Price Control) at a point of more enhanced design certainty

- We propose that there should be a cost re-assessment mechanism for capital cost estimates. As set out above in section 1.5.2, we do not consider that it is in the best interests of SWS customers or the Company to fix the cost estimates at this relatively early stage in the project cost estimation process.
- We set out some of the key considerations in setting the timing of when the cost re-assessment mechanism takes place below:

	Price Certainty	PW Efficiency Incentives
Post GI Surveys	Allows geological risk to be incorporated into design, programme and cost assessment.	Minimal impact – geological conditions are outside of our control.
Post Planning Determination (after GI Surveys);	In addition to geological risk, this allows outputs from the proposed additional project design works on highest risk elements for the project including outline embankment design, habitat mitigation and materials handling to be considered, and any Reserved Matters to be included into the risk assessment.	Minimal impact – planning Reserved Matters are outside of our control.

Post tender evaluation (after Determination) Planning	In addition to geological risk, further design outputs and planning Reserved Matters this option allows tender prices to be taken into account (though tender prices will not necessarily reflect a P50 cost estimate). The advantage of this approach is that it allows the market view to be considered in the cost estimate.	Medium impact – we have ability to influence an efficiency competitive process (and this is likely to be overseen by SWS), though market risk is outside of our control.
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- Our initial preference is that there is a capex cost re-set process post tender evaluation for the main works package(s) and after planning determination, grant of planning permission. A significant advantage of this approach to Ofwat and, we believe to SWS, is that (a) the scope of the scheme will have been finally determined through the planning process and (b) there is an independent reference point for costs which should provide the best level (in that costs have been competitively tendered) of assurance that the overall cost allowance is efficient.

A forward looking only reassessment of the applicable WACC (for the remainder of the Price Control) at the time of PR24 (based on cost of capital and aligned with the wider PR24 wholesale process)

- We propose that there should be a re-set mechanism for the WACC in accordance with the usual regulatory process. As set out in section 1.5.3, we do not consider that it is in the best interests of SWS customers or the Company to fix the WACC at this stage of the project.

An allowance for forward looking only capital and operating costs associated with maintenance and operations (at a time where the operation and maintenance costs for the remainder of the Price Control) are sufficiently certain (e.g. at PR24 or HTWSR commissioning or testing)

- We propose that there should be a cost allowance mechanism for operating costs and capital costs associated with operations and maintenance. As set out in section 1.5.4, any operating cost estimates were not submitted on the basis that we had not anticipated a 10-year price control.
- We do not consider that it is in the best interests of SWS customers or the Company to fix the operating costs and maintenance costs at this early stage of the project design (i.e. prior to design for planning and significantly in advance of developing an operational model). To do so, increases the risk of developing an operating approach before we have undertaken detailed design of the capital assets and potentially incur inefficient risk premia.
- We propose that we should submit estimates of the operating and maintenance costs for HTWSR at the relevant time. This will allow us to undertake and have largely completed further detailed design and have

developed a proposed operating model for HTWSR in more detail. We would be open to a discussion on whether a bespoke price review process could be considered towards the end of construction / after construction when we will be undertaking detailed planning of the operating process.

Notified Items

We would also like to discuss whether the inclusion of certain Notified Items may be appropriate – in particular we query whether the following may be permissible given the duration of the 10-year price control:

- **Ground Conditions** - Where there are material deviations from conditions established through surveys and the geology of the area.
- **Environmental Mitigations** - Ancient woodland and protected species are present on site and approval is required for proposed mitigation. Should the proposed mitigation not be accepted then there could be a significant cost and programme impact.
- **Weather Conditions** – Wetter periods during construction and dry periods during reservoir filling and commissioning could lead to a significant increase in the length of the programme.

Regulatory Comfort Following 10 Year Price Control

It would be also be necessary, from a financeability perspective, if Ofwat was able to clarify that the regulatory framework for the separate price control reverts to normal regulatory framework (i.e. 5-year price reviews and our Company specific wholesale WACC). We understand this to be the case from our discussions.

Ofwat Assurance over Cost Movements at Price-Reset

We recognise that Ofwat will required assurance relating to any revised costs, and propose that such assurance may be obtained by:

- **Transparency of Cost Information** - we have previously (in our response to the IAP) shared our cost estimate review prepared by Faithful + Gould (F+G) with Ofwat; we propose to adopt the same level of transparency over provision of future cost information, including surveys and design. We would be willing to explore whether we can provide a letter of assurance from our cost consultants.
- **Any movements in cost estimates at cost re-set will need to be justified** – as set out above, we have provided you with a capital cost estimate for the full HTWSR project. Whilst we do not consider that this is an appropriate basis to fix a cost allowance, we consider that any changes to this cost estimate should be justified and we expect to be challenged to justify any differences. We recognise that unjustified changes to the costs could result in disallowed costs which provides a strong incentive for us to be as efficient as possible.
- **BSA** – In addition to the normal regulatory controls, SWS will be the counterparty to the BSA. As such SWS will have contractual rights of audit and scrutiny. We also have already established a joint governance group with SWS in order to oversee the development of the project. This additional

level of scrutiny and oversight should provide Ofwat with additional assurance over the robustness of any future cost estimates.

- **Independent Assurance from Bidders** – Additional assurance over the cost estimate will be provided if HTWSR Main Works tender information can be taken into account in setting the overall cost allowance.

1.6 **PRT.CE.A1 Disallowed Costs**

This section addresses PRT.CE.A1:

In assessing the Havant Thicket reservoir development scheme we apply an efficiency challenge and exclude costs relating to assets such as car parks from which Portsmouth Water may earn an income and that are not directly related to making a transfer of water to Southern Water.

Company to provide further detail regarding how assets relating to the Havant Thicket reservoir development with the potential to earn income will be treated in the bulk supply agreement with Southern Water.

Ofwat has disallowed £13.8m of costs from the HTWSR cost estimate and proposed removal of £2.1m of Environmental Mitigation from the project, this is disallowed in the following areas:

- 5% efficiency challenge to HTWSR main works P50 Cost Estimates (less community benefits and environmental mitigation costs) based upon the following Ofwat observations:
 - The benchmarking completed by Faithful + Gould (F+G) indicates that comparable schemes were delivered at lower cost – we feel that it is inappropriate to use these figures to impose an efficiency challenge and this point is addressed in section 1.6.2.
 - The company selects a scheme risk allowance + estimating uncertainty @ P80 as best practice – we have selected a P50 value, the reference to P80 was an erroneous and this is addressed in section 1.6.3.
 - The reasons for selection of a 50 Ml/d pre-treatment size are addressed in section 1.6.4.
 - Opportunities – the reduced potential for opportunities as the design has developed are addressed in section 1.6.5.
- Removal of costs related to community benefits (visitors centre, carparks, etc) from the allowed costs: these items are essential for obtaining planning consent and therefore should be included in the project costs and this is addressed in section 1.6.6;
- Income earning assets – our proposals for dealing with income earning assets is set out in section 1.6.7;
- 10% efficiency challenge to network upgrade costs required to support transfer: we feel a 5% efficiency challenge would be more appropriate following the development of increased scope certainty and this is addressed in section 1.6.8;

- Removal of environmental mitigation costs from project Totex: This is addressed in section 1.6.9; and
- We have also taken the opportunity to clarify the level of contingency provided for in our submissions and this is set out in section 1.6.10.

Whilst we welcome Ofwat's detailed review of our cost estimate, we believe our cost assessment is robust and appropriate for this stage of the project. Our cost estimate has evolved over time with the original cost estimate being prepared by Arup (2009) and subsequently reviewed and updated by Atkins (Jan 2018). This was then assured by F+G (July 2018). F+G undertook a review of the scope of works of the project, the quantities of materials and labour on the project and reviewed all rates and prices against their extensive database of other projects and evidenced why rates or prices were uplifted. F+G also undertook a full risk review and completed a fully costed risk register and prepared a fully reviewed view of estimating uncertainty. The methodology and results are provided in PRT.RR.A4 Appendix 1 of our IAP response.

Our work set out above allowed for the production of a P50 estimate of the project which was submitted to Ofwat. We recognise that while in practice there may be scope to reduce costs in some areas, it is critical to recognise that costs will increase in other areas – and we believe it would be highly imprudent to accept an approach that leaves us with downside risk without potential for upside; we consider that such an approach moves away from the principle of a P50 cost estimate.

Disallowed costs at the proposed level will not allow us to reassure investors or credit rating agencies that the costs are indeed a P50 estimate. If a level of cost allowance was provided for with Ofwat's current view on disallowed costs included we consider that this would require us to redesign the reservoir with a reduced scope. Such reduced scope would provide for a lower level of volume of storage to accommodate such a challenge and this may undermine the business case for the reservoir and/or deliver less water to SWS.

To illustrate the fundamental scale of the challenge to us, a high-level analysis of accepting a 5% efficiency challenge to the submitted costs of the main reservoir works would put us at a ~P10 level of costs.

We also consider that removal of elements associated with visitor and public amenities would significantly compromise the probability (which is currently considered to be good) of securing timely planning consent for the project if at all.

We have set out proposals for a capex cost re-set mechanism in section 1.5.6.

1.6.1 Disallowed Costs have a Negative Impact on Financeability

Adequacy of cost estimates are likely to be a key concern to lenders and credit rating agencies. To the extent that any cost estimates are not in line with our view of a P50 cost estimate, this is likely to be viewed negatively. We expect that a credit

ratings agency will consider the adequacy of funding in its assessment of a credit rating, as set out in the Standard and Poor's Project Finance Ratings Criteria.⁴

1.6.2 An efficiency challenge based upon the benchmarking data provided is not appropriate

The 3% efficiency challenge to the costs of the main reservoir works which is derived from the use of the benchmarks provided by F+G is unjustified. This benchmarking was an exercise to check the validity of our bottom-up cost build-up. A small variation from the limited number of data points indicated that our costs were reasonable. However, the bottom-up estimate produced by Atkins and F+G is considered to be more accurate than the benchmark due to its bespoke nature and therefore a better representation of the final costs of the project.

As set out in our IAP, the cost estimate is based on a P50 cost estimate including a quantified assessment of risk. The comprehensive risk assessment identified 95 risk scenarios, with estimated financial and programme impacts and probabilities based on HTWSR at that stage of development (i.e. prior to the development of the BSA principles). These were modelled using industry standard Monte-Carlo analysis methods to develop a quantitative risk assessment at P50. The cost estimate has also been fully reviewed for estimating uncertainty in line with good industry practice.

Therefore, we feel imposing this efficiency will lead to imposing downside risk on the Company, whilst removing the potential upside and we feel that this would not then be a true P50 position. This proposal goes against BAU water and sharing with customers and potentially has a negative impact on our own customers by virtue of increasing the likelihood of a negative financeability impact.

1.6.3 The HTWSR Cost Estimate is based on a P50 Estimate

We note that there was an erroneous reference in the PRT.RR.A4 Appendix 1 Cost Estimate Review v2.7 of our IAP response being a P80 estimate. This is a typographical error as confirmed in the attached email from Atkins dated 9 August 2019, set out in Appendix 1.6.3. We can confirm that the cost estimates are based on a P50 estimate.

1.6.4 The Pre-Treatment Works are Appropriately sized

The size of the Pre-Treatment works was based upon the concept of allowing the total peak discharge of HTWSR water through Farlington Water Treatment Works, 50 Ml/d, in order to allow for long-term resilience as Farlington Water Treatment Works. This was felt to be the most responsible and suitable size of the pre-treatment works as a pre-treatment works sized at 21Ml/d, the average deployable output under a severe drought, would result in a loss of flexibility which would not

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https://www.spratings.com/documents/20184/86990/SPRS_Project%2BFinance%2BRatings%2BCriteria%2BReference%2BGuide_FLNAL/cdfde690-57d1-4ff4-a87f-986527603c22

be commensurate with the relatively minor reduction in cost that a reduction in size would entail.

1.6.5 Opportunities

We have reviewed the opportunities identified at the time of preparing the cost estimate. An updated list is provided below:

Item Nr.	Opportunity	Potential benefit
1	The sale of surplus materials from the Project, namely topsoil and timber	£200,000
2	Potential savings in wetland design	£100,000
3	Refurbishment in place of replacement of the Bedhampton pumps	£750,000
4	The earth embankment could be constructed in two seasons rather than the three seasons allowed	£3,750,000
	Total Value of Opportunities	£4,800,000
	Expected Value for Opportunities	£1,000,000

The design development we have carried out since identification of the opportunities has resulted in three of them being discarded. The expected value of opportunities has reduced from £1,375k to £1,000k. As with the risk register, we will keep the opportunities under regular review.

1.6.6 Visitors' Centre and Public Amenity Costs are a Necessary Condition of Planning Consent

We have included the costs associated with the Visitors Centre on the basis that it will be a requirement of the planning permission. Local Planning Authorities have made it clear the public amenities are an essential condition to securing planning consent as set out in their draft Local Plans, and their discussions with us.

The full breakdown of the costs associated with the Visitors Centre Recreational Facilities is set out in Appendix 1.6.6; the main elements include:

- £2m for the Visitors Centre;
- £0.4m for public art;
- £0.3m for car park ticketing;
- £0.3m for Leigh Park viewpoint; and
- £0.3m for landmark viewpoint.

Local Planning Authorities (LPAs) have made it clear in public documents and draft plans, and their discussions with us about the project that the public amenities are

an essential condition to securing planning consent. As this is the case, we would expect these to be costs that are allowed.

A review of our proposed visitor facilities undertaken by Planning Solutions Consultants Limited (PSC) concluded that this proposed level of investment had ‘... the strongest fit with the key objectives considered and the site’s environmental capacity. This scenario is also best aligned with the planning opportunity and community aspirations.’ (See below for further detail).

LPAs are also clear that they do not expect facilities to be highly commercialised, although there will be potential to earn limited income. To the extent that costs of facilities are regulated costs all income from the sites will be used to offset costs that would be recovered through the BSA. We have undertaken a market and facilities review to consider the different options which estimate that there will be approximately 300,000 visitors to the site annually.

The scope of the PSC review covered various options relating to the visitor facilities and how visitor numbers could be managed without compromising neighbouring public facilities, an important principle for the Local Planning Authorities.

PSC confirmed that the proposed level of amenity infrastructure set out in our draft business plan and the cost breakdown above was appropriate for a medium level of visitor services that have been indicated as the preferred approach in consultation with the lead Local Planning authority and stakeholders. These proposals may be subject to change as further pre-application discussions the lead planning authority take place, although our discussions with them to date suggest any changes will be minor.

The PSC review was based on a detailed demographic profile of the 15, 30 and one-hour drivetime catchments from HTWSR as well as the level of forecast population growth. They assessed the range of facilities set out in our draft business plan and reflected in the levels of investment set out in the cost breakdown above to serve the local ‘recreation and days out’ market compared with 23 case examples with similar site characteristics such as the range of built facilities, presence of a large waterbody and urban edge locations.

A 14-factor weighted scoring approach assessed different levels of intensity of amenity offered, including:

- low level of intervention: low-key visitor experience with a limited range of facilities. Attractive external environment with a range of recreational trails and activities. Accessible on a year-round basis with seasonal catering kiosk.
- medium level of intervention: enhanced country park facility with visitor infrastructure and services, including a main hub in the form of a purpose-built visitor centre. The medium scenario is based on the post public consultation outline plan (2009) of Portsmouth Water
- high level of intervention: a visitor destination with a more intense level of recreation and commercial use. Introduction of a swimming beach and commercial water-sports and built facilities on a larger scale.

The PSL review identified that the level of amenity facilities proposed in HTWSR would be appropriate in both managing visitor numbers to an acceptable level and achieving the objectives that the LPAs had communicated to us. In order to meet LPA's requirements for moderate intensity of use for the site, we have removed options (and associated Totex costs) for angling and boating facilities from our current preferred option. This option scored highest on the PSC assessment criteria, and secured greatest support from the HTWSR Stakeholder Group which is comprised of a range of local organisation and community representatives.

The study also recommended that car parking charges were an appropriate approach to generate revenue income to help offset revenue costs during operation, and to manage visitor numbers to an acceptable level.

As set out earlier a full breakdown of the costs associated with the Visitors Centre and Recreational Facilities are included in Appendix 1.6.6. These costs have been subject to review, assurance and benchmarking as described in section 1.6 above. The construction elements expected to be delivered by these costs are very conventional civil engineering elements including paths, bird watching hides, and a conventional public use visitor centre building. As the costs have been developed from engineering databases of previously built examples we consider these costs are fully appropriate for the scope proposed. Opportunities for cost offset and reduction have been identified and incorporated in the overall quantitative risk assessment.

1.6.7 Revenues for the Visitors Centre

A key mitigation for the absence of revenues for the Visitors Centre under the BSA is that any revenues will be entirely netted off against opex during operations. We do not anticipate that revenues will be sufficient to finance the construction of the Visitors Centre. The PSL study referenced above recommended that car parking charges were an appropriate approach to generate revenue income to help offset operating costs. A partnership with other local facility providers has been suggested as a way of significantly reducing the costs of recreational aspects of site management and operation, which will be explored in further detail in the coming months. Finally, PSL suggested a franchise or concession approach to delivering the café facilities would be both cost effective and create the best opportunity for optimising income from this activity. Any revenue generated will be used entirely to offset operating costs of the reservoir in total.

1.6.8 Network enhancements

The Network Enhancements are necessary to support the supply of water in a 1:200 year drought. The scope of these enhancements includes:

- Relining of mains from Bedhampton pumping station to Farlington water treatment works to provide additional security of supply and capacity for the transfer of raw water from HTWSR.
- A new main from Farlington water treatment works to Nelson service reservoir to enable the bulk supply to SWS without compromising the current network resilience for our customers.

Since the production of the capex cost estimate for these schemes, we have engaged WRc and Atkins to investigate both of these proposed network upgrades as part of our Early Works study programme. WRc and Atkins' findings and recommendations have been published in their initial reports which we have recently received.

The Atkins study on potable network upgrades has confirmed the requirement for a new main from Farlington to Nelson. There is a scope associated with the chosen solution from the optioneering process which is similar in scale to that in the base cost estimate.

The WRc study on raw water transfer has recommended a solution of inserting semi-structural lining to the raw water mains from Bedhampton to Farlington in order to cope with the increase in pressures. The cost of this scope is also similar in scale to that in the base cost estimate.

However, this work is preliminary and we are reviewing the suitability of these recommendations as well as undertaking more detailed network modelling in order to confirm that the solutions proposed are optimal.

Ofwat has proposed to impose a 10% efficiency on our base cost estimate due to the lack of justification of scope of the network upgrades. In recognition of the increased scope certainty which we can conclude at this early stage following the studies from WRc and Atkins, we feel that a 5% (£1.6m) reduction in costs would be appropriate. We would however ask Ofwat to consider this in view of our overall proposal relating to cost allowances and in particular the appropriate time in the overall project timeline to set such allowances (see section 1.5.6).

1.6.9 The Environmental Mitigation Capital Grant Scheme costs are necessary to support planning consent

The environmental mitigation costs we have allocated to the project and that are contained in overall Totex are a core part of project delivery that have been developed and refined in close consultation with Natural England, the lead Local Planning Authority, and other stakeholders.

Our specific pre-application discussions with Natural England, LPAs and the Hampshire County Ecologist relating to environmental impact and mitigation have helped shape the draft environmental mitigation strategy for the project. This will be further refined as discussions with LPAs and regulators continue in the lead up to submission of our planning application.

The five core elements of the strategy are:

- Creation of a mosaic of new and high-quality habitats on the site;
- Support for enhanced land and environment management for biodiversity on adjacent sites, such as the Forestry Commission and Hampshire County Council land;
- Support for others to create new high biodiversity value habitats off-site through provision of long-term capital grants;

- Maintenance and improvement of habitats on site and adjacent land through the mechanism of a long-term site management plan; and
- Allow significantly greater protection of internationally important chalk stream habitats by substituting water abstracted.

The project costs we have allocated to environmental mitigation are those estimated to be required to deliver this strategy to the satisfaction of environmental regulators and the lead Local Planning Authority.

Natural England have been clear in their pre-application discussions with us that the environmental mitigation capital grant scheme proposed is essential to allow them to support our planning application. The level of funds at £3m for the grant scheme were proposed at their suggestion as a reasonable estimate for a project of this scope and scale at this stage. The full, 30 year scheme costs have been included within our totex as we consider that it is inappropriate to expose us to regulatory risk for the full duration of the capital grant scheme.

1.6.10 Our proposed levels of contingency are in line with good industry practice

Ofwat has raised during the course of meetings a question relating to the levels of contingency provided for in our cost allowances. Specifically, we understand that clarification is required relating to costs that are addressed within high level cost headings. This clarification is as follows:

Where we have stated 'Contractor's On-Costs', we are referring to the Contractor's 'Preliminaries, General Items and Profit'. What this is capturing is all of the in-direct cost of the Contractor delivering the direct works, so this will include:

- Management and Supervision Costs
- Site Accommodation and Facilities
- Common Plant
- Insurances
- General Labour providing attendances etc
- Common Plant (not priced in the rates)
- Site security and safety
- Overhead and profit

When we have used the term 'Risk Allowance' (or Contingency), we are referring to the combination of both the Risk and the Estimating Uncertainty (EU). Therefore, the 'Risk Allowance' or 'contingency' includes:

- The Project Risk, this being the bottom up modelled cost impact of possible events not included in the direct and in-direct works, and
- The EU, this being an assessment of the accuracy of the rates and quantities used within the estimate taking account of the maturity of the scope definition and the source of the pricing data.

It is common to include a level of Optimism Bias for projects at an early stage of development, as per the Green Book methodology. However, in the case of HTWSR we have developed a more sophisticated approach and developed an

extensive risk register which has allowed us to produce the 'Risk Allowance' as noted above. We have also included within our Risk Register a relatively small item allowance for "Unknown-Unknowns" that are not foreseen by the project team at this stage of development. This detailed approach has negated the need for an optimism bias allowance.

The Contractors overheads and profit allow for the fact that contractors will price to earn a level of profit. To clarify, the 'overheads and profit' referred to as part of the Contractor's On-Costs in no way overlaps with the 'Risk Allowance' for the project.

1.6.11 Final PR19 Financeability Assessment

Our financeability assessment is set out in Chapter 2. The Board Conclusion on financeability is set out in Chapter 2.3.14 and summarised as follows:

“...due to the level of uncertainty, explained above, in relation to the separate price control, **the Board are unable to reach a final conclusion relating to the financeability of the Combined Business Plan.**”

1.6.12 RORE Analysis

We have revised our RoRE analysis to reflect the changes under the draft determination, this is set out in Chapter 2.5.

1.6.13 Other Key Financeability Issues

There are a number of other important financeability issues that are identified and subject to regulatory clarification and, as such are set out elsewhere in this document, including:

- Performance Commitment – this is discussed in section 1.9;
- Cost Sharing – this is discussed in section 1.10; and
- Revenue Forecasting Incentive – this is discussed in section 1.13.

1.7 Part B: Regulatory Clarification – Introduction

Regulatory Clarification issues are set out in section 1.7 to 1.20.

Our proposed approach for the BSA is to charge a Capacity Charge for water that is equal to regulated expenditure for HTWSR (prior to netting for BSA revenues) plus a commercially agreed level of economic profit. We had designed this approach to work alongside the regulatory regime as we understood it prior to the Draft Determination. As stated above there are a number of changes from the orthodox BAU regime in Ofwat's proposed approach at the Draft Determination and we consider there are a number of gaps and uncertainties in the methodology provided by Ofwat.

Given the way in which bulk supply arrangements are accounted for and regulated it is not possible to negotiate a coherent bulk supply without clarity of the regulatory

framework. Key risk positions under the BSA (such as liquidated damages) need to be calibrated relative to the expected returns for HTWSR (i.e. WACC and Economic Profit); to the extent that this position is uncertain, we cannot progress the BSA negotiations.

We need urgent and meaningful engagement to clarify the regulatory framework in order to be able to conclude the BSA negotiations. The regulatory uncertainty caused by the Draft Determination has impacted on our negotiation position and means that we have been unable to make progress key commercial discussions relating to the BSA. The key areas are set out in more detail in this section. However, we have submitted to you our core clarifications and we reattach these as Appendix 1.8.

Our aspiration is to finalise the BSA by mid-October so that it and revenues associated with it can be taken into account in the Final Determination. A critical assumption in this, is that the regulatory framework will need to be finalised by mid-September in order for us to meaningfully re-engage with SWS on the terms of the BSA. This is discussed in more detail in section 1.15. In short, we will need a period of intensive engagement with Ofwat in the first half of September via a series of workshops in order to meet this demanding timetable.

1.8 RCV

It was not clear to us from the Draft Determination that expenditure on HTWSR logs up to our RCV, with references made to a “shadow RCV”.

At the meeting on 5 August 2019, Ofwat has confirmed that all expenditure logs up to the RCV and that in future Ofwat will publish a separate RCV for each price control including the separate price control. We welcome this clarification.

We have raised a number of other clarifications in respect of revenues logging up to the RCV – and they are set out in Appendix 1.8.

1.9 Performance Commitment

We would propose that we, together with Ofwat and SWS jointly discuss the correct incentives for performance (and consequences of non-performance) – including construction and supply, and the detailed mechanisms to return costs to SWS customers.

The Draft Determination states that we should be exposed to a bespoke performance commitment and associated financial penalty linked to delivery of HTWSR Main Works. This creates a significant challenge in the context of the BSA as to date SWS have requested that we provide liquidated damages for failure to supply. We will not be able to sensibly proceed with the project where we are exposed to dual jeopardy for the same instance of underperformance. Nor do we consider it is efficient or fair for a single instance of underperformance to have a dual sanction.

We agree with Ofwat that the optimal scenario may be Ofwat regulated performance commitments (this may require some level of comfort being provided

to SWS where failure of water supply arises as a result of our failure). We would like to work with Ofwat to develop a solution on this basis. Ofwat has asked us to propose a time-based financial penalty as an ODI for completion of HTWSR.

We can agree in principle to such as ODI in accordance with the principles set out below. We however are unable to propose a final financial penalty that attaches to the ODI or agree the time to which the ODI attaches to until we have further progressed our discussions on the BSA (and have a clearer view of the wider regulatory regime).

We consider that such an ODI ought to reflect the following principles:

- The ODI will apply to us for a failure to complete dry commissioning of the HTWSR Main Works on time to the extent that delay is our fault. Note that this is defined as HTWSR Main Works, rather than HTWSR. HTWSR Main Works here relates to the scope of the HTWSR reservoir construction only and not the associated network upgrades or works at the treatment works;
- We propose that the ODI corresponds to a proportion of the liquidated damages for delay to HTWSR Main Works construction contract to ensure that risk of delay is passed down to the party that is best place to manage the risk;
- For each month of delay, we will return, through the ODI, an amount calculated as a percentage of the allowed costs which relate to the contract sum of the HTWSR Main Works according to the length of delay. This will be capped at a proportion of the allowed costs for the HTWSR Main Works;
- The length of delay will be the number of calendar months between the projected completion date of dry commissioning and the actual completion date of the dry commissioning;
- Dry commissioning involves all those tests on the constructed assets within the scope of the HTWSR Main Works that are carried out prior to wet commissioning (i.e. Reservoir filling which is dependent on the availability of spring water);
- To the extent that any LDs apply in the BSA, the ODI will need to be reduced to reflect this;
- We will be able to mitigate against the ODI, to the extent that we are able to supply water to SWS and demonstrate sufficient headroom to supply both SWS with no adverse impact on our own customers; and
- We expect that any ODI would include exceptions for force majeure events, including extreme weather conditions.

We propose the ODI provides upside for delivery ahead of schedule gains being calibrated so that we receive an amount equivalent to 50% of the monthly amount that we would incur for the ODI for delay. This is based on our expectations for our other ODIs but we would welcome engagement to consider whether a different approach could be attractive.

We note that an alternative structure is that the ODI applies to SWS, which is then passed through to us (or that no ODI applies and we and SWS agree an LD regime acceptable to Ofwat in the BSA).

We would propose that the ODI is set and calibrated at the time we updated our cost allowance in accordance with our proposals set out at 1.5.6. We consider that at this stage all relevant information will be available to us as Ofwat to set an ODI that operates both effectively and fairly.

1.10 Cost Sharing

In the Draft Determination, Ofwat has suggested the following cost under/over performance mechanic: Overspend – shared 50:50 between our investors and SWS; Underspend – 50% for SWS, 25% for our customers and 25% for our investors.

We consider that over and underspend should be aligned as per BAU water – i.e. 50:50 in each instance between relevant customers and shareholders. The rationale for this is financeability which is set out in section 1.3.1 onwards. Our preferred approach is to revert to the BAU water approach whereby over/underspends are shared 50:50 between our investors and SWS (the customer) in each case.

It is correct that our customers receive some benefit from HTWSR. Indeed, they clearly will take some benefit through lower bills as a result of the application of sharing of EP. However, it is an asymmetrical for benefits of outperformance to be returned to our customers. The approach that we have proposed is in line with BAU water and apportions risk and reward as appropriate between parties.

It is not currently clear when the Totex reconciliation will take place – it is assumed Ofwat's intention is that this will take place at the end of the price control. This also raises significant issues for us as in the event of a significant cost overrun this may present us a deterioration of cashflows for a significant period – we would like to discuss this point further with Ofwat.

Our overall cost sharing mechanics also need to be considered in the context of the approach to set allowed costs. See section 1.5.6

1.11 Economic Profit

1.11.1 Clarifications Required in Relation to Economic Profit

At our meeting on 5 August 2019 Ofwat indicated that it would welcome a proposal from us setting out a suggested approach to EP and the Export Trading Incentive (ETI) mechanism. Our views on how the proposed mechanism could work are set out in section 1.12.

In developing these proposals, we started from a set of design principles for economic profit and the ETI. We consider that these principles are appropriate for HTWSR and the BSA but are also applicable to other similar bulk supply arrangements that are delivered by significant new resource investments. As such we consider that these principles are of general relevance to Ofwat in its objective of facilitating transactions of this type.

The application of economic profit and ETI should benefit customers at the appropriate time and not result in undue bill volatility or intergenerational

shifts for our customers. Our customers will benefit from the BSA as they will receive 50% of the economic profit. The timing of such share should be such that customers are benefiting when it is appropriate for them to do so. Furthermore the mechanism for economic profit and the ETI should ensure that this does not create undue shifts in bills from one generation of customers to another, recognising the clear views for our customers in favour of bill stability. The current Ofwat mechanism for ETI, which is more suitable for smaller transactions from existing assets, does not deliver this as it can result in big swings between the customer share and the company share of economic profit from one AMP to the next.

- **Economic profit should support the financeability of HTWSR.** As outlined above the financing of such a major investment raises challenges in terms of financeability and, in particular, core credit metrics. The design of economic profit and ETI can support the financeability of the project through the way it is applied during the construction phase.
- **Economic profit should promote efficient trades in water.** Economic profit and the ETI provide the incentive for water companies to invest in opportunities to provide bulk supply trades. The way it is regulated and the certainty of the ETI should act to promote these trades and not undermine the incentive through undue regulatory risk around future treatment.
- **Economic profit should reflect the risks of investment in the HTWSR.** To the extent that development and construction of HTWSR and the BSA itself, results in risks over and above those in business-as-usual the Company's operations, it is legitimate that this are reflected in the economic profit charged above the industry cost of capital.

Having regard to these principles, our proposed approach to economic profit and the ETI has the following high-level features.

Economic profit should be charged during the construction period and should be retained by the Company. This approach is appropriate because:

- The construction period is the highest risk part of the programme and the returns should reflect the risks (and should certainly not be lower than the operational phase);
- it supports the financing and financeability of the project during the construction phase when cashflow is negative;
- It avoids potential increases in financing costs by delaying returns to investors; and
- The justification for customer benefit at this stage could be considered to be low – assets being funded by customers aren't being utilised and customer risk at this stage, on the basis of an appropriate cost allowance and an appropriate WACC is close to zero

Sharing of economic profit with our customers should commence after the water supply date. The rationale for this, beyond the financeability benefit above, is that during the construction phase the project risks are borne by our investors. Furthermore, our existing infrastructure is not used for the supply of water until that point, so it is not appropriate to share with our customers until that point.

After the water supply date, the proportion of economic profit due to our customers should be spread evenly over the life of the BSA. The rationale for this is that an uneven profile could potentially lead to undue bill impacts and intergenerational unfairness between different generations of our customers.

It also follows therefore that the remaining economic profits due to the company should be spread evenly over the life of the BSA. Compared to an upfront distribution of economic profit this may increase exposure to regulatory risk and a change in mechanism. Nevertheless, it provides a reasonable balancing of objectives across the different design principles.

These features are developed in more detail in section 1.12.

1.11.2 Changes to the WACC undermine our approach to setting Economic Profit

Our approach in discussions with SWS has been to calibrate Economic Profit relative to the economic benefits that are generated so that the costs (both social and in terms of resilience of supply and economic) of delivering HTWSR are attractive in relation to alternative options that are available to SWS to deliver their water requirements. This is something we have tried to achieve while tempering the outcome within and by reference to the regulatory framework.

As such, it is important to note that the changes to the WACC in the draft determination, as set out in section 1.4, have undermined our negotiations with SWS in relation to the level of EP. It is now clear that Ofwat's Determination has reset the overall context for our discussions by framing a level of "reasonable returns" that is not compatible with the level of risk and reward for a project and trade of this type.

1.12 Export Trading Incentive

Our previous proposal, in the IAP, was that the Export Trading Incentive would apply from PR24. This was done on the basis that:

- Firstly, in terms of consistency with internal resource decisions we note that it is standard for Ofwat to allow water undertakers to collect funding from customers for water resource schemes that are part of the approved WRMPs - even if the capacity from the scheme is not available for many years;
- Secondly, if an alternative new trade did not need a new asset to be built, the incentive would start to accrue as soon as the agreement was in place, irrespective of utilisation. It is therefore consistent with wider water resource planning, and with Ofwat's objectives for the trading incentive, if the trade in the BSA was eligible for the export trading incentive from the time at which the BSA starts. In particular, there should not be a risk that a water undertaker could lose its trading incentive if the trade requires a new asset to be built. This would result in an outcome where the exporting water undertaker would be incentivised against choosing schemes which require a new asset to be built; and
- We have received feedback from Ofwat that the current methodology for the ETI was designed for smaller bulk supply trades and understand why they

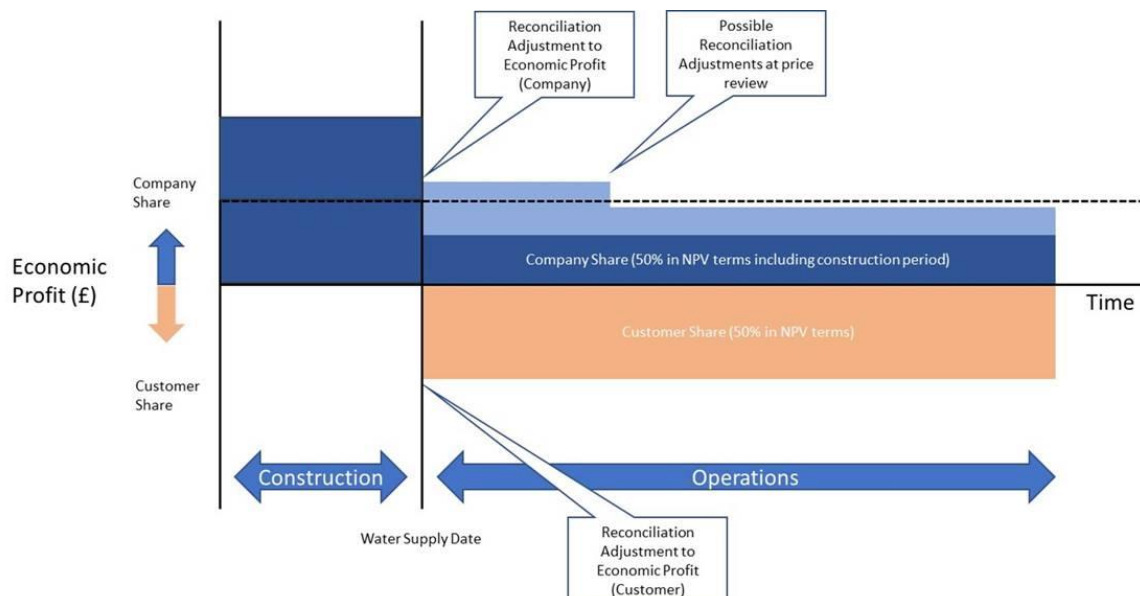
have sought to modify their approach for a supply with the characteristics of HTWSR.

On the basis that Ofwat is open to amending the workings of ETI, we propose the following mechanism for ETI:

- We charge economic profit from day one of the BSA (see position set out in section 1.11 above). During the construction phase 100% of economic profit accrues to the Company;
- Over the operational lifetime of the project (i.e. the remaining period of the BSA) economic profit is shared between the Company and our customers on a 50:50 basis in NPV terms, in line with the existing methodology; and
- We propose to agree a fixed quantum of economic profit as part of the BSA. The intention is that this is broadly consistent with a stable economic return on RCV over and above the cost of capital.

The mechanism of the ETI is changed so that the sharing between our customers and the Company is more consistent over time.

Our proposals are summarised in the following diagram:



Ofwat has proposed that there should be a reconciliation of economic profit (and therefore the ETI). We are open to the inclusion of reconciliation mechanism, although at this stage we are unclear how this would work, and we would welcome clarification from Ofwat and the opportunity for further engagement on the design of the mechanism. Our initial views on the design of any reconciliation adjustment are as follows.

- The mechanism should exclude the impact of any ODIs or other service performance adjustments on the basis that it could create unintended consequences and distort the intended incentive properties;
- The mechanism should compare returns to the allowed cost of capital and therefore should exclude the impact of financing out- or under-performance. The allowed cost of capital would already capture movements in debt costs

through the indexation mechanism and movements in equity costs are too difficult to verify and would result in undue risk and uncertainty if included;

- i. The reconciliation mechanism would therefore adjust for revenue out-turns under the BSA and cost out-turns. We are unclear at this stage how Ofwat would propose to deal with cost out-turns, given the over-lap with the regulatory totex cost sharing rules. One option would be to measure out-turn economic profit based on a return on actual expenditure rather than a return on RCV. However, this would raise a number of implementation issues and the interaction with the cost sharing rates could create further unintended consequences; and
- We assume that this reconciliation would apply at the end of the 10-year price control. We are open to whether there is further reconciliation at subsequent 5-year controls. We would not expect any material variations after the first 10-year period.

Based on the principles set out above and subject to the clarifications highlighted, we consider that the ETI mechanism could be developed in line with the following. We would like to confirm this with Ofwat.

- As set out above, we charge economic profit from day one and during the construction phase 100% of economic profit accrues to the Company;
- After 10 years, the lifetime economic profit would be estimated. This would reflect the reconciliation mechanism (subject to the clarification points above) and projected costs and revenues for the remainder of the BSA;
- ETI would be calculated economic profit over the operational lifetime of the project (i.e. the remaining period of the BSA) is shared between the Company and our customers on a 50:50 basis in NPV terms;
- The company share of economic profit after the first 10 year period would be adjusted to reflect the actual economic profit that had been earned by the company in the first 10-year period. This would result in a percentage for the company of the remaining economic profit that was somewhat less than 50%; and
- We propose that the ETI should be calculated as that fixed percentage of economic profit in each year for the remainder of the BSA, subject to potential further reconciliation (if any).

There are a number of benefits of our proposed mechanism.

- It enables the Company to receive the benefit of EP in a timely way and will ensure a consistent profile of sharing between the Company and our customers;
- It will support the incentive to offer bulk supplies based on new capacity (which is one of Ofwat's objectives) and, in terms of incentives, bring it more into line with the timing of the ETI for supplies based on existing assets;
- It reduces (though does not eliminate) regulatory uncertainty associated with the ETI. We would expect Ofwat to agree to apply the ETI as proposed to minimise any perceived risk that its application could be reopened at subsequent price controls; and

- By generating cashflow and profit in the early years of HTWSR it will support financial metrics and the financing of HTWSR.

1.13 **Revenue Forecasting Incentive (RFI)**

The Draft Determination confirmed that the separate price control for HTWSR will fall outside the RFI, although it was stated that there is a need to make small refinements to the RFI formula and associated definitions to ensure that the RFI works correctly for the wholesale controls. We would like to understand the RFI adjustments that will need to be made to our wider business – we note that this could potentially have an impact on financeability which has not been considered in Part A.

We would also propose/discuss that expenditure reflected in the Volumetric Charge is treated as an excluded expenditure for the purpose of Totex cost sharing. This would avoid the prospect of over-recovery of volumetric expenditure from SWS. There would be two options for this. First, the volumetric expenditure is separately recorded and excluded from the cost sharing. Second, the volumetric revenue is used as the basis for the exclusion. The second option would be simpler to implement and would mean that SWS would share the cost / benefit if actual volumetric expenditure was greater / less than the allowance.

Under the BSA Volumetric Charges will be re-baselined every five years by agreement or reference to an independent expert. Volumetric Charges will only reflect our incremental costs per litre supplied. It will be charged monthly in arrear when water is flowing – as such it is a pure cost recovery mechanic. We would suggest it is more efficient to carve this out of forecast Totex (and the revenue cap) as this will avoid artificially contaminating Totex reconciliations.

1.14 **Reconciliation Model**

We have proposed a suggested approach to the reconciliation model which is set out under section 1.12.

1.15 **Input into BSA**

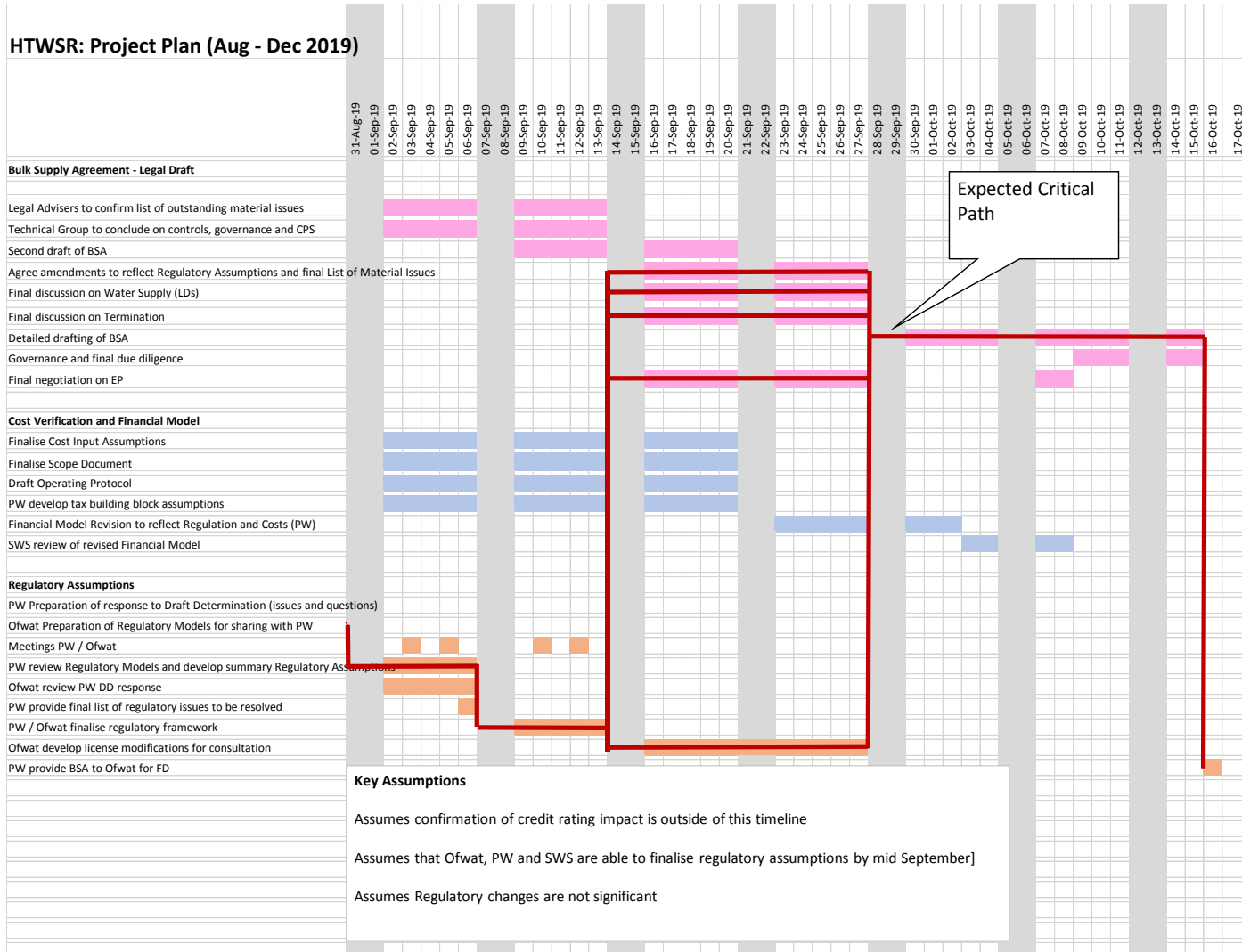
As noted within this section, the regulatory framework underpins the BSA. Therefore, finalisation of the regulatory framework is a critical path activity for us. We have set out a suggested timetable to complete the BSA by the middle of October 2019.

Our timetable assumes:

- Bi-weekly meetings/workshops between Ofwat and PW until mid-September;
- Ofwat shares its regulatory models with PW at the end of August;
- PW and Ofwat agree a final Regulatory Framework by mid-September;
- No material changes in the Regulatory Framework;
- PW and SWS are able to negotiate and resolve all key commercial issues by the end of September; and

- BSA is in final agreed form by mid-October and submitted to Ofwat, so that it can be reflected in the Final Determination.

This is a challenging timetable, with little or no contingency if this is to be taken into account in the Final Determination.



Our intended approach to the BSA is that Ofwat’s assessments of allowed revenue (excluding deductions for third party income under the BSA) are used to determine the Capacity Charge, as such it is important that Ofwat’s determinations are presented in a way that enables spend to be isolated (both in terms of opex and capex).

At a high level the intention is that the Capacity Charge will be equal to the calculation of allowed revenue for HTWSR determined by Ofwat (excluding any deductions of income arising as a result of this Bulk Supply Agreement) plus a commercially agreed amount of economic profit.

This timetable would also allow us to deal with the appropriateness of any proposed license modifications.

1.16 **Netting of Revenues**

We have raised clarifications with you regarding the netting of revenues.

This is in line with our expectations; however we would like Ofwat to provide clarity over the following sentence: "... this can include other services."

1.17 **PAYG**

The Draft Determination confirmed that all expenditure will accrue to the RCV.

This is in line with our expectations; significant capital expenditure costs accruing to the RCV will ensure costs are placed appropriately for SWS customers.

One area in which we would like clarification is that we have not provided an operating cost estimate for the period following construction. We propose that future Opex related to the HTWSR should also log to the RCV. However, if Ofwat has a different approach to future treatment and an appropriate PAYG ratio it would be helpful to understand this.

1.18 **Depreciation**

The Draft Determination confirmed that the intention is that the RCV will depreciate on a straight-line basis to an end date 80 years after the assumed start date for the BSA.

This approach is in line with our expectations albeit we would like to confirm the treatment of future expenditure e.g. renewals/replacement activity and future Opex requirements.

1.19 **Scope of Separate Price Control**

The scope of the separate price control will include any investment in new assets. For the purposes of the BSA we defined these in the HTWSR BSA Scope Document, which is set out in Appendix 1.19. Our proposed approach under the BSA is the costs associated with new infrastructure (pre and post construction) are recovered under the BSA. We propose that the scope of the separate price control is as set out in Appendix 1.19.

1.20 **Tax**

This section addresses PRT.RR.C1:

We have set the tax allowance to zero in the separate control for Havant Thicket in the draft determination. We expect the company to provide updated tax information for each control as part of any representations on the draft determination along with evidence of the assurance, consistent with our expectations on the original business plan information. We have not taken account of the information on tax provided by Portsmouth Water for the Havant control in its query response to PRT-DD-RR-004 at this stage.

Our response to this is set out in Chapter 2.6.

2 FINANCEABILITY

2.1 Executive summary

The key highlights of this section are as follows:

- The reduction in WACC has significantly tightened financeability and reduced headroom against key financial metrics (2.3.14)
- Key assumptions underpinning the financeability assessment relate to;
 - A PAYG adjustment of 3.5% (2.3.4)
 - No further reduction in underlying WACC (including Company Specific Premium) (2.3.12)
 - Ofwat's acceptance of the Company representation relating to the WRFIM treatment of Connection Charges for PR14 (2.3.2)
 - HTWSR price control WACC of at least equal to the Wholesale price control WACC of 3.26% (1.2.2) and Company specific wholesale WACC in each subsequent price review period.
- The Board has concluded upon a financeable plan for the Core business (2.3.14 & Board Assurance Statement)
- The Board is unable to conclude on financeability for the Combined business due to uncertainty relating to regulatory mechanisms for the HTWSR price control (2.3.14 & Board Assurance Statement)
- £97 average household and bill level (in 17/18 prices) with significant customer support and commitment to maintain stable bills (in real terms) in the longer term in line with customer preference. A 4% reduction against AMP6 (2.3.4 & 2.3.10)
- Long term Investor support and commitment to inject significant capital to support the business and develop the Havant Thicket Winter Storage Reservoir
- Capital structure of c.60% average gearing in PR19 in line with Ofwat's notional company assumptions
- Resilient in the long term to a challenging suite of financial & operational down-sides including scenarios covering to delays and cost overruns of the Havant Thicket programme (2.4)
- Financial resilience supported by updated viability scenarios (2.4)
- Core Notional company RoRE range of 2.15% to -3.04% around a base RoRE of 4.33% (2.5)
- Combined (including HTWSR) Notional company RoRE range of 4.03% to -6.31% around a base RoRE of 4.31% (2.5)

2.2 Ofwat Interventions and Actions

Ofwat has raised specific Interventions and Actions in relation to Financeability and Long Term Financial resilience as follows;

Reference	Summary of intervention and action	Reference to document
PRT.LR.A5	<p>Portsmouth Water considers its targeted credit rating of Baa2/BBB is consistent with ongoing financial resilience. We note that this is one notch lower than the current credit rating. It is also one notch lower than the credit rating for the notional structure that the company has targeted and based its Board assurance statement for the notional company structure upon.</p> <p>In its response to our draft determination Portsmouth Water should provide further detail and Board assurance about its plans to maintain its long term financial resilience in the context of targeting a Baa2 credit rating (that is only one notch above the lowest investment grade rating and lower than the target credit rating the company states it targets on a notional basis), and our draft determination as referenced in PRT.LR.C1.</p> <p>In its future reporting Portsmouth Water should undertake suitably robust stress tests to support its long term viability statements.</p>	<p>The Board has set out, in the Board Assurance Statement, its conclusions in relation to financeability and long term financial resilience.</p> <p>Chapter 2.3 covers the Company and the Board's assessment of financeability.</p> <p>Chapter 2.4 covers the assessment of financial resilience.</p> <p>The Company remains committed to undertaking suitably robust stress tests to support its long term viability statements.</p>
PRT.RR.A2	<p>No intervention but further action required. Portsmouth Water has provided sufficient evidence to support the rationale for the revised target credit rating. We note, actual financeability is impacted by the lower cost of capital and the lower cost of debt associated with the separate price control for Havant Thicket.</p> <p>Pursuant to action PRT.LR.A5, the company should provide further assurance about how it will maintain its long term financial resilience and, in particular, in the context of targeting a Baa2 credit rating for the actual company structure which is lower than the target the company proposed for the notional capital structure.</p>	
PRT.LR.C1	<p>We expect companies to provide further Board assurance, in their responses to the draft determination, that they will remain financeable on a notional and actual basis, and that they can maintain the financial resilience of their actual structure, taking account of the reasonably foreseeable range of plausible outcomes of their final determination, including evidence of further downward pressure on the cost of capital in very</p>	<p>The Board Assurance Statement sets out the Board's conclusions in relation to financeability and financial resilience.</p> <p>This is supported by Chapter 2.3 and 2.4 covering financeability and financial resilience respectively.</p>

	recent market data as we discuss in the 'Cost of capital technical appendix'.	The Company has undertaken a viability scenario based on a further 37bps reduction in Cost of Capital.
PRT.RR.A3	<p>Portsmouth water has provided evidence to support the key financial ratios with the target thresholds it considers consistent with its target credit rating of Baa2/BBB albeit with limited headroom.</p> <p>We are intervening to remove the 4.8 per cent increase to PAYG rates for the water resources control and we apply an increase of 0.7 per cent to PAYG rates for the water network plus control.</p>	The Company makes a representation in relation to the application of a PAYG adjustment of 3.5%. This is set out in Chapter 2.3.4 and supported by work relating to bill levels in Chapter 2.3.10.
PRT.RR.C5	We expect companies to update their overall RoRE risk range analysis in updated App26 submissions as part of their response to the draft determination. This should take account of the guidance we have provided in the 'Aligning risk and return technical appendix' that accompanies our draft determination and 'Technical appendix 3: Aligning risk and return' published with the IAP, and the context that achieved cost and outcomes performance has been positively skewed at a sector level in previous price review periods. Companies are strongly incentivised to achieve and outperform regulatory benchmarks. Therefore where companies consider there to be a potential downward skew in forecast risk ranges for returns, we expect companies to provide compelling evidence that this is expected to be in the context of expected performance delivery of the company, taking account of the company's reported level of actual performance delivered in 2015-19 and taking account of the steps it is already taking or plans to take to deliver against regulatory benchmarks and mitigate downside risk.	<p>The RoRE analysis has been provided on both a Core and Combined company basis. We note that for the Combined RoRE analysis this is a 5 year analysis as the Ofwat model functionality does not cover a 10 year RoRE scenario. This is set out in Chapter 2.5 and is supported by technical appendix 2.5.</p> <p>We note that the underlying Monte-Carlo analysis, used to support the RoRE, is based upon historical company performance data.</p>
RR.C1	We have set the tax allowance to zero in the separate control for Havant Thicket in the draft determination. We expect the company to provide updated tax information for each control as part of any representations on the draft determination along with evidence of the assurance, consistent with our expectations on the original business plan information. We have not taken account of the information on tax provided by Portsmouth Water for the Havant control in its query response to PRT-DD-RR-004 at this stage.	We have updated our tax analysis as part of this representation process. This is set out in Chapter 2.6 together with additional table narrative. This is supported by our tax advisers KPMG and information is provided in Appendix 2.6.1.

These have been addressed in this chapter and are referred to within the body of the text as relevant. Given the complex and interrelated nature of Financeability and Financial resilience we have not responded separately to each of the Interventions and Actions but have clearly signposted where they have been addressed.

2.3 Assessment of Financeability










In accordance with the Business Plan guidance we have updated our assessment of financeability on both a notional and an actual capital structure – albeit that the primary focus has been on the actual structure as this reflects the “real life” factors which will impact the Company’s ability to maintain an investment grade credit rating.







Further information on the approach to assessing financeability was included in our submissions on 3 September 2018 and 1 April 2019. We have built upon this approach and modified it to reflect the relevant factors set out in the Draft Determination (DD).

Ofwat have intervened in order to create a Dummy price control covering the Havant Thicket Winter Storage Reservoir (HTWSR) project. This is referred to as the “HTWSR price control”. In addition, we consider financeability in relation to the “Core” business (excluding the HTWSR price control) and the “combined” business (including the HTWSR price control). This is explained further below.

The table below summarises the approach and steps taken in order to assess financeability of the business plan;

	Model used	Actions and interventions made	Reference
Start	Ofwat DD model, notional, core business	Our financeability assessment commenced by using the Ofwat DD financial models (Combined and Core). As explained below we commence the assessment using the Core business in line with Ofwat’s approach.	2.3.1
↓		Consider any modifications considered necessary to the Company’s financeability assessment process.	2.3.1
↓	PW model notional core	Correct the Ofwat model for identified modelling errors (as agreed with Ofwat) and make changes to reflect Company interventions on Capex & opex. Strip out Ofwat financeability adjustments made in the capital structure (equity and PAYG) in order to re-commence the financeability assessment from first principles. Consider financeability with reference to target credit rating, target credit metrics and comparative analysis across the industry. Conclude that financeability interventions are required in the Core notional company.	2.3.2 2.3.3
↓	PW model notional core	Calculate the level of new capital needed to fund Company requested capital investment growth beyond normal maintenance levels on a notional basis. Adjust equity on this basis by £4.5m.	2.3.3
↓	PW model notional core	Consider financeability with reference to target credit rating, target credit metrics and comparative analysis across the industry following equity injection. Conclude that further financeability interventions are required in the notional	2.3.4

		structure after equity injected to fund capital expenditure growth. Adjust PAYG levers 3.5% in Water Network to achieve target credit metrics for the Company with appropriate headroom.	
	Model used	Actions and interventions made	Reference
	PW model notional core	Consider financeability with reference to target credit rating, target credit metrics and comparative analysis across the industry following equity injection & PAYG adjustment. Conclude that further financeability interventions are required in the notional company after equity is injected to fund Company requested capital expenditure growth and PAYG adjustment. Add further equity of £4.0m to “fund” the additional Capex allowed as a result of the Ofwat cost sharing mechanisms (cumulative equity of £8.5m).	2.3.5
	PW model notional core	Consider financeability with reference to target credit rating, target credit metrics and comparative analysis across the industry following two rounds of equity injection & PAYG adjustment. Conclude that the Core business is financeable in the notional structure.	2.3.6
	PW model notional HTWSR (WACC @ 3.26%)	Consider the extent to which financeability can be assessed in the notional separate price control. Conclude that the process for notionalisation in this price control has not been set out in the regulatory feedback. However, equity financing will be required to manage Capex growth. Make the case for at least wholesale WACC required in the HTWSR control. See also Chapter 1.	2.3.7
	PW model notional Combined	Take the financeability adjustments made in the steps above into the Combined notional model (including the HTWSR price control @ WACC of 3.26%).	
	PW model notional Combined	Consider financeability with reference to target credit rating, target credit metrics and comparative analysis across the industry. Note that the combination of Core plus HTWSR results in a deterioration of ratios from the Core business model to the Combined business model. Conclude that financeability interventions are required in the Combined notional company.	2.3.8
	PW model notional Combined	Calculate the level of equity needed to fund the HTWSR HTWSR price control in a notional capital structure. Add further equity of £36m. Cumulative equity of £44.5m.	
	PW model notional Combined	Consider financeability with reference to target credit rating, target credit metrics and comparative analysis across the industry following three rounds of equity injection & PAYG adjustment. Financial ratios are improved over the DD model prepared by Ofwat. No further viable financeability adjustments are considered to be available. Financeability in the Combined Notional model is seen as being very tight but accepted.	2.3.8
	PW model actual Combined	Take the financeability adjustments made in the steps above into the Combined actual model.	2.3.9
	PW model actual Combined	Consider financeability with reference to target credit rating, target credit metrics and comparative analysis across the industry following three rounds of equity injection & PAYG adjustment. Conclude that the Combined business required further financing adjustments in the actual structure.	2.3.9

	PW model actual Combined	Add further equity of £25m across WR, N+ and £13m HTWSR price control. Review debt financing assumptions. Cumulative equity of £82.5m - £33.5m in Core, £49m in HTWSR	2.3.9
	Model used	Actions and interventions made	Reference
	PW model actual Combined	Check that financeability adjustments made have not resulted in a bill exceeding levels supported by customers. Bill remains at £97 supported by customers – no further action needed in relation to bill levels.	2.3.10
	PW model actual Combined	Consider financeability with reference to target credit rating, target credit metrics and comparative analysis across the industry following four rounds of equity injection & PAYG adjustment. Undertake further assessment of financeability in the Combined actual business. Consider the impact of uncertainty relating to the HTWSR price control mechanisms.	2.3.11
	PW model actual Combined	Due to the level of uncertainty in relation to the HTWSR price control, the Board was unable to conclude on the financeability of the Combined business plan. The Board has proposed that, following a period of further engagement and clarification, in relation to key regulatory mechanisms, an updated Board financeability assessment of the Combined business will be provided in advance of the Final Determination.	2.3.11
	PW model actual Core	Consider the financeability of the Core business, in line with the license and statutory duties. Due to the lower WACC financeability metrics appear very tight. The Board therefore considered all relevant qualitative and quantitative factors, including up and down-side scenarios, and the approach by rating agencies, in reaching a conclusion on financeability.	2.3.12
	PW model actual HTWSR price control (WACC @ 3.26%)	The long duration of the programme, scale and financing requirements result in a “front loaded” equity investment. This results in very low gearing at the start of construction and grows over the construction period to achieve c60% gearing at the end of construction. This atypical financing profile results in atypical AICR and FFO/net debt ratios throughout construction. Cash flows are adequate to support capex required and key financial ratios, at the end of construction, appear reasonable.	2.3.13
End		Board conclude on financeability	2.3.14

2.3.1 Modification of the financeability assessment approach

Following the publication of the DD, which includes a separate price control for the delivery of Havant Thicket Winter Storage Reservoir (HTWRS) we have modified our previous approach to assessment of financeability. We have also made certain modifications to the approach taken by Ofwat in the assessment of notional financeability in the DD.

In the DD, Ofwat’s assessment of financeability first considers the financeability of the “Core” notional business (the business excluding the HTWSR development) – reviewing key financial ratios and making any relevant financeability adjustments. We concur with this approach. We believe that it is fair to PW customers because it ensures that there are no cross subsidies between the financeability of the Core business and the HTWSR price control. Having concluded on financeability of the

Core notional business Ofwat then considers the financeability of the “Combined” business (the Core business plus the HTWSR price control).

Accordingly we have modified our approach to the assessment of financeability in order to take a similar approach to Ofwat. As such we have considered financeability through the following sequence of steps;

- 1) Assessment of financeability of the Core business (Notional)
 - a. Review of target credit metrics and comparative analysis
 - b. Correction of model errors and changes in Company position
 - c. Consideration of financeability interventions needed
 - i. Equity injections
 - ii. PAYG adjustments
- 2) Assessment of financeability of the HTWSR price control (Notional)
- 3) Assessment of financeability of the Combined business (Notional)
- 4) Assessment of financeability of the Combined business (Actual)
- 5) Assessment of financeability of the Core business (Actual)
- 6) Assessment of financeability of the HTWSR price control (Actual)

We have summarised, within the Board Assurance section of this Chapter, an overview of the whole assessment process together with the key assumptions made and factors considered when the Board has reached its conclusion on financeability.

2.3.1a Assessment of financeability of the Core business (Notional)

Consistent with the approach taken by Ofwat we considered it appropriate that the financeability of the “Core” business first be considered. The Core business represents the combined Wholesale (WR & N+) and Retail price controls and has been assessed at the “appointee” level. Ofwat provided two financial models to the Company as part of the DD; a model including only the core business (as defined above) and a model including the “Combined” business (the Core business together with the HTWSR price control).

We agree with Ofwat that by undertaking the assessment in this way, PW customers are protected from the effects of any financeability issues or adjustment which may arise solely as a result of the inclusion of the HTWSR programme. This prevents any effective “cross subsidy” between the Core and the HTWSR price control.

2.3.1b Review of target credit metrics, approach to smaller companies and industry comparative analysis

We have previously set out the credit ratings and key financial ratios that we have targeted as part of the Company’s assessment of financeability.

Revision to target metrics

Following the Company’s IAP submission, discussions with one rating agency, S&P, we further clarified the approach that they take to the assessment of Portsmouth Water. S&P’s methodology is relatively complex. It is based upon an

“anchor” rating determined by the combination of the business risk profile and financial risk profile. This is assessed as “excellent” for business risk for the industry. The financial risk profile then indicates the “anchor” rating and has to be combined with other target ratio information to assess relevant thresholds for key ratios.

Combining The Business And Financial Risk Profiles To Determine The Anchor						
--Financial risk profile--						
Business risk profile	1 (minimal)	2 (modest)	3 (intermediate)	4 (significant)	5 (aggressive)	6 (highly leveraged)
1 (excellent)	aaa/aa+	aa	a+/a	a-	bbb	bbb-/bb+

Extract from S&P rating methodology

To determine the thresholds for the core ratio of FFO/debt it is necessary to combine the two S&P tables (above and below);

Cash Flow/Leverage Analysis Ratios--Low Volatility		
--Core ratios--		
	FFO/debt (%)	Debt/EBITDA (x)
Minimal	35+	Less than 2
Modest	23-35	2-3
Intermediate	13-23	3-4
Significant	9-13	4-5
Aggressive	6-9	5-6
Highly leveraged	Less than 6	Greater than 6

Extract from S&P rating methodology

Hence “aggressive” corresponding to a BBB anchor corresponds to a target ratio of 6-9% and “significant” corresponding to an A- anchor corresponds to a target ratio of 9-13%. There is no specific guidance in relation to the target FFO/debt ratio for BBB+ and this is generally seen as falling between “significant and aggressive” using a ratio in the range of 7-10% - judgement needs to be applied in this respect.

Accordingly for the S&P FFO/debt ratio we originally used a target of 6-9% for BBB and 7-10% for BBB+ (as set out in the table below under “previous target”). However, in discussion with S&P, following submission of the IAP, it was indicated that a modifier is applied to Portsmouth Water – as a small company, which is seen as being less able to absorb financial shocks, a tighter target ratio is applied resulting in an uplift of 1-2 percentage points. Hence for the S&P FFO/debt ratio for the Company the range is revised to 7-10% for BBB and 9-12% for BBB+. Consequently, based on this information from S&P, we have revised the target ratios for the FFO/Debt metrics (including the Ofwat FFO:Debt Alt which is equivalent to the S&P definition).

Ratio	Notional Baa1/BBB+		Actual Baa2/BBB	
	Revised Target	Previous Target	Revised Target	Previous Target
Artesian Interest Cover	≥1.5	≥1.5	≥1.5	≥1.5
S&P FFO:Debt	9-12%	7-10%	7-10%	6-9%
Moody's AICR	≥1.5X	≥1.5X	≥1.3X	≥1.3X
Gearing	65-72%	65-72%	72-80%	72-80%
FFO:Debt Alt	9-12%	7-10%	7-10%	6-9%
Cash interest cover	2.5X	2.5X	2.3X	2.3X

The changes made have been highlighted in yellow

Approach taken to small companies

We believe that, in undertaking financeability assessments, it should be recognised that all of the rating agencies apply tighter (more challenging) target ratios to the smaller companies (predominantly the Water Only Companies). Target ratios for “small companies” reflect the slightly higher business risk profile of small companies, in part because they can be seen as being less able to absorb the impact of financial shocks. This is evidenced by the approach taken by both of our raters – Moody’s and S&P – who apply tighter than published target ratios to the Company’s assessment for the reasons explained above (in section 2.3.1b – revisions to target metrics). We have therefore taken these into account in assessing the notional and actual financeability of the Company. We see this as an important factor which should be acknowledged by Ofwat in undertaking the notional financeability assessment.

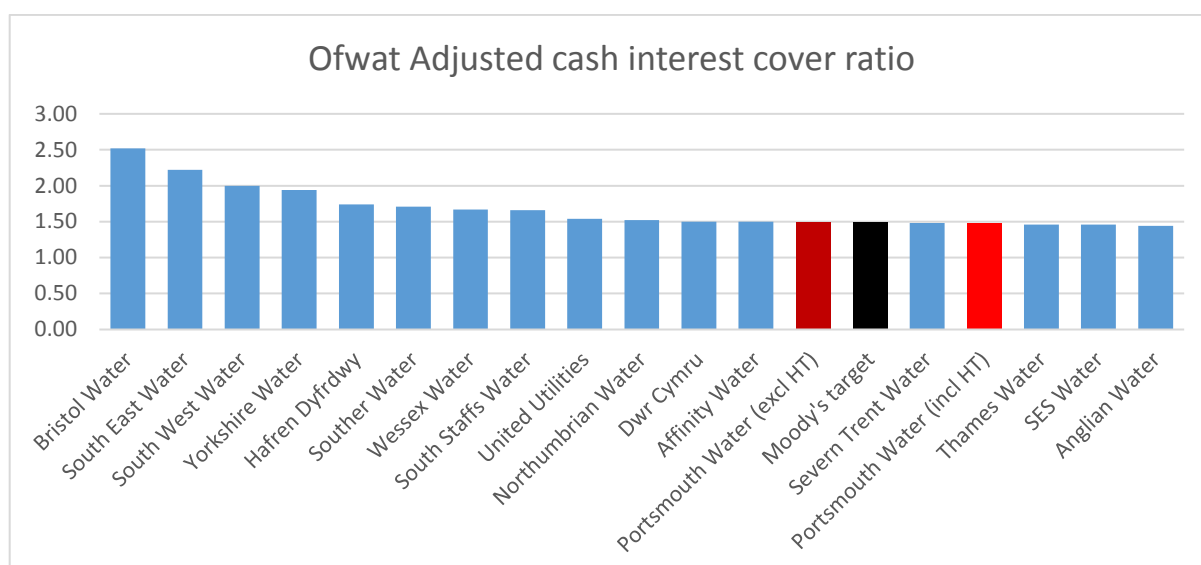
Industry comparative analysis

We have also performed a review of the levels of key financial ratios across the industry assumed by Ofwat when undertaking the notional financeability assessment. This is relevant in terms of determining the appropriate level of headroom required in order to assume a target Baa1/BBB+ rating will be achieved in the notional structure. The analysis is provided by Ofwat as part of the Aligning Risk and Return technical appendix table 6.4.

This table presents Ofwat ratios, we add the equivalent rating agency targets for these metrics for reference. There are some minor differences in the basis of calculation between Ofwat and the rating agencies, in each case the Ofwat metric presents a slightly higher (better) numeric result.

This data is summarised graphically below and demonstrates that, based upon Ofwat’s assessment of financeability, Portsmouth Water falls at the low end of the ratios for both AICR and FFO/net debt.

Adjusted Cash Interest Cover (Ofwat) (AICR)



This Ofwat ratio is very similar to the Moody's AICR methodology although, on average the Ofwat AICR gives a better ratio by approximately 0.09 than the equivalent Moody's ratio.

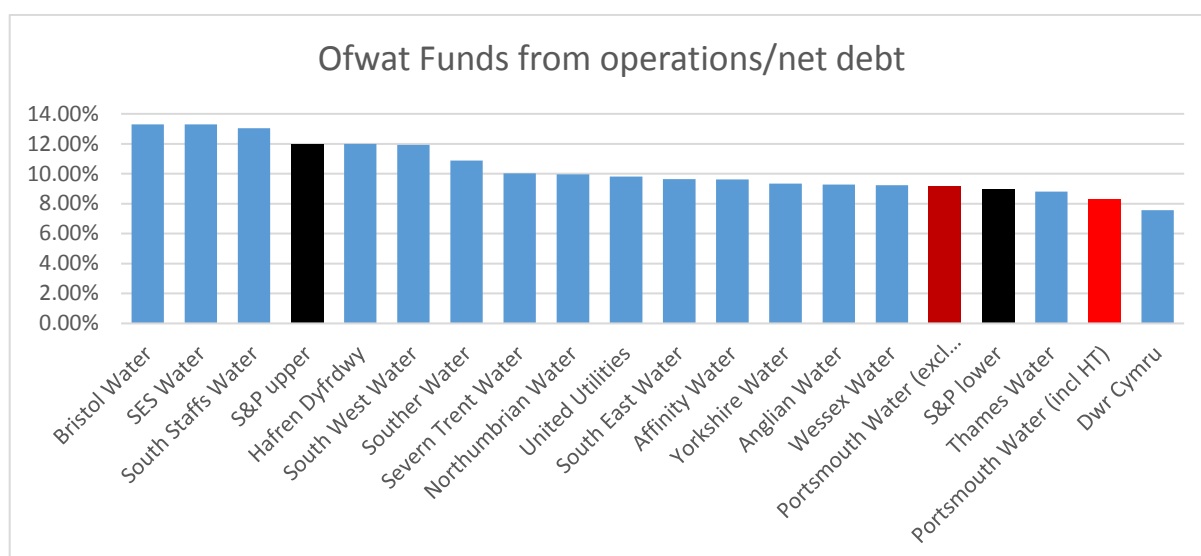
When compared directly to the Moody's target metric of 1.5 times for Portsmouth at Baa1, the Core business Ofwat AICR just meets the target of 1.5 times on average (albeit that in some years it falls below). For the Combined business the Ofwat AICR falls below the Moody's target at 1.48 times.

We noted above that the Ofwat defined AICR produces an improved (higher) result than the equivalent Moody's calculation. If the Ofwat ratios were adjusted downwards (by the average reduction of 0.09) to reflect the difference in ratio calculations between the Ofwat and Moody's, the Ofwat assessment would fall **below** the Moody's target threshold for Baa1.

Ofwat AICR/Moody's AICR	Notional Baa1	
	Moody's AICR Average	Ofwat AICR adjusted Average
Moody's target	≥1.5	n/a
Core	1.41	1.50
Combined	1.39	1.48

Accordingly the Ofwat financeability assessment does not appear to meet this key rating agency financeability metric and has no headroom. It also shows that the level for PW is well below average for the industry.

Funds from Operations to Net Debt (Ofwat)



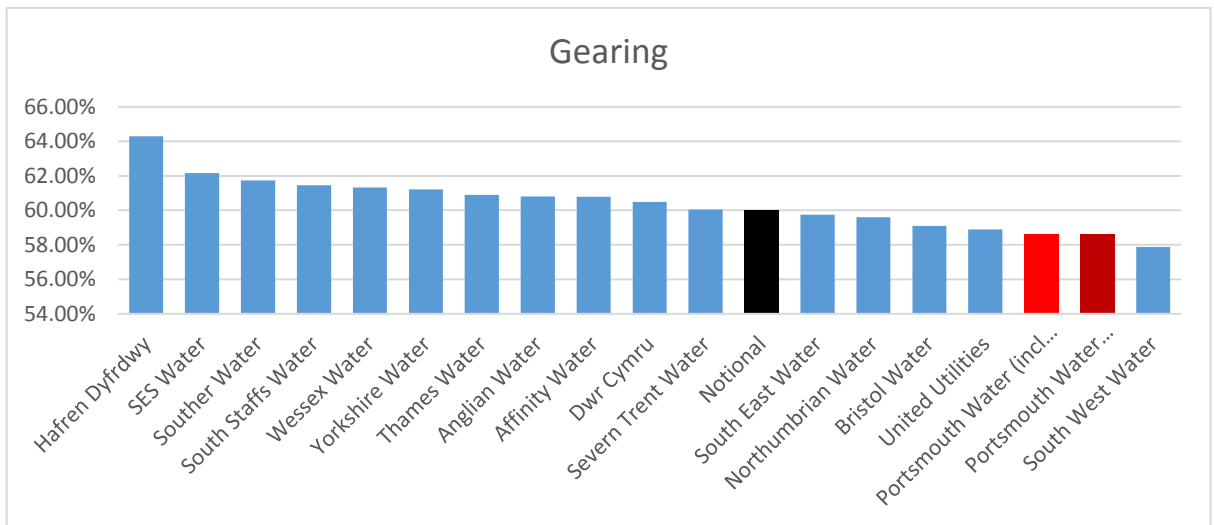
Again this Ofwat ratio is very similar to the Rating agency (Standard & Poor's) FFO/net debt definition. On average the Ofwat FFO/net debt is 90 basis points better than the equivalent S&P FFO/net debt. Whilst for the Ofwat FFO/net debt ratio the Core business just falls within the BBB+ range, the Combined business falls outside the range.

However, if again the Ofwat ratio was adjusted to reflect the S&P FFO/net debt definition, both Core and Combined fail to meet the lower bound of S&P's metric. This presentation also shows that, again, Portsmouth's notional ratios are at the lowest end of the range and the second lowest in the industry.

Ofwat FFO:net debt /S&P FFO:net debt	Notional BBB+	
	S&P FFO:net debt Average	Ofwat FFO:net debt Average
S&P target range	9-12%	n/a
Core	8.29%	9.20%
Combined	7.43%	8.33%

On this basis, it does not appear that, under Ofwat's assessment of financeability, sufficient headroom has been allowed to achieve financeability metrics in either the Core or the Combined notional structure.

Gearing



In contrast, gearing at 58.62% (Combined) is the second lowest in the industry. This implies that a further equity cure is not appropriate.

Accordingly we represent that, in making the assessment of financeability in the Notional capital structure Ofwat has not allowed sufficient headroom on key financial ratios to support financeability of the notional structure.

It is currently unclear as to whether any economic profit from the HTWSR bulk supply agreement will be available in order to improve Notional financeability. However, we strongly contend that, the existence of any economic profit should not be a factor in the assessment of financeability in the notional structure. If economic profit was needed to ensure sufficient financial headroom, this suggests that the underlying financeability requirement has not been met, because incremental economic profit should not be necessary to shore up the financeability of the underlying regulatory price controls.

Representations in relation to the treatment of economic profit are included in Chapter 1 covering HTWSR.

Having reviewed the approach taken by Ofwat to financeability in the notional structure, we represent that the financeability PAYG adjustment, of 0.7%, made by Ofwat is insufficient to maintain targeted financeability levels in the notional structure – particularly given the low gearing and relatively higher headroom that rating agencies consider small companies require.

We discuss our representation on PAYG levels further below at 2.3.4.

2.3.2 Correction of model errors and changes in Company position

Prior to beginning the assessment of financeability in the Notional Core business we have made corrections and changes to the Ofwat company models provided as part of the DD. We have set out further in Appendix 2.3.2 a more detailed explanation of the changes that we have made as part of the Representation to the extent that these are not explained further in this Chapter. Where further

information has been provided within our Representation document a reference has been given. These have been summarised below as follows;

Reference	Area	Change	Nature
Appendix 2.3.2	Reallocation of allowed TOTEX from Capex to Opex	The additional Ofwat TOTEX allowance was allocated entirely to Capex. A modest £3m reallocation (before cost sharing) to Opex was made to reflect a balanced Opex position.	Reclassification
Appendix 2.3.2	Reallocation of enhancement Capex between WR and N+	Certain schemes appear to have been misallocated by Ofwat to the wrong price controls.	Correction
Appendix 2.3.2	Reinstatement of £1.3m resilience Capex	The Company makes a representation relating to resilience Capex of £1.3m.	Representation
Appendix 2.3.2	Cost sharing ratio (Confirmed with Ofwat)	Ofwat acknowledges an error relating to the calculation of the cost sharing ratio	Correction
Appendix 2.3.2	Reversal of WRFIM adjustment	A £2.9m correction was made to reflect the agreed approach to the treatment of Connection Charges at PR14.	Correction
Appendix 2.3.2	Correction to non-price control income (confirmed with Ofwat)	Ofwat acknowledges an error relating to the double counting of Non-price control income of £5.9m.	Correction
Chapter 1	HTWSR price control Capex	The Company makes a representation in relation to Capex in the HTWSR price control. Increasing Capex by £12.1m over the 10 years control.	Representation
Chapter 1	Dummy price control WACC	The Company makes a representation in relation WACC in the HTWSR price control.	Representation

The corrected/updated Ofwat models have been used as the starting basis of the financeability assessment. We note that further changes to the final financial models (Core & Combined) were made as a result of financeability adjustments and these are explained later in this Chapter.

We have also set out, as part of the Board assessment of financeability, the impact on financeability that changes to the financial model have on the overall assessment.

2.3.3 Consideration of financeability interventions needed (Core, Notional)

Following revisions to the Business Plan Core business financial model, any financeability interventions made by Ofwat at the DD stage were reversed in order to achieve a clean starting point for the assessment of financeability in the Core structure. This resulted in the reversal of the 0.7% PAYG adjustment and £9.3m equity injection made by Ofwat in the Core Notional structure.

The results of key financial ratios from this “base” Core, notional model – before any financeability interventions, were as follows;

Ratio	Notional Baa1/BBB+	
	Target	Results
Notional, Core business with no financeability interventions		
Artesian Interest Cover	≥1.5	n/a
S&P FFO:Debt	9-12%	6.98%
Moody's AICR	≥1.5X	1.28X
Gearing	65-72%	65.4%
FFO:Debt Alt	9-12%	6.98%
Cash interest cover	2.5X	3.21X

On this basis the “base” Core, notional model does not meet sufficient financial ratios in order to achieve the targeted Baa1/BBB+ rating. It is clear that further interventions are required in order to achieve financeability.

Ofwat’s PR19 methodology is very clear in relation to the possible remedies for financeability constraints in the notional financial structure. In particular both the Company and Ofwat have identified interventions as follows;

- i. Equity injections
- ii. PAYG adjustments

Equity injections

Ofwat’s methodology recognises that equity injections may be appropriate “where a company has a particularly large investment programme relative to its RCV”. The Company acknowledged the appropriateness of this approach in using equity cures for financeability in both the Business Plan submission and the IAP response, albeit that equity injections in the notional structure were used entirely to finance RCV growth as a result of the HTWSR programme.

In Ofwat’s DD modelling, financeability has been approached in two steps – first in considering the Core business and second bringing in the HTWSR price control for the Combined business. Equity cures are made at each step in this approach. We agree with the logic of this approach and have followed a similar approach. However, in terms of the quantum and order of interventions we make two representations relating to;

- Quantum of equity injections
- Order of operation of different financeability interventions

Quantum of equity injections. Since equity injections are considered to be an appropriate intervention in situations where there is a large investment programme, we have considered the extent to which equity is needed to fund **growth** in the capital programme.

As Portsmouth Water is deemed to be an efficient business in TOTEX terms, there is a divergence between the amount of Capex **assumed** to be required by Ofwat and that **requested** by the Company. As such our starting point is to determine the required equity to address growth in the capital programme, and this is the Capex growth **requested** by the company, not the higher Capex allowed by Ofwat.

We have deducted from the requested Capex, the amount of capital needed for general maintenance of assets (equivalent to the run-off rate), and the capital already funded by customers through bills (New asset additions depreciation and return). The remaining capital expenditure is deemed to be growth Capex still to be funded. The 40% equity required to fund this is based on the notional gearing level of 60%, and results in an equity injection required to fund the actual RCV growth in the business of £4.519m. This is significantly lower than the up-front equity injection assumed as needed by Ofwat in the Ofwat DD notional model of £9.3m.

Calculation of Equity needed to fund growth Capex		N+	WR	Total
CAPEX - PW business plan		50.210	6.611	56.821
Additional CAPEX from Cost Sharing		11.788	-0.337	11.451
Total Capex DD	A	61.998	6.274	68.272
Capex funded by customers		12.648	0.984	13.632
Maintenance of existing RCV (run off)		31.860	1.441	33.301
Total Capex funding through bills	B	44.508	2.425	46.933
Growth Capex requiring funding	A-B	17.490	3.849	21.339
Broken down between growth Capex;				
Capex - PW business plan		7.325	3.972	11.298
Additional Capex from Cost Sharing		10.165	-0.123	10.041
		17.490	3.849	21.339
Equity required to fund the RCV growth @ 40%;				
Requested Capex - PW business plan		2.930	1.589	4.519
Additional Capex - Ofwat Cost Sharing		4.066	-0.049	4.017

On this basis we have identified the equity required to address financeability constraints as a result of RCV growth based on the Capex **requested** by PW in the business plan as £4.519m.

We recognise that it may be necessary to inject additional equity into the model – this is primarily because the **allowed** Capex is higher than that **requested** and therefore this incremental “theoretical” spend will need to be funded in the model. However, we represent that in terms of the order of application this should be considered as a later intervention.

Order of operation of different financeability interventions. Having calculated, and included in the Core notional model, sufficient equity to address growth in RCV we consider it is now appropriate to reassess financeability at this stage and to consider the extent to which any PAYG adjustment is required.

Since equity injections of the type discussed above, are used as a remedy for the impact of large investment growth, it would be inconsistent with the PR19 methodology to apply an intervention beyond the level required to address the particular concern. Therefore we reassess the key financial ratios at this stage following a £4.519m equity injection into the Core Notional model to fund the requested level of Capex. The results of the key financial ratios, following the £4.419m equity injection, were considered relative to the target thresholds. These are set out below;

Ratio	Notional Baa1/BBB+	
	Target	Results
Notional, Core business with injection of £4.519m equity required to fund the requested level of Capex		

Artesian Interest Cover	≥1.5	n/a
S&P FFO:net debt	9-12%	7.41%
Moody's AICR	≥1.5X	1.34X
Gearing	65-72%	62.83%
FFO:Debt Alt	9-12%	7.41%
Cash interest cover	2.5X	3.34X

On this basis the Core, notional model does not meet sufficient financial ratios in order to achieve the targeted Baa1/BBB+ rating, for FFO:net debt or Adjusted Interest Cover. It is clear that further interventions are required in order to achieve financeability.

We therefore represent that it is at this stage appropriate to consider the extent to which any PAYG adjustment is needed to improve financeability in the Core, notional business plan. To include equity injections at this stage which are greater than those required would be inconsistent and “mask” other possible financeability requirements. This is set out further below under “PAYG adjustments” (2.3.4 below).

2.3.4 PAYG adjustments (Notional Core structure)

PAYG adjustments are identified by the Ofwat methodology as an appropriate intervention to address financeability constraints in the notional structure. We have set out in our Business Plan and IAP submission the appropriateness of PAYG as a remedy and Ofwat has supported the use of PAYG levers.

However, we represent that the extent of PAYG adjustment is inconsistent with the financeability test in the notional structure and therefore put forward our representation for a more significant PAYG adjustment in line with our previous submissions.

Accordingly we represent that a larger PAYG adjustment is needed to improve financeability in the notional Core business. An adjustment of 3.5% in the network plus price control improves financeability metrics as set out below. This level of PAYG adjustment was judged to provide the appropriate balance between impact on bill levels and improvement in financeability metrics. This balance was set out at length in the Company's response to the IAP (Chapter 2).

Ratio	Notional Baa1/BBB+	
	Target	Results
Notional, Core business post £4.419m equity injection and 3.5% PAYG adjustment		
Artesian Interest Cover	≥1.5	n/a
S&P FFO:Debt	9-12%	8.59%
Moody's AICR*	≥1.5X	1.66X
Gearing	65-72%	62.14%
FFO:Debt Alt	9-12%	8.59%
Cash interest cover	2.5X	3.7X

*including the benefit of PAYG adjustments

This intervention shows an overall improvement in key financial ratios. In particular the Moody's AICR (assuming the benefit of PAYG adjustment) improves

above the 1.5X target and to a level more consistent with the wider industry as set out in the analysis on 2.3.1b. However the FFO/net debt ratios continue to remain well below the level required for a BBB+ rating.

It should be noted that, the Moody's calculation, currently, does not give the benefit of any PAYG adjustments made as these are reversed back to the "natural" level. However, as previously explained, since this is considered by Ofwat to be an available financeability lever, we have assumed that the benefit is allowed when assessing the ratios.

Whilst we feel that this level PAYG intervention still does not provide the ideal level of headroom, we recognise the need to balance PAYG adjustments versus bill levels and specifically the bill level supported by customer research of £97. The total impact upon bills of the PAYG adjustment (which must be tested in the Actual structure) is £2.13 which is consistent with the customer support for PAYG adjustment set out in our original Business Plan in chapter 11 (11.3.4 & 11.3.5) on page 177 et seq. Customers supported the use of PAYG adjustments together with a bill impact of £3-4 per bill. They also supported our proposal for a flat bill profile during the AMP and in the following 10 years. This is covered in detail in the reports provided by ICS in appendix 2.26 and 2.28 of the original Business Plan submission.

In response to the Draft Determination the Company commissioned a specific piece of customer research to test the acceptability of the Ofwat Draft Determination proposal. This is described in more detail in Appendix 2.3.4a – PW Draft Determination Survey and Appendix 2.3.4b Draft Determination Customer Research.

The research tested customer attitudes to the use of the PAYG levers. Specifically respondents were presented with two bill profiles:-

- The Draft Determination profile with a reduction from £106 to £96 in 2020/21, and £103 in 2024/25 (using CPIH to inflate)
- A lower reduction in bills to £101 in 2020/21 with a lower reduction to £101 in 2020/21 and £100 in 2024/25.

Our research showed that 73% of respondents prefer Option 2, the alternative bill profile, with a smaller bill reduction initially in 2020/21 and slightly lower bills in the future.

This result is consistent with the research we undertook for our Business Plan (September 2018), with customers valuing lower longer term bills, given their views about certainty of their income in the longer term.

This research supports the use of the PAYG levers to modify the bill profile.

In addition we have considered the extent to which the RCV is depleted as a result of the PAYG adjustment. We have undertaken a comparative analysis over the next 3 AMPs between the RCV with no PAYG adjustment and the RCV with the 3.5% PAYG adjustment. This is set out in the table below and shows that the

impact on RCV is not significant and therefore unlikely to impact either future financeability or future bill profiles;

RCV	2020-21	2021-22	2022-23	2023-24	2024-25
RCV with +3.5% PAYG	173,861	189,124	205,342	236,866	272,078
Year on year growth		8.8%	8.6%	15.4%	14.9%
Growth in the AMP					56.5%
RCV without PAYG adjustment	174,941	191,262	208,535	241,148	277,445
Year on year growth		9.3%	9.0%	15.6%	15.1%
Growth in the AMP					58.6%
RCV	2025-26	2026-27	2027-28	2028-29	2029-30
RCV with +3.5% PAYG	320,621	360,104	382,620	395,569	407,746
Year on year growth	18%	12%	6%	3%	3%
Growth in the AMP					27.2%
RCV without PAYG adjustment	325,912	365,319	387,760	400,636	412,740
Year on year growth	17%	12%	6%	3%	3%
Growth in the AMP					26.6%
RCV	2030-31	2031-32	2032-33	2033-34	2034-35
RCV with +3.5% PAYG	421,149	434,788	448,664	462,781	477,140
Year on year growth	3%	3%	3%	3%	3%
Growth in the AMP					13.3%
RCV without PAYG adjustment	426,071	439,640	453,446	467,494	481,786
Year on year growth	3%	3%	3%	3%	3%
Growth in the AMP					13.1%

This 3.5% PAYG intervention does move the financeability metrics back into a more balanced position relative to the industry. However, further intervention is clearly required this is considered further below.

2.3.5 Further equity injections to fund Capex growth as a result of Ofwat Cost Sharing mechanisms

We set out above under 2.3.3 our approach to calculating the level of additional equity required to support unfunded Capex growth. This arises in the financial model due to two factors; Capex requested as part of the Portsmouth Water Business Plan submission and additional Capex allowed by Ofwat as part of the ex-ante cost sharing arrangements. We acknowledge at 2.3.3 that the latter results in an additional theoretical Capex funding requirement and calculated an additional equity requirement of £4.0m. We therefore made this further equity adjustment to the Core notional financial model and again reviewed the results of the key financial ratios;

Ratio	Notional Baa1/BBB+	
Notional, Core business post £4.419m equity injection 3.5% PAYG adjustment and further £4m equity injection to support assumed additional Capex under the TOTEX ex-ante cost sharing mechanism.	Target	Results
Artesian Interest Cover	≥1.5	n/a
S&P FFO:Debt	9-12%	8.85%
Moody's AICR*	≥1.5X	1.7X

Gearing	65-72%	60.83%
FFO:Debt Alt	9-12%	8.85%
Cash interest cover	2.5X	3.8X

*including the benefit of PAYG adjustments
Cumulative equity of £4.4m (Core)

This further equity injection does have some additional positive impact on key financial ratios. The S&P FFO:net debt approaches the lower bound but does not fall comfortably within the range. The Moody's AICR (including the benefit of PAYG adjustment) falls above the target threshold and gearing and cash interest cover have sufficient headroom.

2.3.6 Assessment of financeability of the Core business

Ideally the key financial ratios in the Core, notional model would have more robust headroom. However, as we have set out previously in our response to the IAP Chapter 2.4 (pgs. 106 & 107) there is a clear relationship between financeability and bill levels and it is important to recognise this balance. Accordingly, we feel that it would be inappropriate to make further PAYG adjustments in the Core, notional model (in the actual structure) as this would result in customer bills which fall outside the £97 level widely supported by our customers. Accordingly, the Company and the Board concluded that, in the Core, notional business plan model, taking relevant factors into consideration, this was broadly financeable.

2.3.7 Assessment of financeability of the HTWSR price control (Notional) (WACC @ 3.26%)

At this stage in the process the financeability of the HTWSR price control was considered. However, as no clear guidance has been set out as to the approach to "notionalisation" of this price control or as to the expected approach regarding a Notional assessment, it is difficult to draw firm conclusions about financeability of the Dummy HTWSR price control, on a stand-alone, notional basis.

One clear conclusion can be drawn. When considering cash flow, relative to the profile of the capital programme and gearing, it is evident that further financing is required. Accordingly, this analysis indicated that additional equity, in the region of £36m was required in the HTWSR price control in order to fund capex activity and RCV growth.

We have also made a significant representation in relation to the allowed WACC for the HTWSR price control. This is set out in detail in Chapter 1.2.2 and the principle arguments are summarised below. The Company does not agree with the proposal for a lower WACC for HTWSR price control. Our position is that:

- The bespoke WACC has a negative impact on financeability
- The proposed WACC does not reflect the risk profile of HTWSR
- A lower WACC during construction is contrary to the normal profile of returns on infrastructure projects
- It is not appropriate to adjust the WACC to reflect embedded debt
- The lower WACC exposes our own customers to risk and discourage water trading.



2.3.8 Assessment of financeability of the Combined business (Notional)

Following the financeability assessment process that Ofwat has used in the DD assessment (as set out in 2.3.1a) at this point in the financeability assessment we moved into a Combined, notional model. In doing so we took all of the adjustments made to this point into the Combined Ofwat DD model. Hence the following adjustments were made to the Ofwat Combined DD notional financial model;

- Correct the Ofwat DD Combined Notional model for identified modelling errors (as agreed with Ofwat) and make changes to reflect Company interventions on Capex & opex.
- Strip out Ofwat financeability adjustments made (equity and PAYG) in order to re-commence the financeability assessment from first principles.
- Implement Company financeability adjustments made as set out in the sections above;
 - Additional equity to fund RCV growth £4.519m
 - PAYG adjustment from Core model of 3.5% in N+
 - Additional equity to fund theoretical growth in RCV as a result of ex-ante cost sharing adjustment of £4m
- Additional equity funding of £36m to the HTWSR price control.
- Revision of WACC for the Dummy HTWSR price control to at least the Company's wholesale WACC of 3.26%. This is supported further in Chapter 1.2.2.

At this point the financial ratios for the Combined Notional model were reviewed;

Ratio	Notional Baa1/BBB+		
Notional, Combined business post £4.419m equity injection 3.5% PAYG adjustment and further £4m equity injection to support assumed additional Capex under the TOTEX ex-ante cost sharing mechanism, £36m equity injection and revision of WACC to wholesale level of 3.26% in the HTWSR price control	Target	WACC at 3.26% Results	Core only
Artesian Interest Cover	≥1.5	n/a	n/a
S&P FFO:Debt	9-12%	7.95%	8.85%
Moody's AICR*	≥1.5X	1.65X	1.7X
Gearing	65-72%	60.48%	60.83%
FFO:Debt Alt	9-12%	7.95%	8.85%
Cash interest cover	2.5X	3.51X	3.8X

*including the benefit of PAYG adjustments
Cumulative equity of £44.4m (Core £8.4m, HTWSR £36m)

[REDACTED]

[REDACTED]

[REDACTED]

There is a careful balance to be made between different customer groups. Whilst this was explained further in the HTWSR Chapter, it is worth noting that when setting the WACC and determining other regulatory mechanisms around the HTWSR price control, risk and value can be moved between both sets of customers and investors. It is therefore essential that the right balance is achieved for all parties and that this is done in light of overall financeability considerations for the Appointed business as a whole.

To the extent that there remains uncertainty, as to key aspects of the HTWSR price control, this makes it more difficult to conclude on the overall financeability of the Combined Business Plan. These uncertainties are set out in section 1.3 and include the following factors;

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- Uncertainty about how the price control will be dealt with in future regulatory periods.
- The impact that any apparent divergence from “business as usual” water regulation, within the price control, may have on the approach by Rating agencies and debt investors.
- Uncertainty about the final approach to regulatory mechanisms such as;
 - We have made representation on the duration of the price control
 - Cost sharing mechanisms have not been finalised
 - We have proposed a re-set mechanism for WACC
 - We have proposed a cost re-set mechanism (capex and opex)
 - We have made proposals relating to the treatment of Economic profit and water trading incentives
 - End of AMP reconciliation models have not been finalised by Ofwat
 - We disagree with disallowed costs made by Ofwat.
 - We have made proposals relating to a process to re-set the construction cost in line with the project maturity – cost certainty at

- this stage of the programme is lower than it will be when certain critical programme development milestones have been reached
- Uncertainty in relation to any regulatory performance commitment and any performance commitments under the BSA.

Whilst the factors above, once concluded upon, would impact on financeability in either a positive or negative way, the level of current uncertainty means that the Board's ability to reach overall conclusions on financeability is affected.

Notwithstanding the points set out above, at this stage the Board concluded that, no further effective financeability adjustments can be made in the notional structure. Whilst the key financial ratios presented show limited headroom, nonetheless the headroom is improved from the position set out in the Ofwat Combined Notional model prepared in the DD.

The Board also recognises that, once the related uncertainty factors are resolved, if the HTWSR programme does go ahead, that over the longer term this will help to improve the financeability of the Combined business. This is because the weighted average cost of debt for the whole business will reduce over time as new debt is raised to fund the programme.

Ofwat AICR Average	Notional Baa1	
Moody's target $\geq 1.5X$ *	Company model	Ofwat DD model AICR
Core	1.70	1.50
Combined	1.65	1.48
Ofwat FFO:net debt Average	Notional BBB+	
S&P target range 9-12%	Company model	Ofwat DD model FFO:net debt
Core	9.73	9.20%
Combined	8.70	8.33%

*Including benefit of PAYG adjustment

The Board took comfort from the fact that the key ratios in the Company's Combined Notional model had marginally improved on the position considered financeable by Ofwat. However, the Board recognises that, in the absence of additional effective interventions to financeability, headroom in the Combined notional model remains very tight. The Board also recognised, at this stage in the assessment, the potential impact of uncertainty, regarding key assumptions and regulatory mechanisms underpinning the HTWSR price control, upon the assessment of the Combined business financeability.

2.3.9 Moving into the Combined business model in the actual capital structure

At this point the Company moved into the actual model on a Combined basis. All of the adjustments, including the financeability interventions in the notional structure, were taken into the model for the Combined, actual capital structure.

The overall financing requirement was reviewed including cash-flow and gearing. Consequently debt and equity financing was reviewed and revised, including;

- Additional Equity in the Core business (WR & N+) of £25m
- Additional equity in the HTWSR control of £13m
- Final cumulative equity of £82.4m - £33.4m Core, £49m HTWSR
- Revision to Cost of debt based on latest LIBOR forward curves
- Rebalancing debt profile.

2.3.10 Bill levels and customer support

At this point the revised bill level was also reviewed in order to ensure that financeability adjustments made in the Notional structure had not increased bills beyond the level supported by customers.

The updated position showed a bill level of £96.97 and a flat bill profile.

In response to the Draft Determination the Company commissioned a specific piece of customer research to test the acceptability of the Ofwat Draft Determination proposal. This is described in more detail in Appendix 2.3.4b.

The research tested the customer preferences between the Ofwat Draft Determination and the Company response. It should be noted that our response to the Draft Determination results in very similar bills to our March 2019 re-submission, both in magnitude and profile over AMP7.

Respondents were provided with information on levels of service as well as bills. Overall acceptability of both the Portsmouth and Ofwat proposals were high at 86%.

The research asked respondents “how important is it to keep bills in the future, beyond 2025, affordable and avoid higher bill increases in the future, even if it means bills over the next few years are a bit higher than they would otherwise be?” 76% of those surveyed agreed with this proposal.

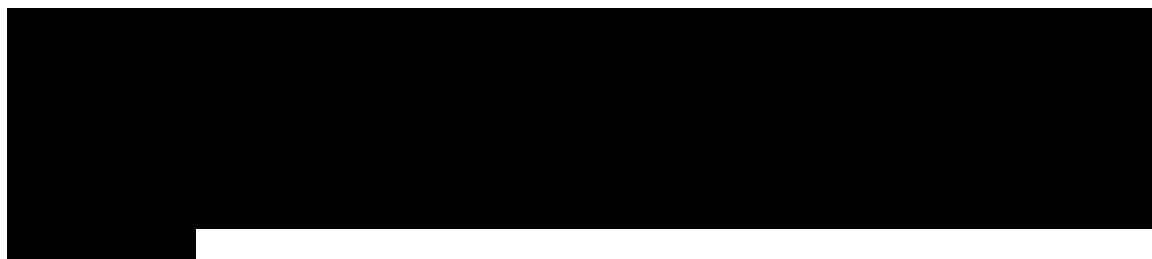
The responses to this statement indicate an overall preference for allowing near term bills to be a bit higher if that allows future bills to be kept more affordable. This indicates customers are less supportive about bill reductions now if this has consequences like higher than otherwise future bills.

2.3.11 Financeability assessment in the Combined Actual structure

As a result of the process set out in the steps above, the resultant changes and interventions to the business plan financial model for, the final Combined, actual business plan model were made. The results of key financial ratios were then considered by the Board. It should be noted that the Company targets a lower Baa2/BBB rating in the Actual capital structure, as set out in detail in the IAP Chapter 2.

Ratio	Actual Baa2/BBB	
	Target	Results
Actual Combined final financial model		
Artesian Interest Cover	≥1.5	1.64
S&P FFO:Debt	7-10%	6.13%
Moody's AICR	≥1.3X	1.35X
Gearing	72-80%	55.04%
FFO:Debt Alt	7-10%	6.13%
Cash interest cover	2.3X	3.45X

HTWSR at wholesale WACC of 3.26%



Combined (Actual) – out performance of £3.6m

Ratio	Actual Baa2/BBB	
	Target	Results
Actual Core final financial model		
Artesian Interest Cover	≥1.5	1.86
S&P FFO:Debt	7-10%	6.75%
Moody's AICR	≥1.3X	1.46X
Moody's AICR (incl PAYG adj)		1.78X

HTWSR at wholesale WACC of 3.26%

Based purely on the quantitative assessment of relevant financial metrics and using a model with a WACC assumption of 3.26% in Wholesale and HTWSR price controls, overall the Combined business appears financeable.

However, as explained above in 2.3.8, to the extent that there remains uncertainty, as to key aspects of the HTWSR price control, this makes it difficult conclude on the overall financeability of the Combined business. These uncertainties include factors such as;

- Level of WACC for the HTWSR price control – we have made representations in relation to a higher WACC at least equal to the Company's Wholesale WACC
- Uncertainty about how the price control will be dealt with in future regulatory periods.
- The impact that any apparent divergence from “business as usual” water regulation, within the price control, may have on the approach by Rating agencies and debt investors.
- Uncertainty about the final approach to regulatory mechanisms such as;

- We have made representation on the duration of the price control
- Cost sharing mechanisms have not been finalised
- We have proposed re-set mechanism for WACC
- We have proposed cost re-set mechanism (capex and opex)
- We have made proposals relating to the treatment of Economic profit and water trading incentives
- End of AMP reconciliation models have not been finalised by Ofwat
- Uncertainty in relation to the cost estimate (disallowed costs) and existence of a process to re-set the price in line with the project maturity
- Uncertainty in relation to any regulatory performance commitment and any performance commitments under the BSA

The Company has appreciated the level of engagement and support from Ofwat thus far in the process. In Chapter 1.3 we have set out principles around how revised regulatory processes could be operated and how further engagement with Ofwat could be taken forward in order to agree such regulatory mechanisms (or alternative approaches).

Whilst the factors above, once concluded upon, would impact on financeability in either a positive or negative way, the level of current uncertainty means that the Board is unable to conclude on financeability of the Combined business at this time.

Accordingly, due to the level of uncertainty, explained above, in relation to the HTWSR price control, the Board are unable to reach a final conclusion relating to the financeability of the Combined Business Plan.

The Board has proposed that, following a period of further intensive engagement and clarification in relation to key regulatory mechanisms and processes, an updated Board financeability assessment of the Combined business will be provided in advance of the Final Determination. The Company has provided further detail relating to how this engagement and clarification can be achieved, in Chapter 1 of the Representation. The Board and the Company's senior management team remain highly committed to this process.

Notwithstanding this conclusion on the Combined business, the Company has provided further quantitative analysis relating to long term financial resilience scenarios on the Combined business in 2.4 Financial Resilience.

The Board has proceeded to assess the financeability of the Core business, in line with the license and statutory duties, below.

2.3.12 Financeability assessment in the Core Actual structure

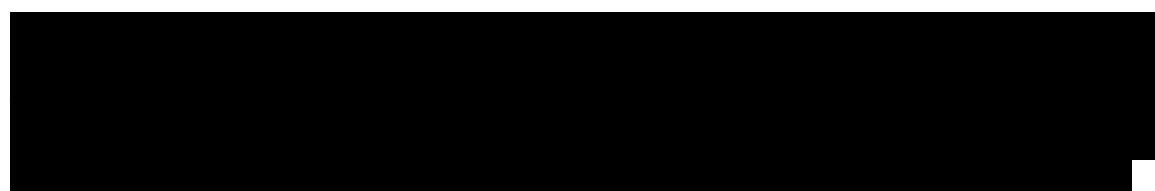
Given the uncertainty about key elements of the HTWSR price control it was also considered important to consider the financeability of the Core, actual business on a stand-alone basis. In particular the Board undertakes this review in the context

of the Directors' statutory & regulatory duties and Appointee License condition requirements relating to financeability.

In the context of financeability assessment, whilst in no way the intention of the Board, in extremis, the HTWSR programme could be terminated. Accordingly, in the Board's view it is essential to assess the financeability of the Core business on a stand-alone basis, as part of the overall financeability assessment process.

Accordingly the HTWSR price controls is stripped out of the Combined Actual model in order to consider the financeability of the Core business on a stand-alone basis.

Ratio	Actual Baa2/BBB		Combined
	Target	Results	Results
Actual Core final financial model			
Artesian Interest Cover	≥1.5	1.83	1.64
S&P FFO:Debt	7-10%	5.36%	6.13%
Moody's AICR	≥1.3X	1.19X	1.35X
Moody's AICR (incl PAYG adj)		1.46X	
Gearing	72-80%	63.67%	55.04%
FFO:Debt Alt	7-10%	5.36%	6.13%
Cash interest cover	2.3X	3.27X	3.45X



The Company has considered simple upside and downside scenarios together with other relevant factors which could influence the conclusion reached on financeability. Further detailed sensitivity scenarios are also included in Section 2.4 covering financial resilience

Up-side Scenarios

The Company has considered two reasonable up-side scenarios the first with an assumed Opex saving of £3.6m over the AMP and the second also with an increased level of non-regulated profit of £0.1m per annum.

Core (Actual) – out performance of £3.6m

Ratio	Actual Baa2/BBB	
	Target	Results
Actual Core final financial model		
Artesian Interest Cover	≥1.5	1.99
S&P FFO:Debt	7-10%	6.20%
Moody's AICR	≥1.3X	1.37X
Moody's AICR (incl PAYG adj)		1.64X

Core (Actual) – out performance of £3.6m and additional non-reg £0.1m pa

Ratio	Actual Baa2/BBB	
	Target	Results
Actual Core final financial model		
Artesian Interest Cover	≥1.5	2.02
S&P FFO:Debt	7-10%	6.29%
Moody's AICR	≥1.3X	1.40X
Moody's AICR (incl PAYG adj)		1.66X

These “sensible” up-side scenarios improve with ratings headroom. However, this assumed that there is a revision to Moody's current methodology to allow the benefit of out-performance (which currently it does not recognise).

Down-side Scenarios

The Company has next considered the sensitivity of the Core financial ratios to the most significant changes/representations made in the business plan being;

- Legacy revenue adjustment in relation to historic agreed treatment of Connection Charges
- WACC reduction by 37bps
- Reduction of PAYG adjustment back to the 0.7% Ofwat level

Down-side disaggregated

Ratio	Actual Baa2/BBB		-£2.9m WRFIM	-37bps WACC	0.7% PAYG
	Target	Results	Results	Results	Results
Actual Core final financial model					
Artesian Interest Cover	≥1.5	1.83	1.71	1.69	1.66
S&P FFO:Debt	7-10%	5.36%	4.83%	4.72%	4.60%
Moody's AICR	≥1.3X	1.19X	1.07X	1.04X	1.19X
Moody's AICR (incl PAYG adj)		1.46X	1.33X	1.31X	1.26X

Down-side – PAYG 0.7%, WRFIM – £2.9m, -37bps on WACC

Ratio	Actual Baa2/BBB	
	Target	Results
Actual Core final financial model		
Artesian Interest Cover	≥1.5	1.40
S&P FFO:Debt	7-10%	4.29%
Moody's AICR	≥1.3X	1.08X
Moody's AICR (incl PAYG adj)		1.13X
Gearing	72-80%	64.87%
FFO:Debt Alt	7-10%	4.08%
Cash interest cover	2.3X	2.95X



Ratio	Actual Baa2/BBB	
	Target	Results
Actual Core final financial model		
Artesian Interest Cover	≥1.5	1.57
S&P FFO:Debt	7-10%	4.98%
Moody's AICR	≥1.3X	1.27X
Moody's AICR (incl PAYG adj)		1.32X

The “sensible” up-side scenarios assist greatly in mitigating the worst case scenario. This gives additional comfort that the investment grade rating would be retained even in a combined down-side scenario.

Other Relevant Factors

The Company has therefore considered other relevant factors in drawing our conclusions;

- The trend of relevant ratios is stable (not deteriorating) and begins to improve towards the end of the AMP.
- Rating agencies have not yet defined the extent to which their approach to the industry may be refined. There is a recognition, with lower allowed cost of capital but also lower gearing, that there could be some trade off in terms of the approach taken with relaxation of some targets. In Moody's recent industry publication dated July 2019, they recognize that on average industry AICR falls from 1.3X to 1.15X (for notionally geared companies) and to 0.99x for highly geared companies. There could also be some recognition, by the raters, of (consistent) out-performance and of the use of PAYG levers. For example under Moody's methodology, if PAYG levers are recognized the AICR would fall comfortably above the threshold.
- Historically the Company has retained lower levels of FFO: net debt whilst maintaining its current credit rating with a lower end range from 4.3% to 5.6% in previous periods.
- The Company is rated as a whole entity and therefore takes the benefit of any non-regulated activities. On average this would improve ratios by 12bps for FFO:net debt and 0.06X for AICR. Whilst in itself not improving ratios to the extent of moving above the target this is another positive contributory factor.
- The Company has shown itself, consistently, to be efficient (in TOTEX terms) and has consistently performed well operationally. Accordingly there is seen to be an opportunity for out-performance which could strengthen financeability. One “sensible” up-side scenario has been presented above. However, this is by no means aggressive and, for example, does not recognize any potential ODI rewards.
- The results of viability scenarios have shown that the Company remains financially resilient and is able to respond appropriately to down side risk.

The long term stable operational performance of the company and experienced management team also reduce the risk of down side events occurring.

- Other relevant qualitative factors considered include strong operational track record, experienced management team, operational excellence (eg SIM) and investor support. The Company provided extensive explanation of these factors in Chapter 2 of the IAP response.
- The wider South Downs Group engaged in low risk activities relating to property rental and solar power generation and. Therefore, does not increase the overall risk profile.

We explained in detail in our response to the IAP the steps that have already been taken in relation to strengthening the overall long term financial resilience of the business and any remedies available to manage the impact of the current financing structure. This has included the sale of the business to an investor that can, subject to business case, support the Company with further equity investment.

Although significant equity injections are included in the business plan, further equity injections are not effective in improving financeability. As the Company has previously explained the existing Artesian bond structure (RPI, 3.635%) has extremely restrictive terms in relation to early repayment or redemption and effectively, cannot be efficiently paid down early. Accordingly equity injections do not readily improve pressure on the FFO/net debt and AICR ratios.

This is because cash from equity injections cannot reduce the embedded debt and related interest charges. Hence whilst equity injections can be effective in managing cash flow requirements or reducing the need for new debt, they cannot reduce the interest load of embedded debt. Therefore they are only effective to a point.

In an ever developing financial market, the Company and the Board continue to keep under review any viable options to restructure the embedded Artesian debt efficiently in the future.

Having considered both the qualitative and quantitative factors set out above the Board has concluded that the Core business remains financeable in the actual capital structure.

However, given the tight headroom against the key rating agency metrics the Board recognises that any significant changes to the plan as submitted could undermine financeability to the point that the Core business is no longer financeable. The key factors that could negatively impact this financeability assessment relate to;

- Reduction in allowed cost of capital below 3.26% (including removal of the Company Specific Premium)
- Reversal of the 3.5% PAYG adjustment made to support financeability in the notional structure
- Reversal of the representation in relation to the proposed Ofwat WRFIM adjustment for the historic treatment of Connection Charges.

- Planned equity investments are not approved by investors at the time required
- The approach taken by rating agencies in the assessment of credit ratings is not modified to take account of factors such as lower gearing, outperformance or PAYG adjustments.

2.3.13 Financeability considerations in relation to the HTWSR price control (WACC 3.26%)

Finally, for completeness, we have also considered the financeability of the HTWSR price control. Whilst it is possible to consider standalone financeability in a simplistic fashion – based upon quantitative analysis of key indicators such as cash flow and financial ratios - there are a much wider range of qualitative factors (and uncertainties) which impact our assessment.

We have, none the less, set out the qualitative factors that impact financeability on a standalone basis.

Quantitative factors

Given that the “Fin Stat” ratios for the Business Plan model take into account only 5 years, and the longer duration of the HTWSR programme, the Company has considered the longer term nature of this programme and the overall funding requirements over the duration of the programme.

In particular, due to the overall financing constraints that the growth in RCV generates, the profile of funding required shows a significant amount of “up front” equity, with debt only raised later in the construction programme. This preserves the overall gearing within the Combined business and helps in managing the critical AICR and FFO/net debt ratio. A different profile of debt and equity funding, with a more balanced profile, would result in a degradation of key ratios and of gearing.

The table below shows the profiles of debt and equity required and the impact on ratios. In particular gearing in the price control is very low initially and only reaches the notional target level of 60% by the end of the construction programme. As a result for the requirement for this significant up- front equity contribution, debt doesn't start to be raised until well into 2023/24 in the fourth year of the AMP.

HTWSR price control	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gearing	-11.44%	-7.32%	-27.74%	6.40%	34.59%	58.12%	63.93%	63.48%	60.32%	56.88%
FFO/net debt (Ofwat Alt)	-15.53%	-50.49%	-14.19%	48.31%	8.26%	4.04%	3.73%	4.07%	4.78%	5.18%
AICR (Ofwat Alt)	3.5806	(37.0940)	(16.9763)	6.5911	3.2625	2.0282	1.8244	1.8559	2.1188	2.2059
Debt - Nominal prices £m	(11.450)			10.017	15.656	40.000	25.000	8.000	(4.068)	(5.027)
Equity - Nominal prices £m	22.000	7.000	13.000	7.000	0.000					
Capex - Nominal prices £m	(11.258)	(6.936)	(8.227)	(20.861)	(24.671)	(38.007)	(28.404)	(10.917)	(1.001)	

This analysis also demonstrates that, the funding and capital structure proposed adequately supports the cash flow requirements of the programme and, by the end of the programme, results in gearing, FFO/net debt and AICR which appear reasonable. However, it should be noted that the scale of this programme relative to the rest of the business does influence the wider package of financial ratios for the Combined business significantly. Accordingly a reduction in WACC for the HTWSR price control degrades the ratios for both the price control itself and across the Combined business.

Qualitative factors

In reality this control would not be considered in a stand-alone capacity and the reasons for this are summarised below. They are also set out in more detail in Chapter 1.

There is uncertainty as to the approach that would be taken by the credit rating agencies particularly given the divergence from “business as usual” water regulatory mechanisms and risks.

The programme has a different risk profile and a number of key regulatory mechanisms have not yet been finalized.

Precedents for raising finance on a standalone basis are not effective comparators for the nature of the HTWSR programme.

To the extent that overall cash flow profile and end of project projected financial ratios appear appropriate, then we have concluded that the HTWSR price control, as submitted, sets out an appropriate financing strategy. However, considering the wider range of relevant qualitative factors, we are unable to conclude that the HTWSR price control is financeable on a standalone basis.

2.3.14 Board assessment of financeability

The sections set out above, together with analysis of financial resilience, have informed the Board’s assessment of financeability. The Board’s financeability assessment and final conclusions are set out as part of the Board Assurance Statement which is presented along-side this Representation document. We have summarised the key conclusions from the Board’s assurance statement below;

Financeability assessment – Core business activities

After considering the financial projections for the Core business using the Ofwat model, the Board concluded:

- **Notional structure.** After applying efficiently structured capital injections, PAYG adjustments of 3.5% and making the corrections and revisions set out in the Representation, with a Baa1/BBB+ target credit rating the Business Plan is financeable.
- **Actual structure.** Following the further reduction in allowed cost of capital, the Board recognises the diminished headroom on key financial

ratios. After applying efficiently structured capital injections, PAYG adjustments of 3.5% and making the corrections and revisions set out in the Representation, and considering a wider range of qualitative factors, with a Baa2/BBB target credit rating, the Business Plan is financeable.

- **PAYG.** After considering the customer research, that the use of PAYG levers is supported by customers and in their best interests for the short and long term.
- **Bill level and profile.** After considering the customer research, that the bill level and bill profile is supported by customers.
- **Viability.** After undertaking financial viability scenarios and considering available mitigating actions, that the Business Plan is financially resilient.
- **FD changes.** In addition the Board also highlights that any changes, in the Final Determination, to the key assumptions highlighted, and in particular any further reduction in cost of capital, reduction in the 3.5% PAYG adjustment or reversal of the representation made regarding the treatment of PR14 Connection Charges under the WRFIM mechanism, would result in the Business Plan in Notional and Actual structures no longer being financeable.

As a consequence of the Board's review of financeability and financial resilience, the Board concluded that the Company's Plan for the Core business;

- Is financeable in the notional and actual capital structures
- Remains financially resilient over the longer-term
- Protects customer interest in the short and long-term

Financeability assessment – Combined business activities

The Board recognises that, at this time and to the extent that there remains uncertainty, as to key aspects of the HTWSR price control, the Board is unable to conclude on the overall financeability of the Combined business at this time. These uncertainties include the following factors;

- Level of WACC for the HTWSR price control – we have made representations in relation to a higher WACC (of a minimum of the Company's Wholesale WACC of 3.26%) and Company specific wholesale WACC in each subsequent price review period.
- Uncertainty about how the price control will be dealt with in future regulatory periods.
- The impact that any apparent divergence from "business as usual" water regulation, within the price control, may have on the approach by Rating agencies and debt investors.
- Uncertainty about the final approach to regulatory mechanisms such as;
 - We have made representation on the duration of the price control
 - Cost sharing mechanisms have not been finalised
 - We have proposed a re-set mechanism for WACC
 - We have proposed a cost re-set mechanism (capex and opex)
 - We have made proposals relating to the treatment of Economic profit and water trading incentives

- End of AMP reconciliation models have not been finalised by Ofwat
- We disagree with disallowed costs made by Ofwat.
- We have made proposals relating to a process to re-set the construction cost in line with the project maturity – cost certainty at this stage of the programme is lower than it will be when certain critical programme development milestones have been reached
- Uncertainty in relation to any regulatory performance commitment and any performance commitments under the BSA

Whilst the factors above, once concluded upon, would impact on financeability in either a positive or negative way, the degree of current material uncertainty means that the Board is unable to conclude on financeability of the Combined business at this time.

Accordingly, due to the level of uncertainty, explained above, in relation to the HTWSR price control, ***the Board are unable to reach a final conclusion relating to the financeability of the Combined Business Plan.***

The Board has proposed that, following a period of further intensive engagement and clarification in relation to key regulatory mechanisms and processes, an updated Board financeability assessment of the Combined business will be provided in advance of the Final Determination. The Company has provided further detail relating to how this engagement and clarification can be achieved, in Chapter 1 of the Representation. The Board and the Company's senior management team remain highly committed to this process.

2.4 **Financial resilience**

We have performed a range of financial viability scenarios as part of our assessment of long term financial resilience. We have covered the viability scenarios set out in the Ofwat "putting the sector in balance" document and those "severe but plausible" scenarios that the Company uses as part of its own viability assessment for statutory reporting purposes. In addition we have added the Ofwat scenario of a 37bps reduction in WACC and we have updated our combined scenario for HTWSR based on the most up to date commercial position

As a result of the use of the new HTWSR price control, and Ofwat and the Company's approach to assessing financeability, we have undertaken two sets of modelling scenarios for financial resilience. We have presented each of the scenarios, where relevant, in both the "Core" business and in the "Combined" business.

We note that, as a consequence of the reduction in WACC from the "early view" previously used for Business Planning purposes, there has been a significant reduction in headroom on key financial ratios. Accordingly the actions that need to be taken to manage down-side scenarios have become more challenging. However, the Board and the management team's opinion is that these actions remain within the bounds of what could be achieved by the business.

We have summarised the results of this analysis below. Based upon this analysis we have concluded that, the Company is able to adequately respond to financial

shocks whilst maintaining an investment grade credit rating and accordingly remains financially resilient. We have set out at length, in our response to the IAP, the nature of mitigating actions available. We have not reiterated these at length but have summarised the actions at the end of this section.

Financial resilience – Core Business

The following table sets out the “base case” scenarios for the Core business plan.

Ratio	Actual Baa2/BBB		
	Actual Core final financial model	Target	Results
Artesian Interest Cover		≥1.5	1.83
S&P FFO:Debt		7-10%	5.36%
Moody's AICR		≥1.3X	1.19X
Moody's AICR (incl PAYG adj)			1.46X
Gearing		72-80%	63.67%
FFO:Debt Alt		7-10%	5.36%
Cash interest cover		2.3X	3.27X

BASE CASE (AMP7) - S&P FFO/Net Debt 5.4%, Moody's ICR 1.19, Gearing 64%, Artesian 1.83

Ofwat Individual scenario	Impact (pre mitigation)	Mitigation	↓ Opex	↓ Capex	↑ Borrowing	↑ Capital	↓ Dividends	Other
Totex underperformance (10% of Totex)	FFO:Debt below 2% and significant reductions in Moody's AICR 0.21x and Artesian 0.56x. Gearing 70%. Risk of downgrade by 1 notch if this endures for the full AMP.	The Board saw this scenario as extreme and unrealistic. However, it could be mitigated through a combination of significant actions as noted aside. In the Board's view the impact of any shock would be limited to 1-2 years and not be allowed to endure for a full 5 years.	✓	✓	✓		✓	
ODI penalty (3% of RoRE) in one year (Opex)	FFO:Debt 5% and reductions in Moody's AICR 1.12x. Gearing 64%.	Mitigated by borrowing in year of impact and temporary restriction on Opex to manage ICR.	✓					
High inflation scenario	Significant reduction in FFO:Debt to 3.6%, Moody's AICR of 1.0x and Artesian 1.54x. Gearing 65%.	Although this can be managed in the short term by temporary reduction in Opex in reality a long-term cost reduction programme would likely be required.	✓					✓
Low inflation scenario	Positive impact	None required						
Increase in the level of bad debt (5%)	No significant impact	None required						
Debt at 1% above the forward projections (5 years)	In final 2 years FFO:Debt 5.2%, Moody's AICR 1.22x. Gearing 65%.	Additional capital & reduce debt, or a re-phasing of the existing arrangements				✓		
Debt at 1% above the forward projections (10 years)	FFO:Debt 5.1%, Moody' AICR 1.41x. Gearing 69%	Reduced opex by £0.5m in 2 years of AMP7 and 2 years of AMP8. Consider switch of debt to equity if this is not possible.	✓			✓		
Financial penalty 3% on one year turnover	One year impact of FFO:Debt 5.2%, Moody's AICR 1.16x and Artesian 1.73x. Gearing 64%.	A one-year impact of this type could likely be managed by discussion with rating agencies. Further management actions would include a temporary reduction in Opex by the same amount.	✓					
WACC falls by a further 37bps	FFO:Debt 5.2%, Moody' AICR 1.16x. Gearing 64%	Reduction in Opex of £0.5m per annum	✓					
Loss of Company specific premium in AMP8	FFO:Debt 5.0%, Moody' AICR 1.77x. Gearing 74%	Reduction in Opex of £1m per annum in each of the last 2 years of AMP8.	✓					
Loss of Company specific premium in AMP9	FFO:Debt 6.4%, Moody' AICR 1.9x. Gearing 86%	Equity injections – replace debt for equity in the last 2 years of AMP9.				✓		
Intercompany	n/a							

Combined								
Cost underperformance (Totex, Retail, ODI and financial penalty)	Significant impact on key ratios. FFO:Debt 2.2%, Moody's AICR 0.35x, Artesian 0.69x. Gearing 70%. Risk of downgrade by 1 notch if this endures for the full AMP.	The Board saw this scenario as extreme and unrealistic. Significant management actions would have to be taken in combination and these are summarised aside. In the Board's view the impact of any shock would be limited to 1-2 years and not be allowed to endure for a full 5 years.	✓	✓	✓	✓	✓	

Company scenario Viability Statement	Impact	Mitigation	↓ Opex	↓ Capex	↑ Borrowing	↑ Capital	↓ Dividends	Other
Totex – loss of a significant water treatment works	Key ratios maintained due to partial mitigation by insurance receipts. However, one year impact of Moody's AICR 0.71 and S&P FFO:Debt 4.0% would require mitigation.	Mitigated by borrowing in year of impact and temporary restriction on Opex to manage ICR. Could also manage through careful discussion with rating agencies.	✓		✓			✓
Totex - A combination of 2 risk events arise	Marginal reduction in Moody's AICR of 1.17 and Artesian 1.58. Gearing 64%.	Mitigated by minor borrowing in year of impact and temporary restriction on Opex to manage ICR.	✓		✓			
Totex – Pension scheme deficit	Marginal reduction in S&P FFO:Debt and Moody's AICR below thresholds. Gearing 64%.	Mitigated by cost reductions of c£0.250m pa.	✓					
An upper limit capital expenditure test of £20m	Reductions in S&P FFO:Debt 4.9% and Moody's AICR 1.07x. Significant fall in Artesian AICR 0.79 which would block dividends if unmitigated.	A combination of borrowing, temporary restriction in Opex & Capex, and reduced dividends.	✓	✓	✓		✓	
Combined								
Loss of IT system for one month in combination with two different scenarios (Pension deficit/Loss of treatment works)	Results consistent with results of these scenarios above. Primary concern is cash-flow management in year and this falls well within current facilities.	Mitigated by cash flow management in year; borrowing in year of impact and temporary restriction on Opex to manage ICR.	✓		✓			

Financial resilience Combined – Core Business + Havant Thicket (WACC 3.26%)

The following table sets out the “base case” scenarios for the Combined business plan.

Ratio	Actual Baa2/BBB	
	Target	Results
Actual Combined - “Base Case”		
Artesian Interest Cover	≥1.5	1.64
S&P FFO:Debt	7-10%	6.13%
Moody's AICR	≥1.3X	1.35X
Gearing	72-80%	55.04%
FFO:Debt Alt	7-10%	6.13%
Cash interest cover	2.3X	3.45X

BASE CASE (AMP7) - S&P FFO/Net Debt 6.1%, Moody's ICR 1.35, Gearing 55%, Artesian 1.64

Ofwat Individual scenario	Impact (pre mitigation)	Mitigation	↓	→	←	←	↓	
			Opex	Capex	Borrowing	Capital	Dividends	Other
Totex underperformance (10% of Totex)	FFO:Debt 4% and significant reductions in Moody's AICR 0.83x and Artesian 0.93x. Gearing 58%. Risk of downgrade by 1 notch if this endures for the full AMP.	The Board saw this scenario as extreme and unrealistic. However, it could be mitigated through a combination of significant actions as noted aside. In the Board's view the impact of any shock would be limited to 1-2 years and not be allowed to endure for a full 5 years.	✓	✓	✓		✓	
ODI penalty (3% of RoRE) in one year (Opex)	FFO:Debt 5.8% and reductions in Moody's AICR 1.28x. Gearing 55%.	Mitigated by borrowing in year of impact and temporary restriction on Opex of 1m to manage ICR.	✓					
High inflation scenario	Significant reduction in FFO:Debt to 5.3%, Moody's AICR of 1.4x and Artesian 1.6x. Gearing 55%.	Although this can be managed in the short term by temporary reduction in Opex in reality a long-term cost reduction programme would likely be required.	✓					✓
Low inflation scenario	Positive impact	None required						
Increase in the level of bad debt (5%)	No significant impact	None required						
Debt at 1% above the forward projections (5 years)	In final 2 years FFO:Debt 6.02%, Moody's AICR 1.32x. Gearing 55%.	Additional capital & reduce debt, or a re-phasing of the existing arrangements				✓		
Debt at 1% above the forward projections (10 years)	FFO:Debt 5.2%, Moody' AICR 1.54x. Gearing 62%	Reduced opex in 2 years of AMP7 and 2 years of AMP8. Consider switch of debt to equity if this is not sufficient.	✓			✓		
Financial penalty 3% on one year turnover	One year impact of FFO:Debt 5.9%, Moody's AICR 1.3x and Artesian 1.66x. Gearing 55%.	A one-year impact of this type could likely be managed by discussion with rating agencies. Further management actions would include a temporary reduction in Opex by the same amount.	✓					
WACC falls by a further 37bps	FFO:Debt 5.5%, Moody' AICR 1.21x. Gearing 56%	Reduction in Opex of £2.5m over the first 3 years	✓					
Loss of Company specific premium in AMP8	FFO:Debt 4.69%, Moody' AICR 1.95x. Gearing 67%	Reduction in Opex of £1m per annum in 2 years Switch of debt to equity of £10m over 2 years	✓			✓		
Loss of Company specific premium in AMP9	FFO:Debt 6.95, Moody' AICR 2.3x. Gearing 67%	None required						
Intercompany	n/a							
Combined								
Cost underperformance (Totex, Retail, ODI and financial penalty)	Significant impact on key ratios. FFO:Debt 3.2%, Moody's AICR 0.63x, Artesian 0.74x. Gearing 60%. Risk of downgrade by 1 notch if this endures for the full AMP.	The Board saw this scenario as extreme and unrealistic. Significant management actions would have to be taken in combination and these are summarised aside. In the Board's view the impact of any shock would be limited to 1-2 years and not be allowed to endure for a full 5 years.	✓	✓	✓	✓	✓	

Company scenario Viability Statement	Impact	Mitigation	↓	↓	↑	↑	↓	
			Opex	Capex	Borrowing	Capital	Dividends	Other
Totex – loss of a significant water treatment works	Key ratios maintained due to partial mitigation by insurance receipts. However, one year impact of Moody's AICR 0.98 and S&P FFO:Debt 5.3% would require mitigation.	Mitigated by borrowing in year of impact and temporary restriction on Opex to manage ICR. Could also manage through careful discussion with rating agencies.	✓		✓			✓
Totex - A combination of 2 risk events arise	Marginal reduction in Moody's AICR of 1.33 and Artesian 1.5. Gearing 56%.	Mitigated by minor borrowing in year of impact and temporary restriction on Opex to manage ICR.	✓		✓			
Totex – Pension scheme deficit	Marginal reduction in S&P FFO:Debt and Moody's AICR below thresholds. Gearing 55%.	Mitigated by cost reductions of c£0.250m pa.	✓					
An upper limit capital expenditure test of £20m	Reductions in S&P FFO:Debt 5.6% and Moody's AICR 1.24x. Significant fall in Artesian AICR 0.74 which would block dividends if unmitigated.	A combination of borrowing, temporary restriction in Opex & Capex, and reduced dividends.	✓	✓	✓		✓	
HTWSR Delay due to Terms not agreed (delay £5m by a year and increase in costs of £2.5m) + Adverse weather £0.750m cost	Pressure on Moody's AICR below 1.3x in some years but not significant.	This could likely be managed by careful discussion with the rating agencies. However, in reality other management mitigation would take place to manage cost overruns. This includes contractual cost sharing mechanisms both with prime contractors and with SWS.	✓	✓				
Combined								
Loss of IT system for one month in combination with two different scenarios (Pension deficit/Loss of treatment works)	Results consistent with results of these scenarios above. Primary concern is cash-flow management in year and this falls well within current facilities.	Mitigated by cash flow management in year; borrowing in year of impact and temporary restriction on Opex to manage ICR.	✓		✓			

Types of mitigating actions

As set out previously in the response to the IAP, the Company has identified a range of actions that it considers to be highly effective in mitigating the effects of down-side scenarios. The Board has considered the effectiveness of these mitigations as part of the overall assessment of finaceability. The Board also set out the more detailed information in the response to the IAP, in Chapter 2.3, and has not repeated these detailed arguments. In summary the primary mitigants include;

- Temporary restriction of dividends
- Temporary restrictions in Opex. In particular this can be managed by temporary reductions in infrastructure renewals of up to c£3m per annum.
- Temporary restrictions in Capex. The portfolio of capex schemes can be managed in year to delay or defer expenditure with minimal short-term business risk.
- Use of overdraft and existing revolver facilities
- Further capital injections (see also further points below)

In extreme scenarios such as year on year cost increases (Capex or Opex) management would respond through the implementation of wider cost reduction programmes.

Effectiveness of equity injections

The Company has included both within the Business Plan submission and as part of mitigation for the viability scenarios presented, the use of equity cures. However, it should be noted that, in Portsmouth Water's *particular* circumstances there is a limit to the effectiveness of equity in addressing pressure on FFO/net debt and AICR financial ratios.

As the Company has previously explained we have an existing Artesian bond structure in place (RPI, 3.635%). This bond has extremely restrictive terms in relation to early repayment or redemption and – effectively, cannot be efficiently paid down early. Accordingly equity injections do not readily improve pressure on the FFO/net debt and AICR ratios. This is because cash from equity injections cannot reduce the embedded debt and related interest charges. Hence, equity injections can be effective in managing cash flow requirements or reducing the need for new debt, but cannot reduce the interest load of embedded debt. Therefore they are only effective to a point.

Although headroom against the key financial ratios at Baa2/BBB is tight, the Board has concluded that there is good evidence to support the Company's short and long term financial resilience to financial shocks and ability to manage such shocks within the Bounds of a Baa2/BBB rating.

The Board has also concluded that the most extreme scenarios are highly unlikely in reality as the Board and Management team would take early mitigating actions to reduce the impact of such shocks to 1 or 2 years and not allow the effect to continue over a whole AMP period. However, the Board recognises that, in the event that these severe long-term scenarios did arise there would be a high risk of downgrade to Baa3/BBB-. There is good evidence to support the Company's ability to continue to finance its operations at a Baa3/BBB- credit rating. This was evidenced in detail in the Company's response to the IAP.

2.5 RoRE

Final RoRE Range

Set out below are the final RoRE ranges. As set out elsewhere in the financeability Chapter, we have presented analysis for both the "Core" business (without HTWSR), and the "Combined" business inclusive of HTWSR (which is also presented both pre and post mitigating actions). Accordingly we have also produced two versions of the related Business Plan table – APP 26.

It should be noted that over the AMP in the Combined business there is significant growth in the RCV of circa 70% from an opening RCV of £152m to a closing of £272m with the equity component of RCV growing at a greater rate due to the reductions in gearing. This results in depression of the RoRE for the Company, particularly in a Combined Business Plan Model. Whilst there is also growth in the RCV in the Core business, with a movement from £152m to £200 this is less significant.

We also note that whilst the HTWSR price control is currently set for a 10 year period, the functionality within the Ofwat Model does not provide RoRE analysis for a period longer than 5 years.

Summary of Core business

RoRE Average Appointee		
Movement from Base Case	Upside	Downside
Revenue	0.33%	-0.34%
Bulk supply revenue	0.01%	-0.05%
Retail Revenue	0.06%	-0.05%
Retail Cost	0.02%	-0.02%
Costs	0.16%	-0.25%
ODI	1.25%	-1.73%
C-Mex	0.25%	-0.50%
D-Mex	0.04%	-0.08%
Financing	0.03%	-0.03%
Total	2.15%	-3.04%

Core RoRE	4.33%
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Summary of Combined business

RoRE Average Appointee		
Movement from Base Case	Upside	Downside
Revenue	0.29%	-0.29%
Bulk supply revenue	0.01%	-0.04%
Retail Revenue	0.05%	-0.04%
Retail Cost	0.02%	-0.02%
Costs	0.14%	-0.22%
ODI	1.08%	-1.49%
C-Mex	0.22%	-0.43%
D-Mex	0.03%	-0.07%
Financing	0.08%	-0.08%
Total	1.92%	-2.68%
Company Scenario	Upside	Downside
HTWSR Pre-Mitigation	-4.28%	-21.98%
HTWSR Thicket Post-Mitigation	2.11%	-3.63%

Combined RoRE	4.31%
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Approach to RoRE analysis

In order to perform the RoRE analysis the Board developed a clear understanding of the risks involved in the delivery of the Business Plan. More detail on this was set out in the Business Plan document submitted on 3 September, in Chapter 10.3.

Using this risk analysis and updating for any areas of Ofwat Actions or any changes in the underlying Business Plan tables for the IAP resubmission and Draft Determination, we have set out a range of upside and downside scenarios for RoRE. We have included two additional company specific scenarios in relation to HTWSR. Where appropriate we have taken into account realistic management mitigations.

Table 2.5.1 RoRE Scenarios and Mitigations

Metric	Scenario assumptions	Mitigation
Revenue	Increase/decrease measured consumption Increase/decrease in meter optants Increase/decrease in new connections	None assumed.
Water Trading	Increase/decrease in water trading revenue	None assumed.
Totex	Increase/decrease in power costs of $\pm 3\%$ above inflation Increase/decrease in labour costs of $\pm 2\%$ above inflation Increase/decrease in other Totex of $\pm 1.5\%$ above inflation	Assume that management actions could mitigate labour costs by 25% to -1.5% and other Totex costs by 50% to -0.75% . No assumptions made regarding out/under performance against Totex targets.
Residential Retail	Increase/decrease in labour costs of $\pm 2\%$ above inflation Increase/decrease in Bad Debt costs of $\pm 5\%$ Increase/decrease other costs of $\pm 1.5\%$	Assume that management actions could mitigate labour costs by 25% to -1.5% bad debt costs by 40% to -3% and other costs by 50% to -0.75% .
Business Retail	n/a	n/a
ODI	Modelling of a package of ODIs taking account of any ODI measures which have positive and negative correlations	None assumed.
WaterworCX	C-Mex & D-Mex high low scenarios	None assumed.
Financing performance (new debt)	Assume cost of new Debt varies by ± 1.5 percentage points relative to Ofwat assumption	Assume that management actions could mitigate new debt costs by 67% to -0.5% .
Company specific scenarios		
HTWSR	Cost overruns against P50	None assumed
HTWSR (new)	A basket of commercial risks. See Appendix 2.5	Commercial remedies as set out in the draft commercial framework

The RoRE analysis set out in the Business Plan table App 26 required development of realistic high and low cases specified as a P10/P90 range of probabilities. The underlying input data was based upon a combination of historic data, Business Plan assumptions (including expert support in relation to ODI performance) and management judgement.

Behind each of the RoRE scenarios there are multiple drivers. To simply sum P10 and P90 for each driver would be incorrect as it would lead to very extreme scenarios when in reality, drivers that are independent of one another are likely to compensate for high/low scenarios of other drivers. The Monte-Carlo analysis randomly samples from a probability distribution for each driver. Where the drivers may be related, correlations have been defined. We then sample from these distributions thousands of times, and use this to develop a new probability distribution for each of the RoRE scenarios. Set out further in Appendix 2.5 support

for RoRE scenarios, is a summary of the approach taken, assumptions made and the resultant high/low scenarios.

Of particular note in the Combined model is the RoRE impact of the unmitigated HTWSR scenario. Two company specific RoRE scenarios have been run for HTWSR. These scenarios lead to a range of RoRE between -4.28% and -21.98% (no mitigation), and +2.11% to -3.63% (with mitigation), against a base RoRE for HTWSR of 4.21%.

Where there are no mitigating actions modelled, the RoRE on the HTWSR project is **below** the base case in both the upside and downside cases. This is because the underlying cost of the project is projected to be higher in both the P10 and P90 cases, increasing RCV (which increases the denominator) and thereby reducing RoRE. The assumptions and mitigating actions are outlined in Appendix 2.5.

Changes to the RoRE range since the previous submission on 1 April 2019

We have revised the following scenarios since our submission on 1 April 2019;

Table 2.5.2 Revisions to RoRE scenarios

Metric	Revision	Reason
Revenue & Costs	Minor changes in assumption	Revised DD revenue
ODI	Changes in rewards levels	Ofwat feedback and various Actions.
Debt financing	Reallocation between the price controls as a result of updated financing assumptions and the new HTWSR control	Revised DD position
Core and Combined business	We have presented the Core business, excluding HTWSR, and the Combined business separately to demonstrate the range of RoRE in each case. This also demonstrates how the RoRE range for HTWSR is determined.	Ofwat feedback

Any other minor movements in the RoRE range have resulted from underlying changes to the Business Plan model or inputs.

Table 2.5.3 Assumption drivers

Metric	Scenario assumptions	Basis
Revenue	Measured consumption Meter optants New connections	Based on normalised historical trends and assumption ranges for WRMP
Water Trading	Water trading revenue $\pm 10\%$	Based on WRMP analysis
Totex	Power costs of $\pm 3\%$ above inflation Labour costs of $\pm 2\%$ above inflation Other Totex of $\pm 1.5\%$ above inflation	Review of external broker's ranges. Independent forecasts for "construction" labour such as engineers and plumbers could be at 1-3% above CPIH. Independent construction cost forecasts (e.g. RICS) could be 2% above CPIH. Reduced to reflect company mix of activities and cost drivers.
Residential Retail	Increase/decrease in Bad Debt costs of $\pm 5\%$	Ofwat's guidance on financial viability scenarios.
ODI	Package of ODIs including WaterworCX s	Analysis of basket of ODI rewards and penalties proposed in the Plan.
WaterworCX	C-Mex & D-Mex	Using Ofwat ranges and historical company performance levels on SIM and developer survey
Financing performance (new debt)	Cost of new Debt varies by ± 1.5 percentage points relative to Ofwat assumption	Ofwat's guidance on financial viability scenarios.
HTWRS cost	Cost overruns	Monte Carlo analysis performed by F+G see Appendix 2.5
HTWSR combined	A range of possible commercial outcomes modelled as a basket.	Detailed risk assessment and commercial analysis. See Appendix 2.5

Mitigation

The management mitigations applied to reduce down side risk were covered in Chapter 10 (Table 10.4.1) of the 3 September Business Plan submission. These were included in the RoRE scenarios in order to give a post mitigation impact. In reality, it is highly unlikely that down-side scenarios would arise in each of the 5 years of the price control and that management actions would not have, at least some favourable impact on the results. We are also confident that management has a good track-record of being able to respond to and mitigate down-side scenarios which may arise.

Results

Based upon our assessment of delivery risks and the RoRE analysis performed, we have concluded that we have a clear understanding of the balance of risk and reward within the Plan. In particular we have concluded that the range of possible down side results are manageable within the context of financial resilience.

We have undertaken the RoRE analysis using the functionality within the Ofwat model. We note that the Ofwat model does not permit a 10 year RoRE analysis for the HTWSR price control. The results of our analysis are summarised below:

Core business detailed analysis

RoRE Average	Water resources		Network Plus		Appointee	
Base Case	3.92%		3.78%		4.33%	
Scenarios	Upside	Downside	Upside	Downside	Upside	Downside
Revenue	5.29%	2.52%	4.07%	3.49%	4.66%	3.99%
Bulk supply revenue	4.26%	2.82%			4.34%	4.28%
Retail Revenue					4.39%	4.28%
Retail Cost					4.34%	4.31%
Costs	5.45%	1.47%	3.88%	3.63%	4.48%	4.07%
ODI	8.66%	-2.17%	4.87%	2.24%	5.57%	2.60%
C-Mex					4.58%	3.82%
D-Mex			3.82%	3.70%	4.36%	4.25%
Financing			3.81%	3.75%	4.35%	4.30%

These have been considered in terms of variance from the base RoRE:

RoRE Average	Water resources		Network Plus		Appointee	
Movement from Base Case	Upside	Downside	Upside	Downside	Upside	Downside
Revenue	1.37%	-1.40%	0.29%	-0.29%	0.33%	-0.34%
Bulk supply revenue	0.35%	-1.10%			0.01%	-0.05%
Retail Revenue					0.06%	-0.05%
Retail Cost					0.02%	-0.02%
Costs	1.53%	-2.45%	0.10%	-0.16%	0.16%	-0.25%
ODI	4.74%	-6.09%	1.09%	-1.54%	1.25%	-1.73%
C-Mex					0.25%	-0.50%
D-Mex			0.04%	-0.08%	0.04%	-0.08%
Financing			0.03%	-0.03%	0.03%	-0.03%
Total	8.00%	-11.03%	1.54%	-2.09%	2.15%	-3.04%

Combined business (pre-mitigation) detailed analysis

RoRE Average	Water resources		Network Plus		HTWSR Price Control		Appointee	
Base Case	3.92%		3.78%		4.21%		4.31%	
Scenarios	Upside	Downside	Upside	Downside	Upside	Downside	Upside	Downside
Revenue	5.29%	2.52%	4.07%	3.49%			4.59%	4.01%
Bulk supply revenue	4.26%	2.82%					4.32%	4.27%
Retail Revenue							4.36%	4.27%
Retail Cost							4.32%	4.29%
Costs	5.45%	1.47%	3.88%	3.63%	-0.54%	-17.31%	3.79%	1.14%
ODI	8.66%	-2.17%	4.87%	2.24%			5.38%	2.81%
C-Mex							4.52%	3.87%
D-Mex			3.82%	3.70%			4.34%	4.24%
Financing			3.81%	3.75%	4.67%	3.75%	4.39%	4.22%

These have been considered in terms of variance from the base RoRE:

RoRE Average	Water resources		Network Plus		HTWSR Price Control		Appointee	
Movement from Base Case	Upside	Downside	Upside	Downside	Upside	Downside	Upside	Downside
Revenue	1.37%	-1.40%	0.29%	-0.29%			0.29%	-0.29%
Bulk supply revenue	0.35%	-1.10%					0.01%	-0.04%
Retail Revenue							0.05%	-0.04%
Retail Cost							0.02%	-0.02%
Costs	1.53%	-2.45%	0.10%	-0.16%	-4.74%	-21.52%	-0.51%	-3.16%
ODI	4.74%	-6.09%	1.09%	-1.54%			1.08%	-1.49%
C-Mex							0.22%	-0.43%
D-Mex			0.04%	-0.08%			0.03%	-0.07%
Financing			0.03%	-0.03%	0.46%	-0.46%	0.08%	-0.08%
Total	8.00%	-11.03%	1.54%	-2.09%	-4.28%	-21.98%	1.27%	-5.63%

Combined business (post-mitigation) detailed analysis

RoRE Average	Water resources		Network Plus		HTWSR Price Control		Appointee	
Scenarios	Upside	Downside	Upside	Downside	Upside	Downside	Upside	Downside
Base Case	3.92%		3.78%		4.21%		4.31%	
Revenue	5.29%	2.52%	4.07%	3.49%			4.59%	4.01%
Bulk supply revenue	4.26%	2.82%					4.32%	4.27%
Retail Revenue							4.36%	4.27%
Retail Cost							4.32%	4.29%
Costs	5.45%	1.47%	3.88%	3.63%	5.86%	1.04%	4.67%	3.66%
ODI	8.66%	-2.17%	4.87%	2.24%			5.38%	2.81%
C-Mex							4.52%	3.87%
D-Mex			3.82%	3.70%			4.34%	4.24%
Financing			3.81%	3.75%	4.67%	3.75%	4.39%	4.22%

RoRE Average Movement from Base Case	Water resources		Network Plus		Dummy		Appointee	
	Upside	Downside	Upside	Downside	Upside	Downside	Upside	Downside
Revenue	1.37%	-1.40%	0.29%	-0.29%			0.29%	-0.29%
Bulk supply revenue	0.35%	-1.10%					0.01%	-0.04%
Retail Revenue							0.05%	-0.04%
Retail Cost							0.02%	-0.02%
Costs	1.53%	-2.45%	0.10%	-0.16%	1.65%	-3.17%	0.36%	-0.65%
ODI	4.74%	-6.09%	1.09%	-1.54%			1.08%	-1.49%
C-Mex							0.22%	-0.43%
D-Mex			0.04%	-0.08%			0.03%	-0.07%
Financing			0.03%	-0.03%	0.46%	-0.46%	0.08%	-0.08%
Total	8.00%	-11.03%	1.54%	-2.09%	2.11%	-3.63%	2.14%	-3.12%

Tables

App 26 – Core, App26 - HT

Additional Evidence and Assurance

Appendix	Reference	Title
Support for RoRE scenarios	Appendix 2.5	RoRE scenarios revised

2.6 Tax Update

As part of our previous business plan submissions we have already included assurance statements and our methodology relating to our tax position.

This can be found in the following places within the submitted Business Plan documents;

Document	Section
Draft Business Plan – 3 rd September 2018	Table commentary App29
Draft Determination – 30 th August 2019	Table commentary App29

In addition, we have also responded to the following tax queries throughout the business plan process;

- RR-001 sent to OFWAT on the 19th April regarding the inclusion of the new Special Building Allowance capital allowance pool.
- RR-004 sent to OFWAT on the 19th June 2019 regarding expected tax treatment of expenditure relating to HTWSR.
- PRT.CA.A8 10.10 page 258 of the response to the IAP regarding assurance of tax forecasts.

In order to update the tax element for the requirements of the Draft Determination, we have additionally undertaken a significant amount of work supported by KPMG

our external tax advisors regarding the process and output of the data we have included.

There are no significant changes to the price controls apart from the HTWSR price control which is now split into a separate price control. Segregating HTWSR has had a knock on impact on the Water Resources price control which has subsequently changed as a result. The Water Network and Retail price controls remain unchanged.

To update the tables for the Draft Determination we have completed the following activities;

- Updated the opening capital allowances in accordance with the draft tax computation compiled and audited by KPMG for the financial statements for 2018/19.
- Split the tax balances into separate price controls and separated HTSWR activity.
- Reviewed the HTWSR capital allowances with assistance from the specialist capital allowance team at KPMG. This was essential given updated information now available since the IAP regarding the newly introduced Special Buildings Allowance.
- Analysed the Havant Thicket capital allowances for a further five year period to be compatible with the entire ten year price control.
- Requested specialist tax teams within KPMG review the Corporate Interest Restriction for the Ancala Holdco group rules and any implication for Portsmouth Water (a subsidiary of that group).

Evidence of the work that has been undertaken and the assurances gained from KPMG our tax advisors are included with the appendices of the Draft Determination.

Document	Position in appendix
Letter from KPMG stating that KPMG have provided advice to Portsmouth Water regarding the Capital Allowances	Appendix 2.6.1
Letter from KPMG referencing provided advice in respect of the tax treatment of the group interest costs.	Appendix 2.6.1

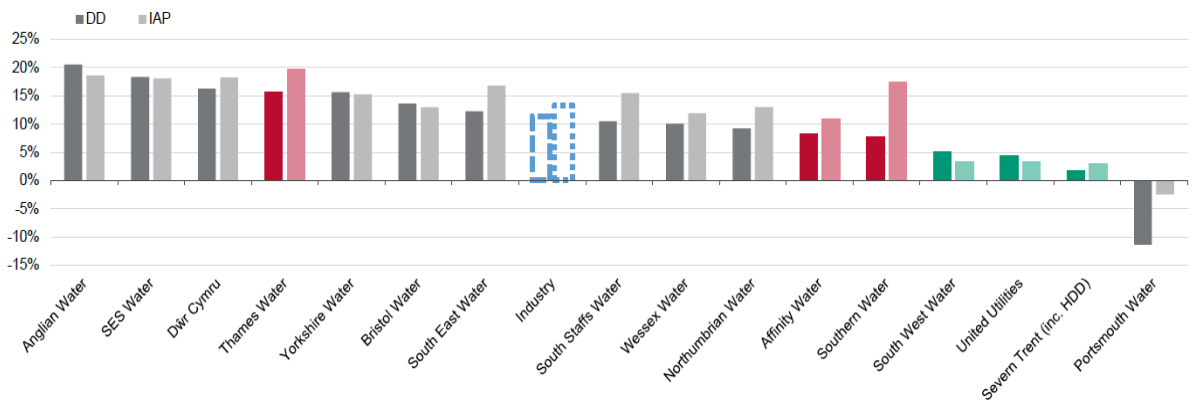
3 COST ASSESSMENT

3.1 Cost Assessment - TOTEX

General

Portsmouth Water is pleased that its Business Plan and response to the IAP both result in a plan, which meets Ofwat’s expectation in terms of Totex for AMP7.

The graph below shows that we are the only company, which exceeds Ofwat’s assessment of the costs the business needs to operate in the five year period 2020-25.



The Company has consistently been a low cost Company and has been assessed cost efficient by Ofwat in recent reviews.

We are aware that the conclusions of the assessment may be revised (marginally) for the Final Determination when Ofwat have reviewed both the 2018/19 cost and performance data and any company representations on the Draft Determinations.

Notwithstanding the above there are still a number of challenges made in the Draft Determination which we wish to respond to in this representation.

3.1.1 PRT.DD.CA1 - Havant Thicket

The Company response to the IAP (April 2019) proposed expenditure in AMP7 of £65.5m on Havant Thicket. The Draft Determination challenges this assessment and this results in a lower Totex allowance of £58.8m.

Havant Thicket is a significant project for the Company. This is recognised by Ofwat who propose a separate price control lasting for 10 years to cover the construction period. We have responded fully to all of the issues on Havant Thicket in a separate chapter. This includes our response to the Totex challenge, see section 1.6 in particular.

3.2 PRT.DD.CA2 - Resilience Schemes

The Company response to the IAP (April 2019) proposed expenditure in AMP7 of £15.4m on enhancement schemes in AMP 7. The Draft Determination challenges this assessment and this results in a lower Totex allowance of £13.9m, a reduction of £1.3m.

Based on our analysis of the Draft Determination we have concluded that Ofwat have excluded one specific enhancement scheme, Farlington Resilience, which was a value of £1.3m. All other schemes appear unchallenged.

For completeness below we have look at each of our 4 resilience schemes in turn and provide detail against the four questions asked by Ofwat in adjudicating on expenditure.

The four Ofwat questions are:-

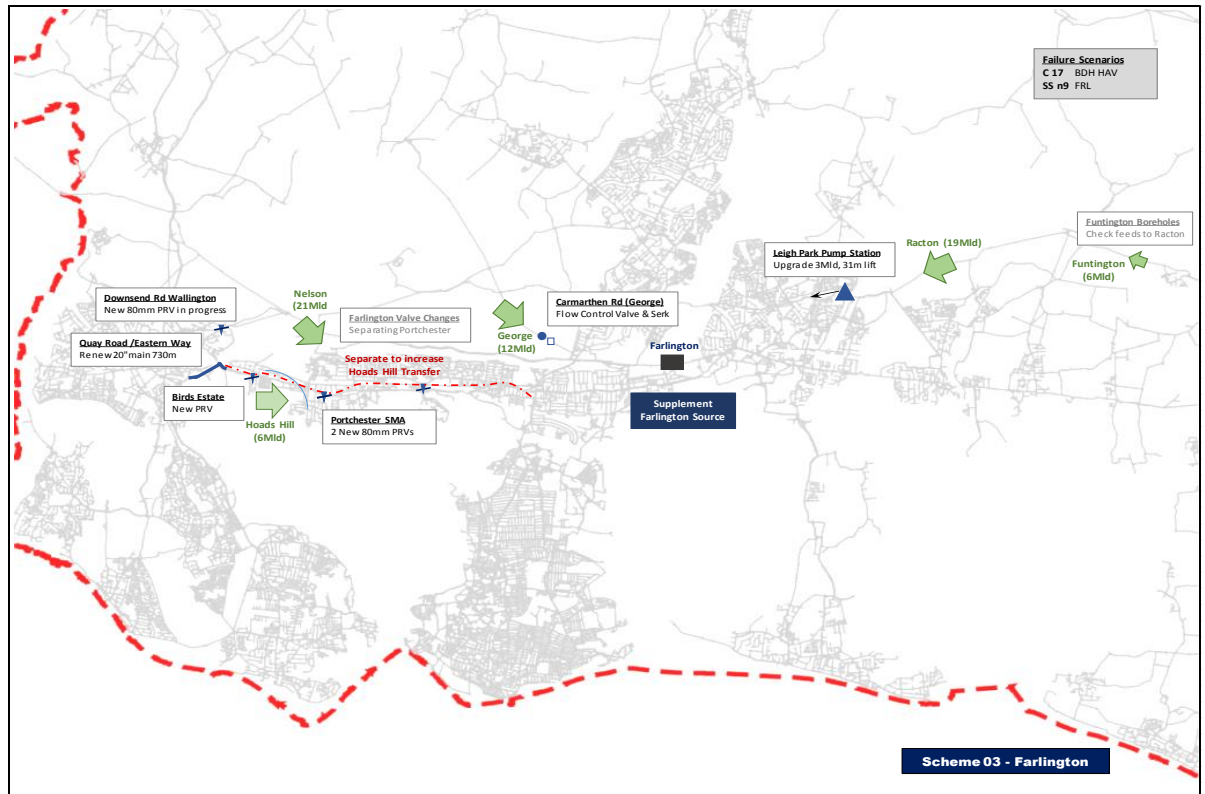
- Specific Cause of Service Failure
- Probability of Failure that the Investment is proposing to Address
- The Consequence of Failure to Customer Service
- Detail how the Failure and the Consequence are currently beyond Management Control

The four Portsmouth Water resilience schemes are as follows:-

		IAP (£m)	Draft Determination (£m)
MS003	Resilience Farlington	1.303	0.000
MS001	Oil Spillage – VOC monitors	0.369	0.369
MS006	Hoads Hill to Gosport	0.548	0.548
MS007	Nelson to Lovedean	0.252	0.252
		2.472	1.169

3.2.1 MS003 – Resilience Farlington – Deficit Distribution Support

IAP - £1,303,623 (Draft Determination - £Nil)



Background

This scheme is about providing alternative cover in the event of a loss of Farlington Treatment Works. Farlington Works is the Company's largest and most strategic source which feeds about 35% of the Company's supply including the whole of Portsmouth City and Hayling Island (79,390 props).

The Resilience modelling showed that Farlington Works is the only Company works that **could not be** fully supplemented by other means. A hydraulic modelling study was undertaken to investigate levels of improvement that could be achieved through opening up transfers from neighbouring zones.

Supplementary feeds from all four adjacent zones need to be considered to meet the shortfall in the event of a loss of Farlington. These together with distribution network support can be brought into play at relative low cost, requiring some added pressure management and flow controls.

Specific Cause of Service Failure

The specific cause of service failure considered for Farlington is a failure at its source at Havant and Bedhampton Springs, this could be due to a spring collapse or spring contamination.

A 2012 collapse at St Chads spring, one of thirty springs supplying the works, showed how the Farlington Works was put out of action for 48 hours due to

elevated turbidity issues. This was overcome at the time by availability of storage at the site but had the duration been much longer the implication would have escalated.

In the event of a contamination event (such as oil) the spring would be affected and this would likely spread into the raw water rising main which feeds up to the treatment works. This would result in a taste and odour problem that would be hard to remove, resulting in a clean-up operation that could take weeks or even months to resolve. An example of this was the oil leak from the national Grid substation at Lovedean in 2011, where 10,000 litres were lost to ground, this is in source protection Zone 1 (SPZ1) for Bedhampton springs, as the site is adjacent to a swallow hole. The springs and works were taken out of service as a precaution for 48hrs whilst VOC monitors were fitted (the substation uses a mineral oil which is not detected by VOC monitors). The VOC monitors would protect the site if oil reached the springs by shutting the site down, however this would then leave the company with reduced resources to meet its demands at certain times of year.

Probability of Failure that the Investment is proposing to Address

There are thirty separate springs at Havant and Bedhampton the chances of a repeat collapse such as St Chads is put at about 1/20yr.

The likelihood of contamination at the springs and feeder network is assumed at 1/100yr. Though this is small it cannot be ruled out particularly given that the consequences are so severe.

The proposal solution is to create enhanced distribution transfers so that Farlington zone can be supported by the surrounding Hoads Hill, Nelson, George and Racton zones.

The investment includes for network re-configuration, plus controlled and managed valves to ensure reduce pressures and constrain flows. It includes a key transfer main from Hoads Hill (Quay Road) a main which was condition tested in AMP5 and found to be nearing the end of its predicted life 2028.

The Consequence of Failure to Customer Service

The most severe impact will be felt in the event of a prolonged shutdown of the Farlington Works due to a spring contamination and a prolonged clean-up operation. This will result in a loss of supply, low service pressures, demand management and even possibly the need for emergency water supplies.

Detail how the Failure and the Consequence are currently beyond Management Control

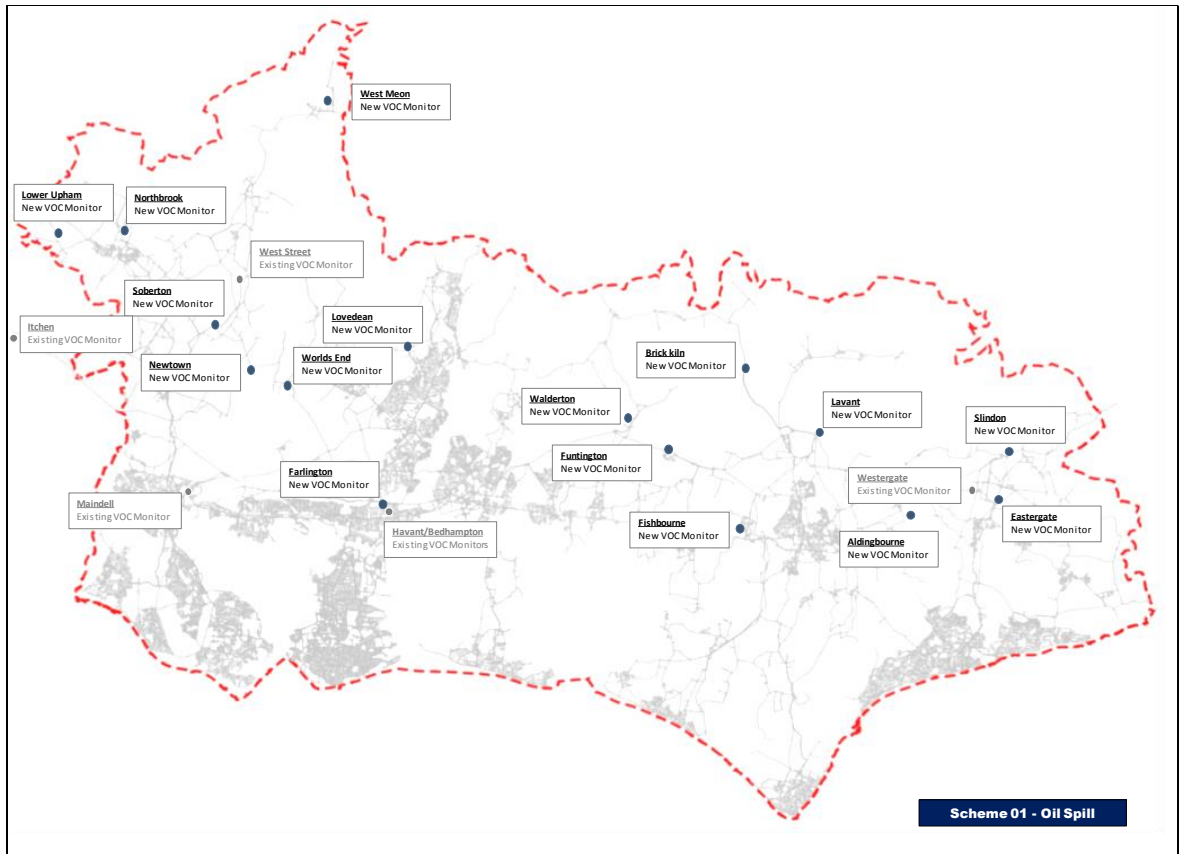
The Company is proactive involved in catchment management by promoting customer awareness and support activities such as subsidies towards renewal of customer oil tanks. But oil spillages can still occur unexpectedly. These events fall outside of the Company control.

With regard to managing an event with loss of the Farlington works mitigation measures can be employed as an immediate response by targeting adjacent

zones. But this can be limited as it could cause excessive pressures in parts of Farlington zone, whilst causing rapid water loss in donor zones. Moreover without premeditated network reconfigurations, installation of control valves and the opening up of DMAs the actual transfer capacity across the network would be insufficient.

3.2.2 MS001 - Oil Spillage (VOC Monitors)

IAP - £369,093 (Draft Determination - £369,093)



Background

This scheme provides monitors to protect source works, rising mains and reservoirs from contamination by oil related substances.

Domestic and commercial oil spills in catchment areas has the potential to enter the source works. Over recent years there have been at least six occasions where oil spillages have occurred within catchment areas which were contained but resulted in the work shutdowns.

However these events have raised the level of concern and the need to prevent contamination actually entering the works.

Specific Cause of Service Failure

This relates to service failure that could arise from oil products entering and contaminating the water system, causing taste and odour failures. This could then

have massive repercussion with the need for prolonged clean-up, especially if the contamination effects the entire works, the rising mains and terminal reservoirs before eventually being registered by the customers.

Probability of Failure that the Investment is proposing to Address

Over a 13 year period over 800 oil spills have occurred within Company catchments, approximately 120 have occurred within the highest risk source protection Zone 1 (SPZ1). The probability of an oil spillage directly affecting a site has been assumed at 1/20yr per site, applied across 15 sites.

Investment in VOC monitors for each of the works is seen as an effective safe guarding measure to detect oil contamination and automate shut down the works.

The Consequence of Failure to Customer Service

The initial impact to the customers would be first noted as a Taste and Odour failure. But beyond there would be the need for a prolonged clean-up operation. This could cause a massive disruption with the possibilities of loss of supply, low service pressures and possibly emergency water supplies.

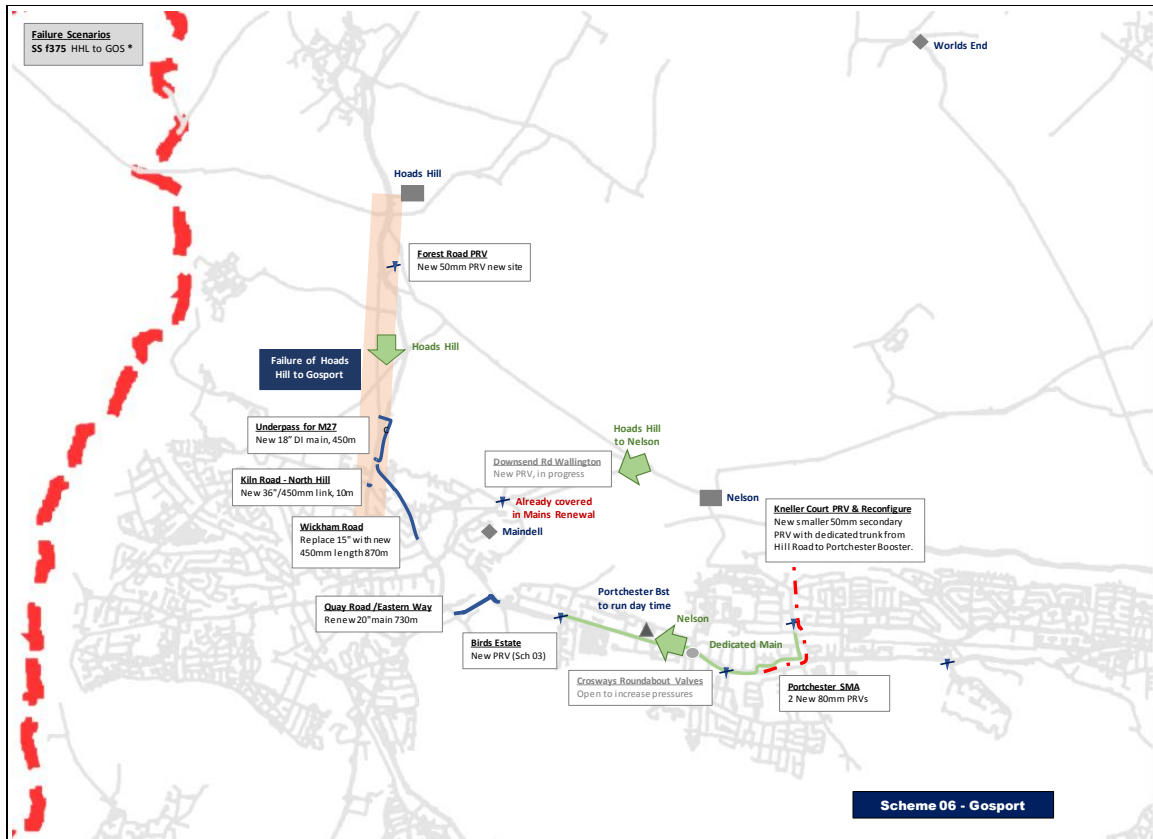
Detail how the Failure and the Consequence are currently beyond Management Control

The Company already provides proactive catchment management, promoting customer awareness and support activities such as subsidies towards renewal of customer oil tanks. But oil spillages can still occur unexpectedly, without notice and are at times only discovered weeks after the event.

The control of these events are the responsibilities of others, outside the control of the Company.

3.2.3 MS006 - Resilience Hoadshill to Gosport - Trunk Mains Support

AMP7 Requested - £548,376 (Draft Determination - £548,376)



Background

This scheme provides security of supply for the strategic link from Hoads Hill Reservoir to Gosport, the link comprises of three trunk mains (36" 18" and 15").

Critical Links Analysis shows this link carries the greatest Company risk, supplying 55,600 properties. This level is **more than 5 times** greater than anywhere else across the Company network.

Hydraulic modelling was undertaken to investigate the levels of support which can be afforded to Gosport by increased feeds from Nelson Reservoir and Farlington zone. To address the shortfall a number of supporting network enhancements were proposed.

Specific Cause of Service Failure

The three mains converge at a focal point which feeds under the M27 Motorway. The mains connect at a point to the north of the underpass where they meet at a nest of valves which is assessed as being the point of greatest vulnerability.

The cause of service failure therefore relates to a major pipe burst occurring at this point, with the potential for washing away the surrounding soil thus causing damage and failure of multiple mains.

This location therefore constitutes a single point of failure which could cause major disruption if it were to occur. A failure at this location would take an extended amount of time to repair because of its location, which is why it is considered to not be included as a 'business as usual' network risk.

Probability of Failure that the Investment is proposing to Address

The probability of mains failure was determined by the Servelec Resilience Study which assessed the material type, mains size and length. The probability is stated under two considerations, a minor repair which can be addressed within 24 hours or a major repair which takes up to a week to fix.

The likelihood of mains failure was stated at 1/3yr for short repairs (1 day) & 1/20yr for long (7days) as relating to the pipe condition and lengths. The probability of multiple simultaneous failure will be much less at 1/800yr

Provision of a second 450m of 18" reinforcement passing under the M27 Motorway was seen as an efficient pre-emptive way of gaining most of the benefit of this schemes at limited cost. The original solution looked at laying 870m of 450mm main along Wickham Road, this was challenged as being poor value for money and the alternate solution created.

The Consequence of Failure to Customer Service

The consequence of a broken mains in this area is that it will result in loss of supply and low service pressures. The length of the interruption will depend on the time required to undertake the repair and what remedial action can be put in place, this scenario is considered to be business as usual

However a burst occurring along the sections of main running under the underpass has the potential to quickly escalate to a significant Incident, due to the potential impact on adjacent mains This would affect the supplies to 55,000 customers and likely last for a number of days whilst repairs were made to all affected mains, the work would be complicated due to its location at a major junction.

Detail how the Failure and the Consequence are currently beyond Management Control

The Portsmouth Waters network has been designed over many years to be robust and resilient and able to cope with the effects of mains bursts whilst maintaining supplies to customers.

Critical Links Analysis was carried out across our network for the AMP7 Business Plan. This showed that the strategic link between Hoadshill and Gosport potentially presents the greatest risk in the whole of the network with 55,000 properties affected, this is over six times higher than anywhere else. The risk of this strategic main burst is managed through our day to day activities however the study identified a specific point of vulnerability not previously considered.

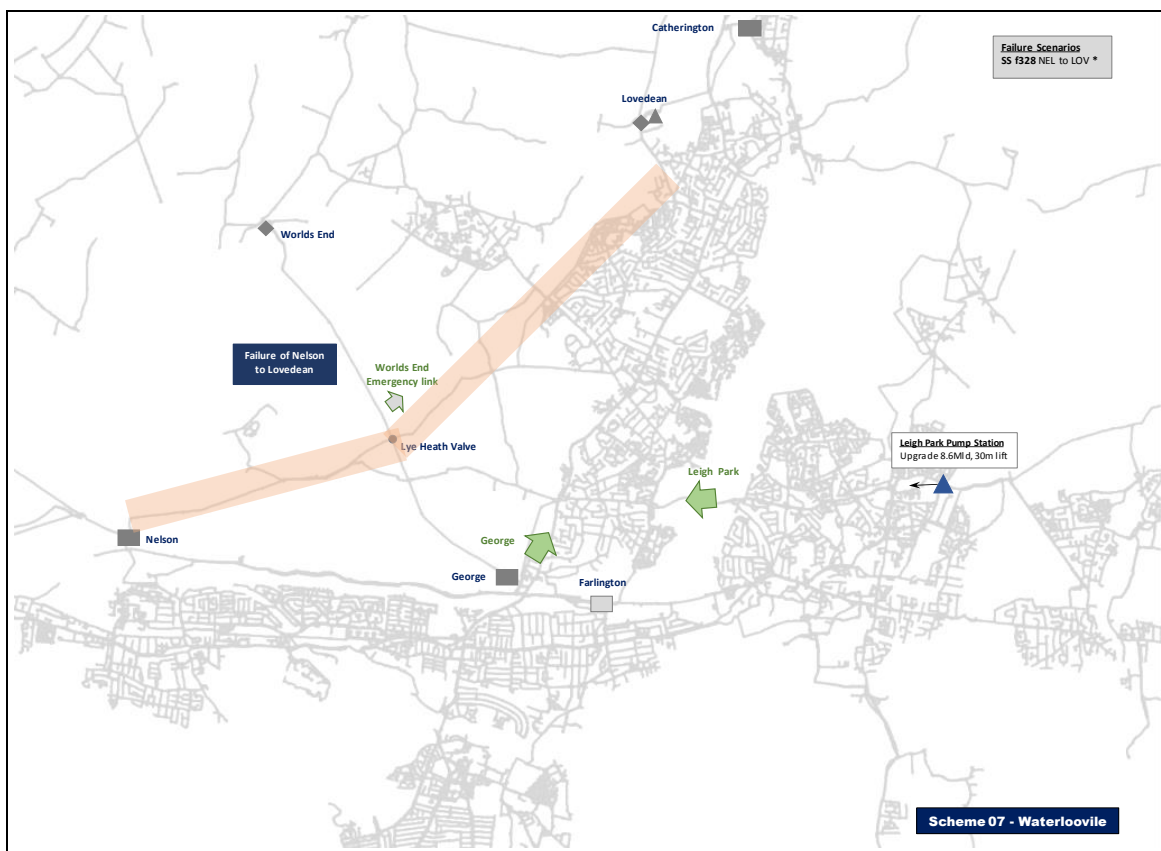
An inspection along the link indicates that the point of greatest vulnerability relates to where the multiple mains converge to pass under the M27. At this point there is a nest of valves, after which the mains squeeze together to run down the same

side of the road at the Underpass. If there is a large burst at this point then it is conceivable that it could washout surrounding soil causing consequential damage to adjacent mains.

In the event of a burst on the 36" (largest main) at this point, the losses can be mitigated by providing supplementary feeds from the Nelson and Farlington zones. But if there is a multiple failure (36"+18") then the Hoads Hill zone will collapse and be well beyond Management Control. This can be resolved by adding a 450mm bypass main at the Underpass but on the opposite side of the road so that it avoids the nest of valves and any consequential damage that may be caused from a burst on the 36" main.

3.2.4 MS007 - Resilience Nelson to Lovedean - Trunk Mains Support

AMP7 Requested - £251,591 (Draft Determination - £251,591)



Background

This scheme provides security of supply for the 900mm strategic link from Nelson Reservoir to Waterlooile (13,150 props). The main can also be used to feed Lovedean source particularly when it has high nitrates levels (6,120 props), so at certain times of year this main feeds 19,270 props. Further large new housing developments are planned in this area.

The George Zone lies to the south and can be used to supplement the Waterlooile area, by bringing in limited extra resources from the Farlington Zone via the Leigh Park Booster.

Hydraulic modelling was undertaken to investigate the levels of support which can be afforded to Waterlooville from the George zone.

Specific Cause of Service Failure

The cause of service failure relates to a pipe burst occurring on the strategic main between Nelson and Waterlooville. Part way along this main it is crossed by the Worlds End to George 600mm main (at Lyeheath valve). It is the Lyeheath to Waterlooville section of main that holds the greatest concern.

Probability of Failure that the Investment is proposing to Address

Failure scenario implications are based on a single 900mm transfer main with a likelihood of failure of 1/65yr. Given the size and rural location of this main it is likely to take an extended period of time to locate, access and complete a repair on the main.

Proposed investment is for the upgrading of the existing Leigh Park Booster to provide water to customers in the event of the loss of this trunk main. Additional network improvements will be needed as part of on-going system development in response to additional housing being developed in this area,

The Consequence of Failure to Customer Service

The consequence of a burst on the trunk main will be a loss of supply and low service pressures for the duration of the repairs with the possibility of this continuing for a number of days, due to the potential difficulty which may be incurred in access the location of a burst and making the repair.

The impact of a burst on this trunk main is magnified by the requirement for this main to supply water to the Lovedean zone during times of high nitrate at this source, which is now an annual occurrence with the work being out of service for extended periods of time. The combination of a burst and high nitrate period coinciding had not previously been considered, this would mean that the existing mitigation of the Leigh Park booster would not be sufficient.

Detail how the Failure and the Consequence are currently beyond Management Control

Portsmouth Waters network has been designed over many years to be robust and resilient and be able to cope with the effects of mains bursts whilst maintaining supplies to customers. The resilience review identified the importance of the strategic link between Nelson and Waterlooville as an important single point of failure, due to the expected difficult of locating, accessing and completing a timely repair on this large 900mm diameter main.

The demand loading on this main has steadily increased in recent years due to substantial on-going domestic and commercial infill developments. In addition, raised nitrates levels at Lovedean source have resulted in the Nelson 900mm main also covering for these demands (6,120 props) on a seasonal intermittent basis.

It is appreciated that the strategic structural reinforcement solutions required to service this area will be funded through on-going developments over the medium longer term. However, this option is about addressing an immediate short-fall in emergency mitigation capability. With the increased demand associated with supplying the Lovedean area at times of high nitrate it means that the existing planned emergency measures are no longer sufficient to match requirements and so failure of the 900mm main would lead to a consequential loss of supply which would fall beyond management control.

It is therefore proposed that the capacity at the existing Leigh Park booster should be upgraded to 100l/s, at 30m to provide an immediate fall-back support to cover for the next ten years.

3.3 PRT.DD.CA3 - Household Retail – Bill Size Cost Claim

We note the Draft Determination has rejected our claim that the use of the household bill to establish the cost to serve has a disproportionately adverse impact on the allowed household revenue.

The company does not consider that Ofwat has reviewed the evidence submitted in our IAP response fully as, we believe, the challenges raised by Ofwat in their assessment of the claim have already been provided in March 2019.

As noted in various representations on this issue, we consider that the options and tools we have to proactively manage debt are limited relative to those companies who have greater bills / debt to collect. Our position is that we do not benefit from economies of scale that larger companies do. In contrast, Ofwat's approach and models assume simple proportionate relationship between bad debt and bill size, underestimating the costs faced by Portsmouth Water in recovering small bills (including the semi fixed nature of certain debt recovery costs).

Three reasons were given in the Draft Determination to reject our claim and we respond to each in turn below [Cost Efficiency draft determination appendix page 7 Table 5. As these challenges were answered in our original evidence [Impact on bill size of Ofwat's IAP models – update note], we provide reference to these in our short response below:-

(i) the data does not give a clear intuition as to why a quadratic term would be appropriate to relax the assumption of linearity between bad debt costs and bill size.

- The Company determined a revised modelling relationship and structure to allow us to quantify the magnitude of the claim. This is not to suggest that the structure of the model should change for the rest of the industry. We recognise difficulties in making wholesale changes to the models at an advanced stage of the price review process and suggested a remedy to address a Portsmouth-specific issue. Portsmouth Water's position on bills is extreme, is significantly below both the industry average and the second-lowest bill level. Ofwat's modelling approach focusses on the 'average' and a simple (log-) linear relationship is unable to accommodate our outlying position on bills.

- This is the first time that Ofwat has modelled retail total costs in an econometric framework and there is insufficient external validation of the cost impacts determined by the draft determination cost models. (Professor Andrew Smith's and Dr Thijs Dekker's peer review of Ofwat's wholesale and retail cost model presented at the IAP recommend validating of the cost impact of variables (presented on wholesale but also applies for retail), highlight challenging circumstances under which the retail models were developed and scope for further refinements).
- We were not suggesting that the quadratic term was the only approach to address our fundamental concern (i.e. the models assume linearity between bad debt costs and bill size). What we suggested was one approach to address extreme heterogeneity with respect to bill levels, which involved a minor amendment to the assumed relationship between bad debt and bill levels.
- This amendment is consistent with Ofwat's treatment of density in the PR19 wholesale cost models and with respect to scale, density and usage in PR14. Our amended specification was found consistent from an economic, statistical and operational perspective, as Ofwat had argued with its own models.
- To that end, Ofwat has not explained the basis on which their models were superior and why our amendment was ignored despite satisfying the conceptual rationale and similar techno-economic criteria. As noted, Ofwat models suffer from the same limitations as ours in that both are econometric top-down models and the cost impacts estimated from these would benefit from external validation.
- We remain of the position that, for example, if our bills increased by 20% our bad debt costs would not increase by the same amount.

(ii) it is not clear how the value of the claim was calculated.

- The claim was based on the forward looking assessment of the Totex (including debt-management costs) with an equation using the level of bills squared as an explanatory factor. This was documented in table 2.2 of the Oxera report, dated March 2019.
- Oxera concluded that there was a gap between modelled costs and the UQ costs of £0.2m per annum and this determined the value of our claim over AMP as per Ofwat's guidance on cost claim submissions.

(iii) we tested the bad debt and total cost models excluding Portsmouth Water from the historical data used to generate the model coefficients. We found that the models give a greater allowance to Portsmouth Water when the company is included in the historical data set compared to the allowance the models give when the company is excluded from the data.

- We conclude that the reason the Company receive a greater allowance when it is included in the modelling data set reflects the fact that this model takes account of all observations and however small the Portsmouth values are, the inclusive model will be impacted by our inclusion.
- Our claim was not suggesting that Portsmouth be excluded from the model, indeed it should be included, but an adjustment to the modelled value be

applied given the outlier nature of our bills. In other words, the heterogeneity with respect to bills is exacerbated by excluding Portsmouth Water from the modelled data. Rather, a sensible approach to accommodate this heterogeneity within Ofwat's framework would be to model the relationship between bad debt and bills flexibly and validate the results from economic, operational and statistical perspective as was done in our submission.

In conclusion, we appreciate that this is the first time Ofwat have developed econometric models for the Household Retail business unit and the models still need to be reviewed and scrutinised externally. However we consider that our extreme position on bills is not robustly recognised and addressed in Ofwat's current modelling approach to Household Retail cost allowances.

We strongly recommend that Ofwat re-assesses our representations on this issue and makes a sufficient adjustment to our household retail revenue in the Final Determination.

4 DRAFT DETERMINATION ACTIONS AND INTERVENTION RESPONSES

4.1 Action Reference - PRT.OC.A20 stretch

Ofwat Intervention

We are intervening to set the performance commitment percentage reduction levels to the following values:

2020-21 = 1.3%

2021-22 = 2.5%

2022-23 = 3.8%

2023-24 = 5.0%

2024-25 = 6.3%

Units: percentage reduction in per capita consumption from initial levels on a three-year average basis. The values are based on the 2024-25 percentage reduction of 6.3%.

Portsmouth Water Review and Response

We believe the 5% PCC reduction target to 135 l/h/d by 2024/25 proposed in our Business Plan is already ambitious and stretching and is supported by customers as delivering the best-cost solution for our draft Water Resource Management Plan 2019. Therefore we believe the proposed further reduction to 6.3% (133 l/h/d) in the Draft Determination is unreasonable.

A key assumption is the 2019/20 starting position. When we prepared our Business Plan (September 2018) we based our plan on 2019/20 being a “normal year” with a consumption value of 142 l/h/d. Further we were basing our forecast on 2017/18 (the base year) being a dry year (with demands circa 3% higher than a normal year) and an optant metering programme of 5,000 properties pa in AMP6.

Ofwat have since clarified that the 2019/20 value should be calculated using the last three years outturn. All three years in the calculation have been influenced by good summer periods with significant impacts on water demand and PCC.

The outturn for 2017/18 and 2018/19 and the forecast value for 2019/20 shown below result in three year rolling average for 2019/20 of 149.3 l/h/d, some 7 litres higher than our Business Plan assumption of 142 l/h/d.

l/h/d	2017/18	2018/19	2019/20	Three year average
PCC	147.6	152.4	148.0	149.3

We wish to highlight that our proposal to achieve a PCC target reduction of 5% to 135l/h/d was based on a normal year starting at 142 l/h/d and whilst we recognise the three year rolling average methodology negates the impact of weather to a

degree, we wish to retain our ambition to reduce PCC by 5%, but understand this would now mean a change from 149.3 to 141.8 l/h/d.

This change is larger in absolute terms and remains a challenge, particularly if similar weather patterns prevail and the “high” demand years become the norm. Applying the Draft Determination reduction of 6.3% would mean a PCC of 139.9 l/h/d by 2024/25 which we believe is extremely stretching.

The reasons for our position are as set out briefly below in summary – with the supporting evidence which follows.

- 1. Current PW PCC performance is already efficient for the region (see figure 1)** analysis of draft Water Resource Management Plans show this is the case even though our neighbouring companies have 90%+ levels of meter penetration compared with 35% at the start of AMP7 for PW.

The figures presented by water resource zone (as opposed to company aggregates) show the well-established strong link between water usage and socio-economic status with more affluent areas using more water per capita than poorer areas. PW’s customers generally have higher levels of deprivation than other areas of Sussex, Hampshire and Kent with lower income and smaller properties/gardens. This goes a very long way to explain the variations in usage levels and therefore potential reductions in PCC.

- 2. The impact of metering will be limited due to our low charges (see figure 2)** - there is a very weak economic incentive for PW customers to opt for a meter and most who would gain from a meter financially have already opted. Optant numbers over the last few years have been reducing. PW’s charges are the lowest in the industry by some distance – in 2019/20 our charge was only 55% of the average in England and Wales.

Further price reductions have been proposed in the Draft Determination reducing the economic incentive to meter even further. In simple terms we find that most customers prefer a low value predictable bill of £95 on average which is fixed rather than a (possibly) marginally cheaper bill (say £90) where there is a risk that higher consumption may increase the bill above £95.

This suggests that our assumed impact of metering is already dramatically overstated (see figure 3). Whilst most recent studies report a saving between 12-20% we do not see price incentives having the same effect when we install a meter given the size of our bill.

We have concluded internally for the reasons stated above that at least double the 25,000 meters we assumed in our original plan for AMP7 will actually need to be installed to hit the target of 5%. Whilst we are willing to accept this additional cost of c £1.9m as integral to our original commitment, to stretch the commitment further is unreasonable.

- 3. Metering penetration needs to be at least 50% to achieve significant PCC reduction (see figure 4 – Artesia independent analysis)** – independent studies based on South East region water companies have

shown that the impact of metering on PCC is quite limited until you achieve a penetration level of at least 50%. PW's position by 2025 of around 45% will not reach this level and thus the scope to reduce PCC is not likely.

- 4. PW's inability to compulsory meter limits our options relative to neighbours** - we do not have the right to compulsory meter in spite of several attempts in the past to convince DEFRA of the need for this.

The inability to compulsory meter already results in us having to look at more innovative ways to extend meter penetration (e.g. dual billing where following a meter installation we give customers a rateable value based bill and a meter based bill at the same time and they can chose which to pay) - these methods are less predictable in terms of impact on pcc reduction presenting a greater risk to achievement of the PCC target.

- 5. PW's starting point is likely to be higher than expected following hot weather last year and this summer (see figure 5)** – making the 135 target more challenging. Hot weather for the last two summers in particular is likely to increase PCC significantly over and above the PCC level for 'average' weather years.
- 6. Limited consideration of PW's historical position with surplus water balances, low charges and low drivers for metering** – therefore making the original proposed target a quantum leap and already challenging. In spite of the history, PW's current PCC position is efficient and PW is planning to use its surplus water resources to support the wider region in other ways (e.g. Havant Thicket) – so PW customers will already be 'doing the right thing' to support the regional water resources position and the stretch on PCC beyond 5% is inappropriate.
- 7. Customers do not support anything other than widespread compulsory metering** - we have limited support from customers for anything other than widespread universal metering which has already had significant publicity in the region through the historic metering programmes of our neighbours. Our customer research confirms that if 'everyone is in this together' they will support metering in preference to any selective metering programme, such as 'change of occupier'.

Conclusion

We believe a 5% reduction in PCC from our current (three year rolling average) position will be very challenging under PW's specific circumstances and any reductions over and above this unfair and unreasonable

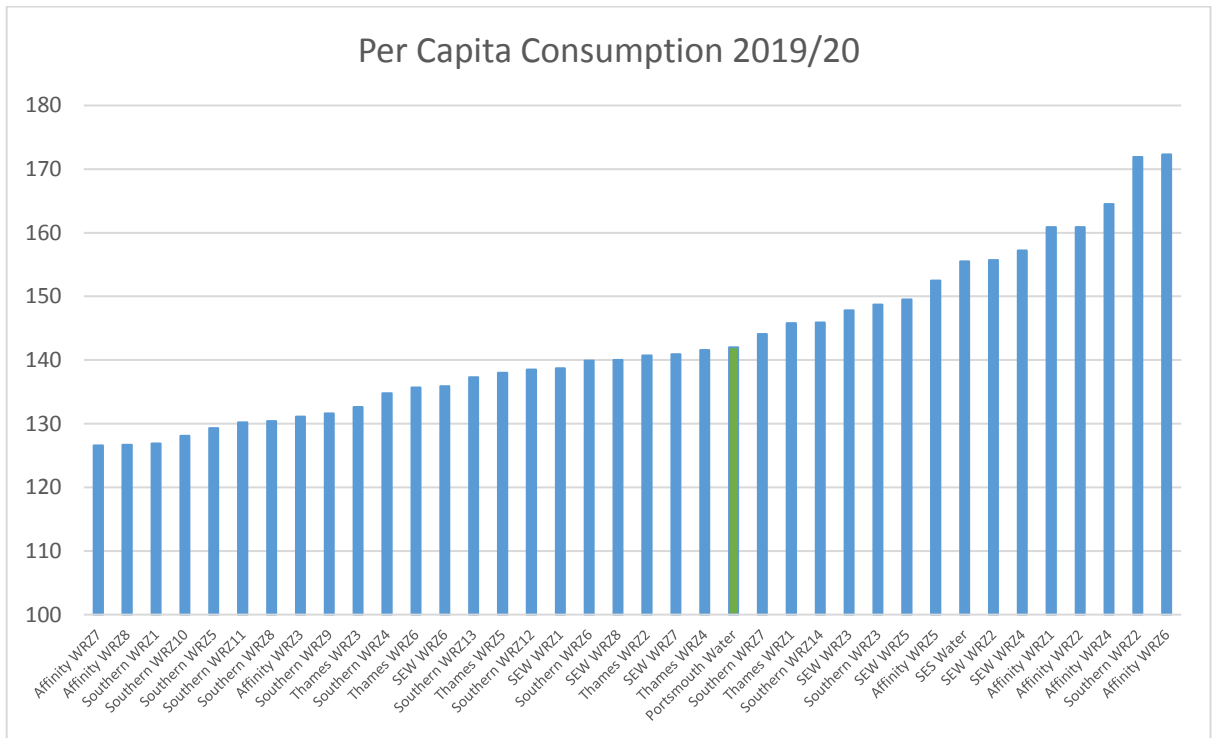
Further we propose that whatever target is agreed it should be a 2024/25 target only. This is the structure of our current PR14, AMP6 target, where we have a PCC target relating to 2019/20 only.

Supporting Evidence

The next section provides supporting evidence (figures 1-5) to the discussion above on the stretch of the PCC target.

Figure 1 – PCC Levels in the South East of England by Water Resource Zone

The graph below shows the starting positions of all water resource zones in the South East, with PRT at 142 l/h/d just below the median of the sample.



The second graph shows the improvement in relative performance by 2024/25 as a result of the target of 135 l/h/d. The Company is now below the median of the distribution.

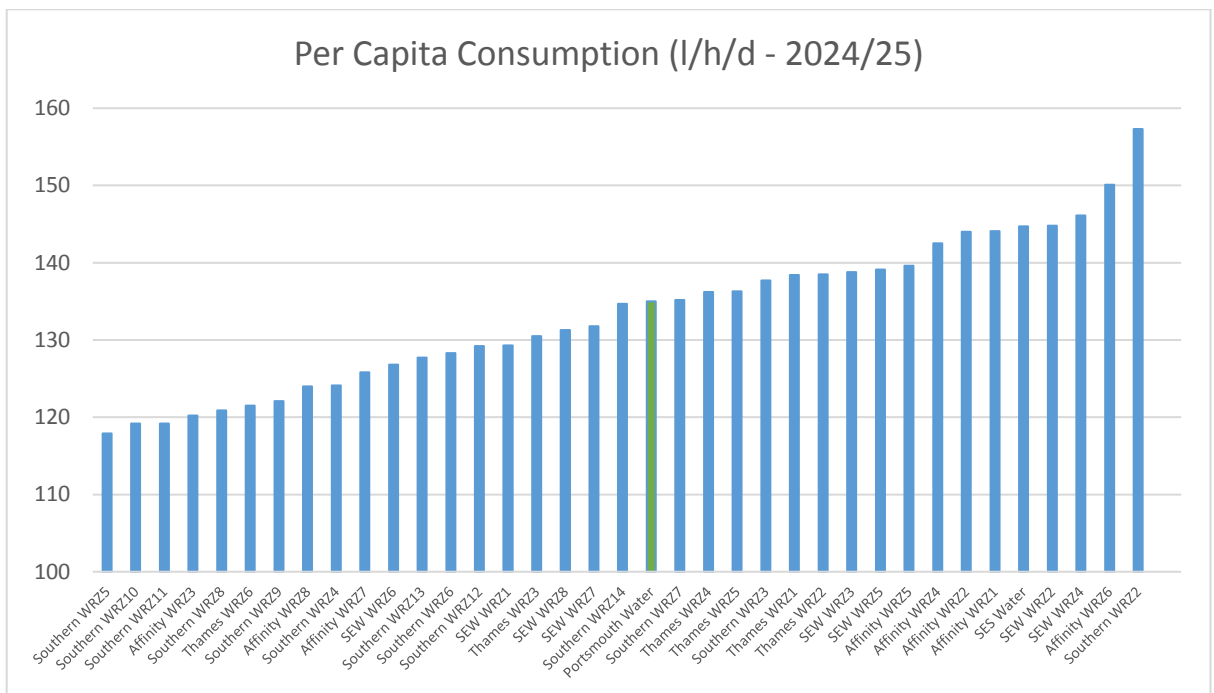
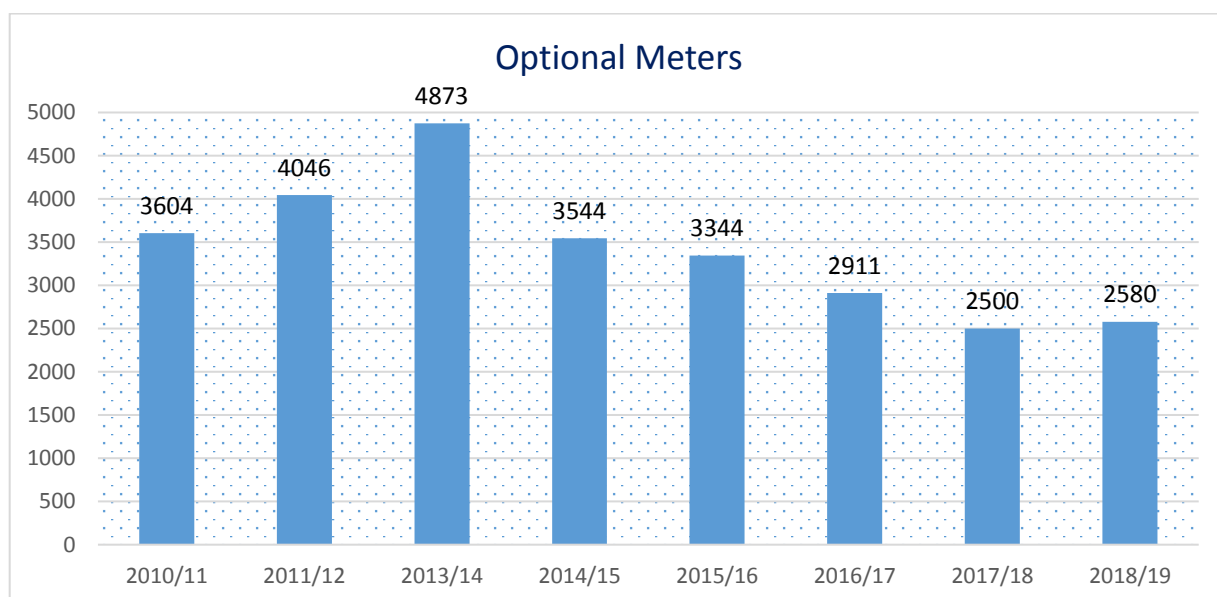


Figure 2 – PW Recent Meter Optant Figures – Downward Trend

Meter optants have declined in recent years despite a number of dedicated initiatives to stimulate interest from our customer base.



PW Charges Relative to Others

All figures are 2019-20 (source – Discover Water, Water UK):

- Average national water bill - £193
- **Average Portsmouth Water bill - £106 (55% of national average)**
- Next lowest to Portsmouth Water (Cambridge) - £139
- Average Southern Water wastewater bill - £282
- Average national total water and wastewater bill - £415
- Average Portsmouth Water area water and wastewater bill - £388 (PW + SWS)

(Southern is the wastewater services provider in PW's area of supply).

Figure 3 – Impact of Metering on Water Usage

We have looked at the experience of other companies who have had wide-scale metering programmes over the last 30 years and note the following impacts on customer usage as a direct response to metering.

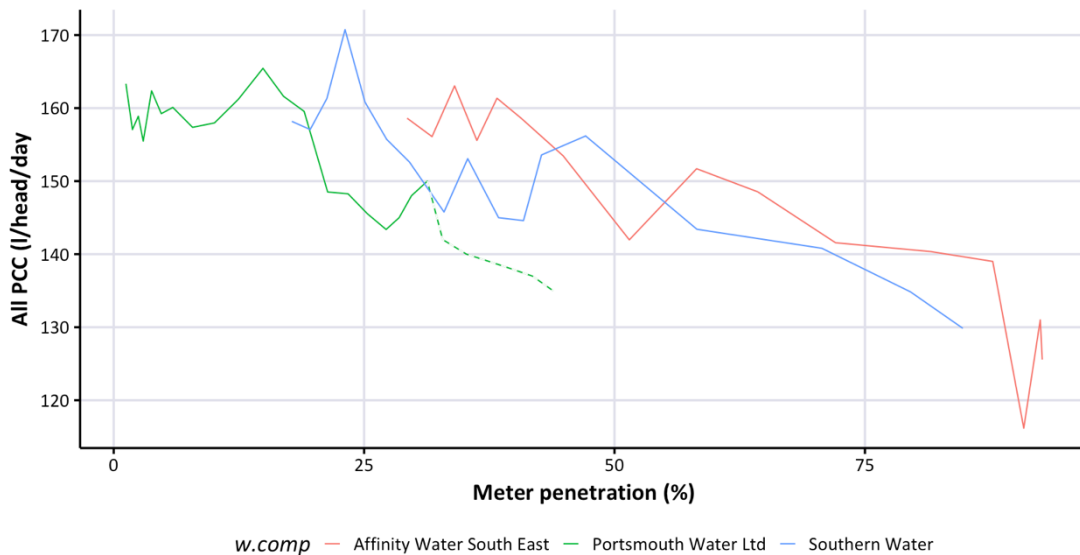
Company	Quoted Impact of Metering on PCC
Isle of Wight metering trials	10% reduction
Southern recent compulsory metering	16% reduction
Thames recent metering and plumbing checks	20% reduction
PW business plan original submission	15% reduction proposed

We applied a 15% reduction as instructed in the WRMP guidelines. We believe this overstates the reduction we will experience given, in particular, the low level of our charges.

Figure 4 – Impact of Meter Penetration on PCC – c. 50% Trigger for Reduction

(Source – Artesia independent study)

The graph shows the reported PCCs relative to historic meter penetration for Southern Water and Affinity South East and compares it to the proposed reduction by Portsmouth Water.



It is based on the metering experience of two companies which are of direct relevance to Portsmouth Water, Affinity South East (formerly Folkestone & Dover Water) and Southern Water. Affinity South East has a very similar socio-economic mix to Portsmouth with some areas of high deprivation. Southern Water is located to both the east and west of Portsmouth Water and a wide mix of socio-demographics.

Starting with a PCC of circa 160 l/h/d Affinity South East did not see a reduction in PCC until meter penetration approached 50%, plateauing in the 140s until almost 90% of customers are metered when it fell below 130 l/h/d.

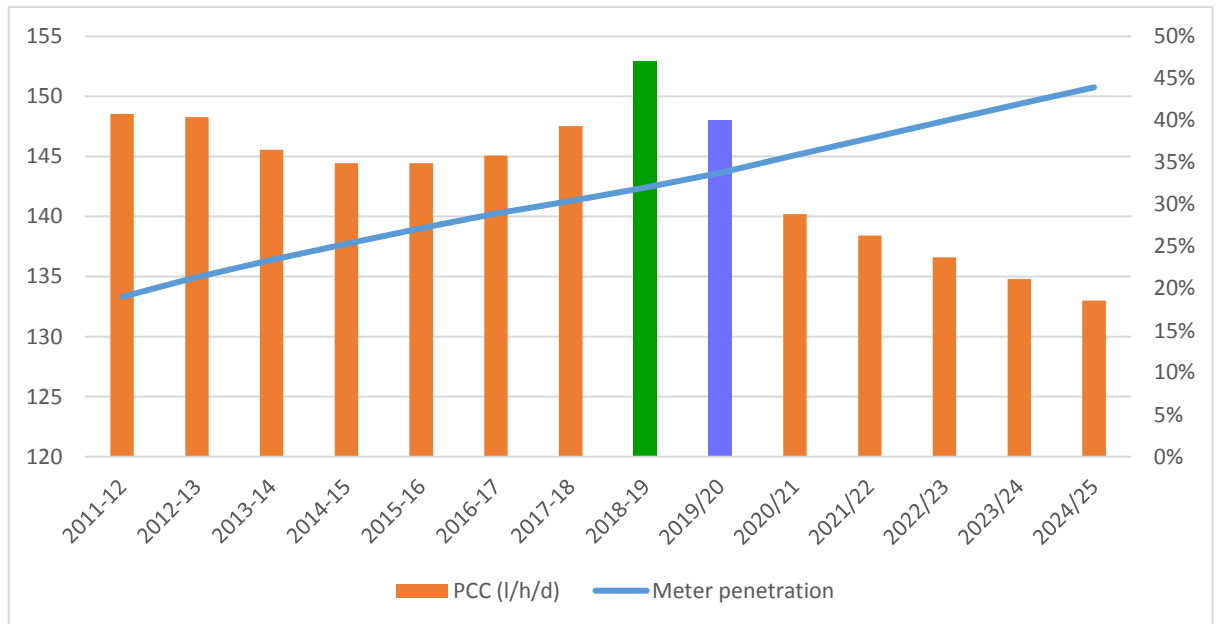
Similarly Southern reached a plateau of circa 150 l/h/d for 30% meter penetration to 60%, with the reduction to 130 l/h/d only occurring in excess of 75%.

Portsmouth's PCC has reduced in recent years to mid-140s. Our proposal to set the target at 135 is not consistent with experience of others, who did not see a reduction in PCC when meter penetration increases from 35% to 45%, as we propose to do over the AMP7 period.

Figure 5 – PCC High Starting Position 152 l/h/day 2018/19 and likely 2019/20 at 148 l/h/d

Our Business Plan was based on 2019/20 being a normal year with usage at 142 l/h/d. Our proposed reduction of 5% over AMP7 reduced PCC to 135 l/h/d.

The Draft Determination has applied a 6.3% reduction to the assumed starting point of 142 l/h/d in a normal year resulting in a target of 133 l/h/d for 2024/25.



The graph above not only shows the impact of the long dry summers in 2017 and 2018, with an increase to 147.6 l/h/d and 152.4 l/h/d in 2017/18 and 2018/19 respectively but also the impact of this summer, 2019. We currently estimate the 2019/20 PCC to outturn much higher than the normal year estimate of 142 l/h/d at 148 l/h/d.

Not only does this demonstrate the impact of the weather on this ODI but also the magnitude of the challenge we face in achieving 133 l/h/d.

4.2 Action Reference – PRT.OC.A24 – Definitions

Ofwat Intervention

This is a sector wide action.

The company should confirm which programmes of work will impact their risk profile forecasts.

The company should confirm the planning scenario used for the performance commitment levels, which should be reflective of its latest water resources management plan position.

Portsmouth Water Review and response

The Company submitted its “Risk of Severe Restrictions in a Drought” ODI in its response to the IAP (1 April 2019 PRT.OC.A24 Appendix 1 Risk of Severe Restrictions in a Drought). The ODI was calculated based on the data for our revised Draft Water Resources Management Plan, which was sent to Defra 14 June 2019.

We are pleased to note Ofwat’s observation in the Draft Determination that “only Portsmouth Water provides a clear understanding of the performance commitments and definition as well as the standard definition by April 2020”.

The detailed supply interventions, which were provided in Table Wr7, and will reduce the risk profile forecasts are:-

Scheme Name	MI/d	Date	Comment
Yield Recover Schemes	7.8	March 2021	
Worlds End	12.5	March 2024	To facilitate 9 MI/d Bulk Supply to SRN in March 2024
Havant Thicket	23.0	March 2029	To facilitate 21 MI/d Bulk Supply to SRN in March 2029

Further the demand interventions which will reduce the risk profile forecasts are:-

- A leakage reduction of 20% from the 2019/20 assumed value of 34.9MI/d, by 2024/25.
- A reduction in per capita consumption to 135l/h/d by 2024/25.

The reference level of service in our WRMP is 1 year in 200 (5%).

We are awaiting approval from the Secretary of State to publish our WRMP.

Table Changes

None

4.3 Action Reference – PRT.OC.A38 – Definitions

Ofwat Intervention

We are intervening to update the definition for this performance commitment. The updated performance commitment definition is 'The number of farmers engaged with that have committed, following engagement, to implement changes to current practices'. We are specifying that the company should also obtain commitment from landowners to implement a change in land use practice.

Portsmouth Water Review and response

We do not agree with this intervention. We are willing to develop the scope to recognise the need for a farm management plan.

This commitment is to engage with farmers in our region, outside of our high priority zones as this engagement is covered in our WINEP programme.

In setting this ODI we worked with the EA and Natural England in particular. We agreed that one way of meeting our customers' general desire to "improve the environment" would be to engage more widely with farmers, throughout our region and beyond the legal requirement embedded in the WINEP.

Portsmouth Water will be engaging with all High Priority Farms and landowners (those in source protection zone 1) as part of the WINEP and PR19 catchment programme between 2020 & 2050.

Engagement and delivery of interventions within these high priority areas is essential to reduce nitrate leaching into Groundwater, along with other pollution prevention measures. Sufficient resource has been put forward through PR19 for these priority areas.

We believe it will be challenging to get to farmers in lower priority, but still important, areas without intervention funding to commit to uptake of measures and practices to reduce nitrate pollution.

Farmers and landowners have no obligation to uptake schemes that are offered so meeting this new definition will be extremely difficult. Notwithstanding this, we suggest that the definition is changed to reflect the following practice that farmers may be willing to take up;

"The number of farmers engaged with that have committed, following engagement will undertake and implement a Farm Management Plan that includes a nutrient management plan so that farmers and landowners do not use more nutrients than the crop or soil needs".

This can be delivered through advice and funding by Portsmouth Water and with the support of Natural England.

Our proposed revision has been discussed with Natural England. They support the revision.

Table Changes

None.

4.4 Action Reference – PRT.OC.A42 Timing

Intervention – We are intervening to change the definition of the target to set in-year targets, without the flexibility of carrying forward any out or underperformance

Portsmouth Water Review and response

We note the intervention.

It is disappointing that Ofwat propose to remove any flexibility to carry forward any out or under performance. This may incentivise the Company to cease an

engagement programme part way through the year when the annual target of 10 has been achieved.

We ask Ofwat to reconsider this issue.

4.5 Action Reference – PRT.OC.A43– Definition

Ofwat Intervention

The Company has not complied with the action in the IAP. We are concerned that this performance commitment attaches outperformance payments to a grants programme still under development.

We are intervening to remove the outperformance payments from this performance commitment.

Portsmouth Water Review and response

We note this intervention.

It is disappointing that Ofwat propose to remove the outperformance payment for the Grant Scheme. (details of the scheme draft promotional leaflet working are provided in 4.3.1 below).

Ofwat comment that this is because the outperformance payments are being provided to a programme still under development.

We have developed our thinking further on this issue and a paper is attached.

The ODI was proposed in response to a clear desire from our customers for us to address biodiversity and wider environmental improvements beyond our own land holdings, we undertook to set up and run a £250k biodiversity grant scheme in order to:-

- Deliver priority biodiversity projects on our owned or tenanted land
- Deliver biodiversity or knowledge enhancement projects located in our catchments.

In addition we should seek for the grant to enable:-

- The formation of sustainable partnerships which will continue to deliver for our environment into the future, leveraging money spent in the catchment from other biodiversity focused sources for maximum benefit.

When considering the most effective way to deliver this aspiration we have looked at three models:

1. Portsmouth Water stand-alone grant scheme
2. Setting up a new partnership to administer the grant scheme
3. Extension to the existing Downs and Harbours partnership for Catchment Management grants

A summary of our thoughts on each option are given below:

Option	Pros	Cons
1	In PWC control Straight forward to administer Obvious source of grant money, unshared publicity	Starting from scratch Could be seen as pursuing vested interests All the administration falls to PWC Need to establish 'brand' for the grant No natural encouragement of partnership collaboration or sustainable partnership delivery model for biodiversity
2	Delivers on the partnership outcome Will be seen as independent and outcome focused Will be able to share some of the administration resource	Starting from scratch Need to establish a 'brand' for the grant
3	Builds on existing successful brand Will be able to share some of the administration and promotional resources (staff and website) Will be seen as independent and outcome focused Delivers a framework for a long-term partnership for biodiversity interests into the future.	Will need to recast the current partnership arrangements There will be some legalities to undertake to use the brand

Based on our analysis to date, option three is best placed to deliver the outcomes the grant has been set up to achieve.

We are planning for the initiation of this grant by April 2020.

- Formal engagement with current and prospective partners
- Costings for administration and on-costs
- Research into possible legal models such a partnership might adopt.

We propose the following timeline:-

Month	Actions
September	Write to current Downs and Harbours members and council Approach possible partners for the new Biodiversity grants Research possible legal models for the partnership
October	Workshop with potential partners
November	Continued work with potential partners Publicise the availability of grant money
December	Completion of the partnership agreement. Official launch of the partnership
January	Request applications
February	Work with potential applicants on honing their bids (if needed)
March	Formal decision on applications
April	Money paid out to successful applicants

This ODI works in tandem with our existing ODI to maintain and enhance biodiversity on our sites. This is a penalty only ODI as it is essentially a legal requirement.

The grant scheme goes significantly beyond our legal obligation and accordingly is a new and reward only scheme.

The valuations we received from customers on the environment underpinned both the outperformance payment for the grant scheme and the underperformance payment for the biodiversity status of our sites.

We ask Ofwat to reconsider this issue.

Table Changes

None

4.5.1 Biodiversity Grants Scheme – August 2019 – Wording from our promotional materials: -

Vision

- An Improved Environment Supporting Biodiversity

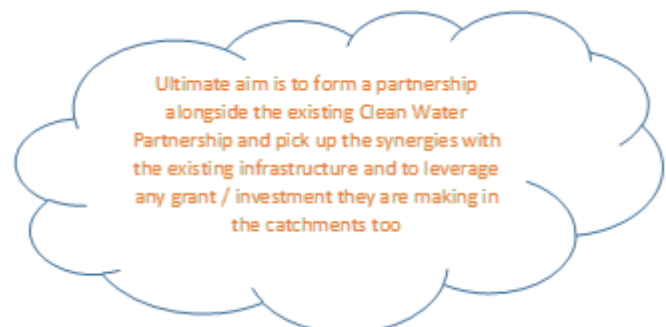
Delivering:

- Protection for the biodiversity in our catchments
- Enhanced habitats in order to improve biodiversity
- The formation of sustainable partnerships continuing to deliver for our environment into the future



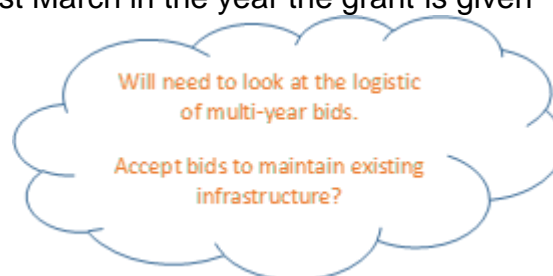
Who are the Downs and Harbours Biodiversity Partnership?

Group of interested parties working together to maximise benefits to Biodiversity along the southern coast



Key Facts about the grant scheme

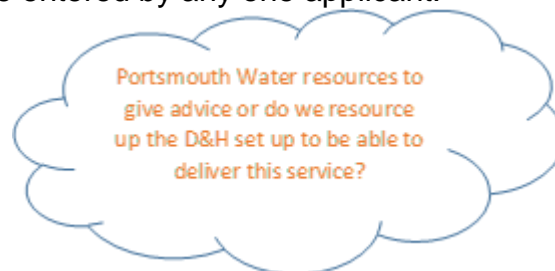
- Grants will only be available to NGOs, councils, community groups, schools, farmers, and landowners who work within the Portsmouth Water region. All projects must be designed to improve biodiversity.
- £50,000 of funding will be available every year for 5 years (2020 – 2025), there are no minimum limits to funding applications, but a maximum cap of £10,000. Bids spanning a number of years will be considered.
- A scoring system overseen by our expert committee* has been devised to ensure that funding will go to projects that demonstrate a clear biodiversity improvement, provide good value for money and where there is demonstration of partnership working. Not all applications will be successful.
- Successful applicants will be given the opportunity to pitch their project to the expert committee, who will be able to allocate further funding after each presentation.
- All work must comply with relevant environmental legislation and have the appropriate planning permissions.
- All work must comply with the relevant health and safety legislation. Please visit the HSE website www.hse.gov.uk for further information.
- Photos must be taken of the project site before, during, and after work for case study and publicity purposes.
- Projects should be completed by 31st March in the year the grant is given



Application Criteria

- Applicants will be required to:
- Fully complete the application form, which requires:
 - a map of the project location and, if available, any photos
 - a copy of your organisation's constitution and a copy of a recent bank statement (dated within the last 3 months) with this application. The constitution document should be in your organisation's name and signed by appropriate representatives
- Portsmouth water's Biodiversity and Catchment team will be available to advice with the application process, but will not be responsible for the submission of the application form.
- A scoring system has been devised to ensure that funding will go to projects that demonstrate a clear biodiversity improvement, provide good value for money and where there is demonstration of partnership working.
- Applications will close at xxxxxxxxxx
- All applicants will be contacted regarding the success of their application.
- As the money available every year is capped, not all applications will be successful. The Biodiversity Partnership may reject applications if they do not score as strongly as others in the opinion of the Expert Panel

- The submission of a valid application does not guarantee funding will be received for your project.
- Successful applicants will be notified of their success and will receive further detail on the project pitch stage of the process.
- Applications can be submitted via post to xxxxxxxxxxxx or by email to xxxxxxxx@xxxxxxxx.
- Applications submitted via email will receive a confirmation of receipt email.
- A maximum of three projects may be entered by any one applicant.



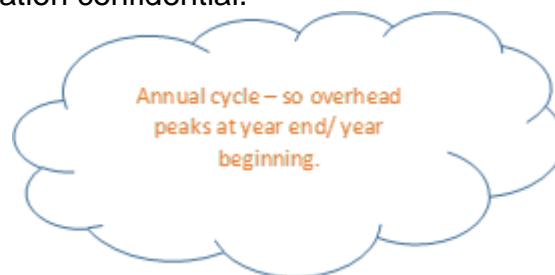
Responsibility of the applicant

- It is the responsibility of the applicant to familiarise themselves with these Terms and Conditions.
- Planning permission may be required depending on the project chosen. Consult your local planning authority or National Park authority to seek informal advice.
- Any capital items you install must comply with the relevant British Standards (BS).
- Items installed under scheme must have a minimum design life of xx years.
- All works must comply with relevant environmental legislation associated with the project
- If your work affects any of the following you will need consent from the Environment Agency or from the relevant authority;
 - National Park
 - Listed Building
 - Scheduled Monument
 - Protected Species
 - National Nature Reserve
 - Site of Special Scientific Interest
 - Registered Parkland
 - Local Nature Reserves
 - Registered Battlefields
- Any work carried out near the top of a river bank may require flood defence consent.
- Once offered a grant, applicants can't change their capital works, or amend their milestone agreement unless given permission by Portsmouth Water.
- Before, during, and after photos of the project site should be taken, and a short report written on completion of the project.
- Projects should be completed by 31st March of the year the grant is made.

Responsibility of Downs and Harbours Biodiversity Partnership (Portsmouth Water?)

The Biodiversity Partnership undertake to:

- Assess applications in an unbiased manner using the published scoring system
- Provide application advice through the Biodiversity and Catchment team
- Respond to queries within 7 working days
- Keep all project and financial information confidential.

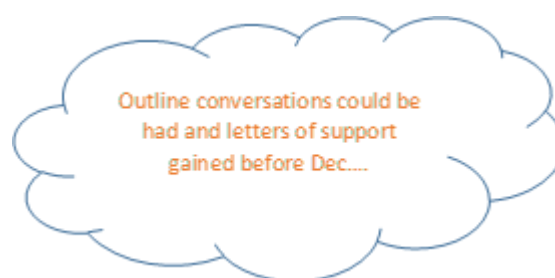


Expert Panel & Scoring Criteria:

Expert Panel

The Expert panel shall consist of suitable qualified individuals from the stakeholders affiliated with the Downs and Harbours Biodiversity Partnership. Namely:

- The South Downs National park
- The Environment Agency
- Natural England
- The Wildlife Trust
- The Harbour conservancy



Scoring Criteria

Should the grant scheme be oversubscribed, the following scoring criteria will be used to rank the applications that successfully satisfy the entry criteria for the grant.

- Area and nature of biodiversity improvement (ha of land or km of river, priority catchment / priority species) and sustainability of the improvements made
- Number of wider project benefits
- Match funding available
- Value for money (project benefits against cost)
- Number of partners involved

- SSSI improvement to help reach unfavourable recovering or favourable status
- WFD benefit

4.6 **Action Reference – PRT.OC.A44 - Timing**

Ofwat Intervention

The Company complies with the action to propose an in-period ODI.

However, the company's proposed performance commitment level design would allow it to carry over any under or over delivery from prior years. The company does not provide sufficient evidence to justify their proposed design and approach.

We are intervening to change the definition of the target to set in-year targets, without the flexibility of carrying forward any out or underperformance. These are as follows:

2020-21 = 0.05

2021-22 = 0.05

2022-23 = 0.05

2023-24 = 0.05

2024-25 = 0.05

Units: Value of grants awarded (£m)

Portsmouth Water Review and response

We note the intervention.

It is disappointing that Ofwat propose to remove any flexibility to carry forward any out or under performance. This may incentivise the Company to cease the grant programme part way through the year when the annual target of £50,000 has been achieved.

We ask Ofwat to reconsider this issue.

Table Changes

APP1

4.7 **Action Reference – PRT.LR.A1– Required**

Ofwat Intervention

The company should address any outstanding actions associated with operational resilience from the 'Portsmouth Water - Delivering outcomes for customers actions

and interventions' tables, in particular those related to mains repairs and unplanned outage.

Refer to interventions described in the 'Portsmouth Water - Delivering outcomes for customer's actions and interventions' tables regarding mains repairs and unplanned outage.

Portsmouth Water Review and response

The Company has reviewed the 'Portsmouth Water - Delivering outcomes for customers' actions and interventions' tables regarding mains repairs and unplanned outage.

Specifically for mains repairs and unplanned outage we note and agree with the proposed interventions by Ofwat in the Draft Determination. We also comment on other asset health interventions relating in the Draft Determination, which relate to water quality contacts.

Reference	ODI	Intervention	Company response
PRT.OC.A26	Mains repairs	Increase the underperformance payment to £0.0238m per 1000km	Accept
PRT.OC.A28	Unplanned outage	Reduce the performance commitment to 2.34% for each year in AMP7	Accept
PRT.OC.A28	Unplanned outage	Increase the underperformance payment to £0.191m per percentage point	Accept
PRT.OC.A28	Water quality contacts	Increase the underperformance payment to £0.0727m per contact per 1000 population.	Accept

4.8 Action Reference – PRT.LR.A4 - Required

Further action required – Company Specific Premium

We expect the company to continue to consider and plan for appropriate scenarios [relating to the loss of the Company specific premium in future AMPs] in its ongoing assessment of financial resilience in its long term viability assessment in its annual performance reports.

Portsmouth Water Review and response

The Company confirms that, in future assessment of long term financial resilience/viability (beyond the end of AMP7) for Annual Performance Reports, that scenarios considering the loss or reduction of the Company Specific uplift to WACC will be considered and assessed.

4.9 Action Reference – PRT.LR.A5 – Required

Further action required

Portsmouth Water considers its targeted credit rating of Baa2/BBB is consistent with ongoing financial resilience. We note that this is one notch lower than the current credit rating. It is also one notch lower than the credit rating for the notional

structure that the company has targeted and based its Board assurance statement for the notional company structure upon.

In its response to our draft determination Portsmouth Water should provide further detail and Board assurance about its plans to maintain its long term financial resilience in the context of targeting a Baa2 credit rating (that is only one notch above the lowest investment grade rating and lower than the target credit rating the company states it targets on a notional basis), and our draft determination as referenced in **PRT.LR.C1**.

In its future reporting Portsmouth Water should undertake suitably robust stress tests to support its long term viability statements.

Portsmouth Water Review and response

The Board has set out, in the Board Assurance Statement, its conclusions in relation to financeability and long term financial resilience.

Chapter 2.3 covers the Company and the Board's assessment of financeability.

Chapter 2.4 covers the assessment of financial resilience.

The Company remains committed to undertaking suitably robust stress tests to support its long term viability statements.

4.10 Action Reference – PRT.LR.C1 – Board Financeability Assurance

Further action required

We expect companies to provide further Board assurance, in their responses to the draft determination, that they will remain financeable on a notional and actual basis, and that they can maintain the financial resilience of their actual structure, taking account of the reasonably foreseeable range of plausible outcomes of their final determination, including evidence of further downward pressure on the cost of capital in very recent market data as we discuss in the 'Cost of capital technical appendix'.

Portsmouth Water Review and response

The Board Assurance Statement sets out the Board's conclusions in relation to financeability and financial resilience.

This is supported by Chapter 2.3 and 2.4 covering financeability and financial resilience respectively.

The Company has undertaken a viability scenario based on a further 37bps reduction in Cost of Capital.

4.11 Action Reference – PRT.CMI.A1 – Separate Price Control

Further action required

We are intervening to propose a separate control related to the Havant Thicket reservoir. Further information is provided in 'Havant Thicket Policy Issues.'

Portsmouth Water Review and response

Our response is set out within our HTWSR chapter, principally within 1.3.

We have set out the key areas where we need regulatory clarification in Part B, including a proposed timetable to complete.

We have set out our key financeability concerns and suggested remedies in Part A.

We have commissioned external advice from EY on the proposed level of the WACC which is appended to this response.

We are not able to provide Bulk Supply Agreement income for reasons set out in section 1.1.2.

4.12 Action Reference – PRT.CE.A1 – Efficiency Challenge

Further action required

In assessing the Havant Thicket reservoir development scheme we apply an efficiency challenge and exclude costs relating to assets such as car parks from which Portsmouth Water may earn an income and that are not directly related to making a transfer of water to Southern Water.

Company to provide further detail regarding how assets relating to the Havant Thicket reservoir development with the potential to earn income will be treated in the bulk supply agreement with Southern Water.

Portsmouth Water Review and response

We have provided further information on the breakdown and justification for the costs in our HTWSR chapter, section 1.6.

4.13 Action Reference – PRT.CE.A2– Evidence Required

Ofwat Intervention

Company to provide evidence to confirm DWI agreement with its submitted plans/revised undertakings and that no metaldehyde specific product substitution costs are included in the requested allowance.

Portsmouth Water Review and response

Please see below DWI confirmation, addressed to Carol Lucas, our Water Quality Manager, as requested.

From: Norton, Mary-Anne [<mailto:Mary-Anne.Norton@defra.gov.uk>]
Sent: 13 August 2019 10:59
To: Carol Lucas <C.Lucas@portsmouthwater.co.uk>
Cc: Benton, Simon <Simon.Benton@defra.gov.uk>; Knight, Caroline <Caroline.Knight@defra.gov.uk>
Subject: [EXTERNAL] RE: OFWAT Draft Determination Question

Good morning Carol,

I did have a good but exhausting holiday! I think I am just about coming back to this time zone now!

With regards to a statement for Ofwat, please see below:

Under regulation 28(1) of the Water Supply (Water Quality) Regulations 2016 (as amended), water companies are required to submit risk assessment reports to the Inspectorate. Portsmouth Water's risk assessment reports, do not highlight a significant risk to wholesomeness of supplies from metaldehyde. Consequently, there is no regulation 28(4) Notice in place to require mitigation. Companies are required to keep their risk assessments under continuous review. Additionally, within the Inspectorate's Long Term Planning Guidance (dated September 2017) the use of catchment management approaches are encouraged as they offer protection of the quality of water supplies, that may subsequently negate or delay the need for treatment.

Kind regards,
Mary-Anne

Mary-Anne Norton | Inspector | Drinking Water Inspectorate
Direct line: +44 (0) 208 565 4413 | Mobile: +44 (0) 7717 156780
Email: Mary-Anne.Norton@defra.gov.uk
Area 5B Nobel House, 17 Smith Square London SW1P 3JR

4.14 Action Reference – PRT.RR.A2 – Financial Resilience Assurance

Further action required.

No intervention but further action required. Portsmouth Water has provided sufficient evidence to support the rationale for the revised target credit rating. We note, actual financeability is impacted by the lower cost of capital and the lower cost of debt associated with the separate price control for Havant Thicket.

Pursuant to action **PRT.LR.A5**, the company should provide further assurance about how it will maintain its long term financial resilience and, in particular, in the context of targeting a Baa2 credit rating for the actual company structure which is lower than the target the company proposed for the notional capital structure.

Portsmouth Water Review and response

The Board has set out, in the Board Assurance Statement, its conclusions in relation to financeability and long term financial resilience.

Chapter 2.3 covers the Company and the Board's assessment of financeability.

Chapter 2.4 covers the assessment of financial resilience.

The Company remains committed to undertaking suitably robust stress tests to support its long term viability statements.

4.15 Action Reference – PRT.RR.A3 – Financial Ratio Evidence

Further action required

Portsmouth water has provided evidence to support the key financial ratios with the target thresholds it considers consistent with its target credit rating of Baa2/BBB albeit with limited headroom.

We are intervening to remove the 4.8 per cent increase to PAYG rates for the water resources control and we apply an increase of 0.7 per cent to PAYG rates for the water network plus control.

Portsmouth Water Review and response

The Company makes a representation in relation to the application of a PAYG adjustment of 3.5%. This is set out in Chapter 2.3.4 and supported by work relating to bill levels in Chapter 2.3.10.

4.16 Action Reference – PRT.RR.C1 – Tax

Further action required

We have set the tax allowance to zero in the separate control for Havant Thicket in the draft determination. We expect the company to provide updated tax information for each control as part of any representations on the draft determination along with evidence of the assurance, consistent with our expectations on the original business plan information. We have not taken account of the information on tax provided by Portsmouth Water for the Havant control in its query response to PRT-DD-RR-004 at this stage.

Portsmouth Water Review and response

We have updated our tax analysis as part of this representation process. This is set out in Chapter 2.6 together with additional table narrative and within our HTWSR chapter 1.20. This is supported by our tax advisers KPMG and information is provided in Appendix 2.6.1.

4.17 Action Reference – PRT.RR.C5 – Updated RoRE analysis

Further action required.

We expect companies to update their overall RoRE risk range analysis in updated App26 submissions as part of their response to the draft determination. This should take account of the guidance we have provided in the 'Aligning risk and return technical appendix' that accompanies our draft determination and 'Technical appendix 3: Aligning risk and return' published with the IAP, and the context that achieved cost and outcomes performance has been positively skewed at a sector level in previous price review periods. Companies are strongly incentivised to achieve and outperform regulatory benchmarks. Therefore where companies consider there to be a potential downward skew in forecast risk ranges for returns, we expect companies to provide compelling evidence that this is expected to be in the context of expected performance delivery of the company, taking account of the company's reported level of actual performance delivered in 2015-19 and taking account of the steps it is already taking or plans to take to deliver against regulatory benchmarks and mitigate downside risk.

Portsmouth Water Review and response

The RoRE analysis has been provided on both a Core and Combined company basis. We note that for the Combined RoRE analysis this is a 5 year analysis as the Ofwat model functionality does not cover a 10 year RoRE scenario. This is set out in Chapter 2.5 and is supported by technical appendix 2.5.

We note that the underlying Monte-Carlo analysis, used to support the RoRE, is based upon historical company performance data.

4.18 Action Reference – PRT.PD.C002.01

Ofwat Intervention

We are intervening to remove the SIM outperformance payments from the outcome delivery model.

Portsmouth Water Review and response

Table 4.11 of Portsmouth Water Draft Determination provides a comparison of the reconciliation of the PR14 Incentives.

We queried this with Ofwat on 25 July 2019 and the Ofwat reply confirmed that the reference point for the Company view was our IAP response on 1 April 2019.

The Company acknowledges that in its Business Plan (1 April 2019) APP27 did include a reward for SIM to the value of £1.190m and thus an ODI adjustment of £2.115m.

However, we did not feed the results from APP27 automatically into the Financial Model.

Specifically in the financial model we entered a penalty of £3.336m over the AMP7 period in row 261 of the Inputs tab – Water Network End of periods ODIs. This was the re-profiled assessment of the penalty of £3.0m and a re-profiling impact £0.3m.

Further we entered SIM on row 443 of the Inputs Tab – Residential retail revenue adjustment. This was a value of £0.238m per annum, £1.190m in total. We note the Draft Determination has increased this assessment by £0.2m to £1.4m.

Finally we did respond to a query on this issue on 26 April 2019, where the penalty was reduced marginally from £2.115m to £2.041. We assume the DD has referenced this additional information, albeit still including SIM.

Therefore we believe rows 1 of Table 4.11 should be revised as shown below.

	Revenue Adjustments	
	Company view	Ofwat view
Outcome delivery incentives	-3.0	-3.0

4.19 **Action Reference – PRT.PD.A6– Past Delivery**

Ofwat Intervention – We are intervening to reflect actual grants and contributions reported in line with the reporting requirements for the annual performance review.

Our intervention reduces the total WRFIM adjustment at the end of the 2015-20 period from £0 million to -£2.682m (2017/18 FYA CPIH deflated price base).

Portsmouth Water Review and response

Table 4.11 in the Portsmouth Water Draft Determination document (copied below) provides a comparison of the reconciliation of the PR14 Incentives.

We strongly disagree with the negative adjustment applied by Ofwat of £2.7m compared to the Company assessment of zero (highlighted in the table) for WRFIM.

Table 4.11: Reconciliation of PR14 incentives, 2020-25 (£ million, 2017-18 prices)

Incentive	RCV adjustments		Revenue adjustments	
	Company view	Ofwat view	Company view	Ofwat view
Outcome delivery incentives	0.0	0.0	-2.1	-3.0
Residential retail revenue	N/A	N/A	0.0	0.0
Wholesale revenue forecasting incentive mechanism	N/A	N/A	0.0	-2.7
Totex	-0.3	-0.3	-0.7	-0.7
Land sales	0.0	0.0	N/A	N/A
Service incentive mechanism	N/A	N/A	1.2	1.4
PR09 blind year adjustments	-2.3	-2.3	-0.1	-0.1
Water trading	N/A	N/A	0.1	0.2
Total	-2.6	-2.6	-1.6	-4.9
Total post profiling	N/A	N/A	-2.9	-5.2

Note: Total post profiling is the total revenue over the period, taking account of the time value of

In response to our query, dated 29 July 2019, we were advised by Ofwat to state our position in our representation.

The difference arises because the Draft Determination has assumed that there is a variance reflecting revenue from Grants and Contributions in the assessment, whilst the Company does not believe this is the case. The circumstances resulting in this difference have previously been discussed and agreed with Ofwat and have consistently been documented as such in the APR.

Background

The matter relates to the classification of Connection Charges. At PR14 we did not classify Connection Charges as “Grants and Contributions” (although connection charges were included in the PR14 business plan. As a result, the PR14 Final Determination of revenue *excluded* the £3.4m income from the overall Wholesale price control. In other words the Wholesale price control income was *understated* by the amount of connection charges.

When the Company realised that this error had occurred it was raised in an email and was subsequently discussed in a meeting with Rob Lee and Gayle Webb. (It was also discussed with Eleanor Matheson in a subsequent year).

The Company explained the mismatch arising between the amounts included in the FD and amounts that are reported in table 2E. We understood that a potential WRFIM issue would arise because we would report revenue *inclusive* of connection charges against a Final Determination *exclusive* of connection charges.

Supporting evidence

The following information provides evidence that the connection charges were EXCLUDED from the FD.

The Tables below are from the PR14 Final Determination and shows the elements of the allowed wholesale revenue and shows assumed capital contributions of £5.3m in AMP6 and the Totex of £140.7m.

Final price control determination notice: company-specific appendix – Portsmouth Water

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Wholesale allowed revenue build up:						
PAYG ¹	22.5	21.2	21.0	20.8	20.8	106.4
Return on capital	4.5	4.6	4.7	4.8	4.9	23.4
RCV run-off	4.7	4.8	5.0	5.1	5.3	24.7
Tax ²	0.2	0.1	0.0	0.0	0.0	0.2
Income from other sources ^{3,4}	-1.3	-1.3	-1.3	-1.3	-1.3	-6.4
Reconciling 2010-15 performance	-0.7	0.6	0.7	0.7	0.7	2.2
Ex ante additional menu income	0.1	0.1	0.1	0.1	0.1	0.6
Wholesale allowed revenue adjustments:						
Capital contributions from connection charges and revenue from infrastructure charges	0.9	0.9	1.1	1.2	1.2	5.3
Final allowed revenues	30.9	31.0	31.3	31.6	31.7	156.5

Table A2.9 Portsmouth Water's wholesale water allowed revenue (£ million)

	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Totex	27.2	29.4	29.4	28.0	26.7	140.7

TOTEX TRACKING AMP6

WHOLESALE	PRICE BASE	2015/16	2016/17	2017/18	2018/19	2019/20	TOTAL
Operating Expenditure	2012/13	16,308	15,936	16,279	16,391	16,341	81,255
Renewals	2012/13	5,229	5,213	5,213	5,219	5,224	26,098
Capex	2012/13	6,556	9,180	8,992	7,617	6,338	38,683
Grants and Contributions	2012/13	(907)	(901)	(1,052)	(1,247)	(1,226)	(5,333)
WHOLESALE TOTEX FD	2012/13	27,186	29,428	29,432	27,980	26,677	140,703

Grants and Contributions

The £5.333m of Grants and Contributions shown in the prior Ofwat table is made up of the following elements and detailed below (2012/13 prices):-

- Infrastructure Charges total £4.195m (row 1 714+708+824+985+964)
- Developer Contributions £1.138m (row 4 193+193+228+262+262)

You will note it **excludes** Connection Charges.

Grants and Contributions	Outturn Prices					2012/13 Prices							
	2008/09	2009/10	2010/11	2011/12	2012/13	Actual 2013/14	Forecast 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	
Infrastructure Charges	£'000	763	442	666	609	495	579	700	714	708	824	985	964
New Properties	'000	1,831	1,248	1,522	1,793	1,508	1,693	2,500	2,176	2,160	2,513	3,003	2,939
Cost per property	£	417	354	438	340	328	342	280	328	328	328	328	328
Capital Contributions	£'000	127	109	211	308	392	447	222	193	193	228	262	262
New Mains	£'000	202	280	1,283	923	908	1,019	566	496	496	584	671	671
% Recovered	%	63%	39%	16%	33%	43%	44%	39%	39%	39%	39%	39%	39%
Total Grants & Contributions		890	551	877	917	887	1,027	922	907	901	1,052	1,247	1,226

39% Average of last actual 6 years

The amount of connection charges included in the PR14 Business Plan but erroneously omitted from the Final Determination were £3.4m.

	Outturn	£000	2010/11	2011/12	2012/13	2013/14	2014/15
NEW SUPPLIES			635	711	580	639	844
Cost + Overhead			(457)	(498)	(445)	(453)	(571)
Surplus			178	213	135	186	273

Communications and agreements with Ofwat

The Annual Performance Report (APR) process introduced a new table in 2016 (2E), which explicitly required connection charges to be included in Grants & Contributions. As a result we identified that the issue described above, had occurred and Grants and Contributions were erroneously omitted from the PR14 Final Determination revenue.

We discussed this issue with Ofwat staff (Rob Lee and Gayle Webb in particular) and it was agreed that we should report connection charges as per the RAG guidelines in table 2E but exclude it from the reconciliation of wholesale income, Table 2I. This was felt by all to be an equitable approach as it avoided having to restate the FD and it allowed an appropriate comparison on a (like for like basis). It was discussed that this approach avoided creating an “unfair” WRFIM adjustment. We do not have any written confirmation from Rob/Gayle on this discussion, but have consistently and transparently reported it in the APR (see excerpt below) for the 4 years of this AMP period. We recall subsequently also having a discussion with Eleanor Matheson the following year, who also accepted the position agreed with Rob & Gayle.

Examples of previous contact with Ofwat.

Email from Caroline Jemphrey (Portsmouth) to Ofwat

From: Caroline Jemphrey [<mailto:c.jemphrey@portsmouthwater.co.uk>]
Sent: 06 June 2016 09:22
To: Robert Lee <Robert.Lee@ofwat.gsi.gov.uk>
Cc: Gayle Webb <gayle.webb@ofwat.gsi.gov.uk>
Subject: Annual Performance Report - Tables

Good Morning Rob

I have populated the tables for the Annual Performance Report and have the following issues/questions:

1. Table 2B, cell F25 (line 17), is a formula and it takes data from 2E 17...19. (Grants and Contributions)
This formula therefore includes any numbers in the ‘fully recognised in income statement’ column.
However, it excludes the 2 lines below, which include ‘Other contributions’. Is this correct?
We have some s45 connection charges income, but this was not in the price control.
We have Developers Contributions, and these are in the price control. Are these ‘other contributions’?
2. 2F calculates Revenue/Customer, whereas RAG 4.05 asks for Retail Revenue/Customer.
3. 4D cell L16 has the wrong formula in it.
4. 4D the units for ‘average volume stored’ and ‘distribution input from water treatment’ show tonnes, and not MI.
5. 4I All my numbers are zero, but the validation error message is still showing.
6. RORE ratio in Financial Metrics – why does this start with the FD notional RORE?
We are having trouble understanding what this is asking for.

I am in a meeting from 11.30 – 12.30pm today, but will be at my desk for most of the rest of the day, if you want to call me.
Otherwise maybe we can catch up tomorrow.

Many thanks
Caroline.

Caroline Jemphrey
Management Accountant, Portsmouth Water Ltd

Extract from APR explaining treatment

2E ANALYSIS OF CAPITAL CONTRIBUTIONS AND LAND SALES - WHOLESALE

For the 12 months ended 31 March 2017

£'000	Current year			
	Fully recognised in income statement	Capitalised and amortised against depreciation	Fully netted off capex	Total
Grants and contributions - water				
Connection charges (s45) ¹	601	0	0	601
Infrastructure charge receipts (s146)	0	787	0	787
Requisitioned mains (s43, s55 & s56)	0	379	0	379
Diversions (s185)	0	0	0	0
Other Contributions	0	0	0	0
Total	601	1,166	0	1,767

¹ Connection Charges (s45) were included in Revenue in the Business Plan, and not Grants and Contributions.

Extract from Email to Ofwat when submitting APR

From: Caroline Jemphrey
Sent: 10 July 2017 12:37
To: Ofwat Finance and Governance <FinanceAndGovernance@ofwat.gsi.gov.uk>
Cc: Steve Morley <S.Morley@portsmouthwater.co.uk>; Helen Orton <H.Orton@portsmouthwater.co.uk>; Simon Hall <Simon.Hall@saffery.com>; Jenny Ngai <Jenny.Ngai@ofwat.gsi.gov.uk>
Subject: Annual Performance Report 2016/17

PORTSMOUTH WATER LTD
 Annual Performance Reporting for 2016/17

Attached are the following documents for our 2016/17 submission, and/or the links to our website:

1. Annual Performance Report 2017 (includes Risk and Compliance Statement on page 14)
<https://www.portsmouthwater.co.uk/about-us/accounts/> (Regulatory Accounts)

*The Data Tables have 2 validation errors. The first relates to tables 2B and 4D, and is an issue that you are aware of. The second relates to the validation between tables 2B and 2E. Our Table 2B excludes the s45 Connection Charges in 2E. We had the same issue last year, and agreed with you that we should report the same categories of Grants and Contributions in Totex, as in the Final Determination.

Full emails and APR documents can be provided if required.

We did also explain this agreed treatment as part of the PR19 query process. We are extremely unhappy that Ofwat appear to have unilaterally reversed an agreed position without further consultation with us. We have taken this approach in good faith and it has not been subsequently raised as a concern by Ofwat during the 4 years of APR reporting. This has a direct impact on revenue and therefore on financeability.

Ofwat's intervention response PRT.PD.A6 details....

Intervention required. The claim relates to errors Portsmouth Water made in completing its business plan tables for connection expenditure at PR14 and we consider this to be outside of the reconciliation mechanism's scope.

We are intervening to reflect actual grants and contributions reported in line with the reporting requirements for the annual performance report. Our intervention reduces the total WRFIM adjustment at the end of the 2015-20 period from £0 million to - £2.682 million (2017-18 FYA CPIH deflated price base).

Notwithstanding the reversal of a previously agreed position with Ofwat, we disagree fundamentally with the position that this is “outside of the reconciliation mechanism's scope”

Extracts from the WRFIM guidance set out the purpose of the revenue correction mechanism;

WRFIM

Background and purpose

WRFIM is a new PR14 mechanism which replaces the PR09 Revenue Correction Mechanism (RCM). WRFIM has been introduced to improve companies' revenue forecasting within the new flexible wholesale revenue controls. The purpose of the mechanism is to reduce the impact of deviations on customer bills arising from revenue forecasting deviations by:

- Incentivising companies to avoid revenue forecasting errors by applying a penalty to variations (either over-recovery or under-recover) that fall outside the set revenue flexibility threshold; and
- Adjusting companies' allowed revenues for each year to take account of any over-recovery of actual revenues compared to projected revenues, so that the over-recovery is corrected within the price control period.

We note the purpose of the WRFIM is to “*reduce the impact of deviations on customer bills arising from revenue forecasting deviations*”. The approach being taken in the intervention is in effect causing a WRFIM adjustment which is not in fact as a result of inaccurate forecasting but is instead as a result of not comparing “like with like”.

We have demonstrated below that there has been very accurate recovery of connection charges (see section 5) and has not resulted in any material under and over recovery from customers. Implicitly this cannot drive a WRFIM adjustment.

An alternative way to look at this is that if Ofwat is not content with the approach to strip connection charges out, then an adjustment should be made to the allowed revenue to include the connection charges so that a like for like comparison is being made.

No material forecasting variance has arisen

The following shows the forecast variance over the first three years of AMP6.

Connection charges in PR14 Business Plan

Using the same methodology as for the other Grants and Contributions, the average revenue for new connections is £0.682m per annum (see table below). This is in 2012/13 prices, or £0.676m in 2017/18 CPIH deflated prices, giving a total of £2.028m over the 3 years.

			2010/11	2011/12	2012/13	2013/14	2014/15
NEW SUPPLIES	Outturn	£000	635	711	580	639	844
Cost + Overhead			(457)	(498)	(445)	(453)	(571)
Surplus			178	213	135	186	273

Connection charges actually received

£m	Outturn Prices	2017/18 CPIH deflated Prices	Variance to BP
2016	0.860	0.852	
2017	0.601	0.595	
2018	0.571	0.566	
Total	2.032	2.013	0.015

This analysis shows that we have a forecast under recovery of revenue of £0.015m, so far in the AMP.

This is not a material difference in the WRFIM.

Conclusion

In conclusion we strongly disagree with the position taken by Ofwat in intervention PRT.PD.A6 for the following reasons;

- We previously agreed the position with Ofwat
- We have been consistent and transparent in applying it
- It does not result in a material forecasting error
- The intervention made is inconsistent with the aims of the WRFIM by causing a variance which is not as a result of forecasting differences.

4.20 Action Reference – PRT.PD.A7– Past Delivery

Ofwat Intervention

The intervention relates to the forecast profits for export 1 (to Southern Water Sussex North) for which the company is claiming water trading incentives.

In its April submission, the company provides forecast profits for export 1 consistent with the minimum volume contained in the trade agreement. However, evidence from the first four years of the operation of the export suggests that the volumes traded were always above the minimum. Therefore, our intervention is to impose forecast profits based on the historical average volumes for the last three years of the export.

Consistent with the Company's proposal in the query response, we are intervening to impose forecasts for profits consistent with the historic profits for 2016/17 to 2018/19.

Portsmouth Water Review and response

The Company acknowledges the adjustment to the trading incentive to reflect the forecast profits in the three years up to and including 2018/19 for the bulk supply to Southern Water into its Sussex North distribution zone.

We confirm that intervention results in an increase in the water trading incentive payment from £0.107m to £0.197m (2017/18 FYA CPIH deflated price base).

4.21 Ofwat Action Reference – PRT.CA.A4 - Required

Ofwat Intervention

We expect Portsmouth Water to be transparent about how the dividend policy in 2020-25 takes account of the obligations and commitments to customers and to demonstrate that in paying or declaring dividends it has taken account of the factors we set out in our position statement. We expect the company to respond to this issue in its response to our draft Determination.

We expect the company to demonstrate that its dividend policy for 2020-25 takes account of obligations and commitments to customers and other stakeholders including performance in delivery against the Final Determination. In doing so, the company should refer to the examples of best practice we have identified among companies.

Portsmouth Water review and response

In our response to the IAP (March 2019) the Board stated the following:-

The Board has confirmed that it will adopt the expectations on dividends through 2020-25 as set out in 'Putting the Sector into Balance'. Therefore, the Board commits to maintaining a fair, sustainable and transparent dividend policy, which is reflective of the business performance and our delivery for customers.

The dividend policy for PR19 has been developed by considering all relevant factors – particularly performance against our promises to customers, long-term resilience, financeability, our wider obligations and responsibilities to stakeholders. The Board will be open about how the policy takes into account the obligations and commitments to customers when determining dividend payments.

If the dividend payment or policy changes, the Board commits to being open and transparent with stakeholders, especially customers, clearly communicating what and why the changes have occurred.

In the Draft Determination Ofwat challenged this policy in PRT.CA.A4 as described above. The Board has developed its policy further having reviewed those policies identified by Ofwat as best practice in the industry.

Revised Dividend Policy

For the appointed business a base level of dividend, calculated using a 5% dividend yield on average regulatory equity value, has been proposed for the period 2020-25.

Portsmouth Water confirms that it will adjust its base dividend in the period 2020-25 to reflect and recognise company performance and delivery to customers, in particular performance above or below that assumed in the Final Determination of Price Limits, published by Ofwat (December 2019).

The decision on the dividend will reflect a mixture of financial and non-financial incentives, with account being taken of known and forecast performance and relative importance to customers and stakeholders.

Specifically it will recognise:-

- Our regulatory obligations
- The commitments we have made to customers and other stakeholders
- Any adjustments for out / underperformance against regulatory metrics and benefit sharing
- Employee interests and pension obligations
- Our actual capital structure and the need to finance future investment (RCV growth) beyond committed equity injections.
- The short / medium term financial resilience of the Business.

In determining the level of the dividend the Company will apply the following 4 step process:-

1. Understanding the Financial Performance of the appointed and non-appointed business and its ability to provide a dividend

2. Reflect Commitments to Customers and Stakeholders including:-

- Customer Service:- C-Mex, D-Mex, Written Complaints
- Performance Commitments:- Leakage, Interruptions to supply, Water Quality (CRI)
- Commitments to customers:- Vulnerable customers, Sustainable abstraction, Community commitments
- Employees:- Health & Safety, pensions.

3. Undertake Financeability Tests to ensure:-

- Sufficient liquidity for the medium term
- The viability of the company is tested considering facilities available and the headroom target

4. Recognising Regulatory Tests

- Licence Condition F

- (i) *dividends declared or paid will not impair the ability of the Appointee to finance the Appointed Business*
 - (ii) *under a system of incentive regulation dividends would be expected to reward efficiency and the management of economic risk*
- Licence condition FA.5A

No director of the Appointee should vote on any contract or arrangement or any other proposal in which he / she has an interest by virtue of other directorships.

The Board is committed to considering these factors in declaring a dividend and in setting out clearly, in each Annual Performance Report, the dividend policy, the factors that have been considered in determining the dividend and how these relate to the dividend declared.

Our explanations will also cover how the Board's decision in relation to dividends reflects how the Company has delivered for customers.

Over and above this dividend policy, the Board have already indicated that outperformance arising directly because of its gearing structure will be shared with customers; this issue will also be recognised in its decision on any dividend declared on paid in the period 2020-25.

4.22 Action Reference – PRT.CA.A5 – Required

Ofwat Intervention

There remain some details to be finalised, for example details of the underlying metrics and associated weightings for both the annual and long term bonus schemes and the finalisation and approval of the policy. Once finalised, we expect Portsmouth Water to provide an update in its response to the draft determination to demonstrate that it is committed to meet the expectations we have set out in 'Putting the sector in balance' position statement. We expect the company and its remuneration committee to ensure its performance related executive pay policy demonstrates a substantial link to performance delivery for customers through 2020-25 and is underpinned by targets that are stretching. Trust and confidence can best be maintained where stretching performance is set by reference to the final determination and taking account of stretching regulatory benchmarks (for example delivery of upper quartile performance) and should include a commitment that it will continually assess performance targets to ensure targets will continue to be stretching throughout 2020-25. We expect the company to report transparently, in its annual performance report, about further updates to the development of its policy that will apply in 2020-25.

Portsmouth Water Review and response

We have considered Ofwat's specific and general comments on Performance Related Executive Remuneration as set out in the Draft Determination document. In order to maximize the degree of alignment of objectives with agreed regulatory

targets, we propose that our final policy and final targets/weightings will be published after the Final Determination (FD); however, for this Draft Determination (DD) response we have added to the principles previously articulated which we will apply to this final policy. These changes will take account of best practice as very helpfully set out by Ofwat in the DD response. Our proposals have been considered by our Board and are summarized in the table below.

We note Ofwat's expectation that the company and its Remuneration Committee (REMCO) should ensure its performance related executive pay policy demonstrates a substantial link to performance delivery for customers through 2020-25 (and is underpinned by targets that are stretching). We believe that the policy principles we have articulated previously along with the additions in the table below very much reflect this. As a highly customer centric business PW's existing policy focusses heavily on delivery of industry leading levels of customer service and we will build on this strong foundation to strengthen the link between executive remuneration and outcomes for customers.

We agree that trust and confidence can best be maintained where stretching performance is set by reference to the final determination and taking account of stretching regulatory benchmarks (for example delivery of upper quartile performance). We therefore commit that the REMCO will continually assess performance targets to ensure they will continue to be stretching throughout 2020-25. We also commit to transparent reporting of the targets set and achievements within the Annual Performance Report including any changes to published policy.

Issue	Ofwat DD Statement	PW DD Representation Position
Overall policy and detailed AMP7 PRP arrangements	Should be submitted now with DD response.	Our Board and REMCO is committed to finalizing the detailed PRP arrangements post receipt of the final determination, fully in line with the principles set out here and in our previous Business Plan and IAP documents.
Proportion of performance related exec pay linked to service delivery	60% of incentives must align with delivery of service to customers	The DD response highlights PW policy as an exemplar in this area and we therefore propose to maintain this position.
Measures considered appropriate	Measures might include regulatory metrics such as C Mex and other common ODI's, water quality, environmental performance, Totex and RORE.	The measures we will use will include all Ofwat defined and bespoke ODI's as well as targets set by the Remuneration Committee of the Board considered to be key to the development of the business. This probably includes all of the examples set out by Ofwat in the DD.
Stretching targets	Align targets to the FD	The targets will be fully aligned to the FD.
Stretching targets	Consider prior year performance for company and sector to adopt further stretch towards industry leading position.	Where our position is not upper quartile the Remuneration Committee will set targets which align to this unless there are specific reasons to do otherwise. Where we are already upper quartile, targets will be set to maintain that position. Enhancing prior year performance will be a key consideration.

Underpin arrangements	Bonus will be paid only if certain gateway criteria are achieved.	This principle already exists in PW's 19/20 targets where the size of the bonus pot reduces based on adverse HSE performance. We will maintain this policy of an underpin based on HSE performance.
Discretionary powers of REMCO	REMCO has powers to change bonus level based on specific issues or events	PW has been mentioned as an exemplar in this area and we propose to maintain and develop this position.

5 OTHER ISSUES

5.1 AMP6 Performance commitment: Water quality contacts – Challenge to level of penalty in Draft Determination

Background

This ODI reflects the number of contacts we receive from customers with dissatisfaction in the taste, odour or colour of their water. It is calculated as the number of contacts per 1,000 population and is reported annually (for the calendar year) to the Drinking Water Inspectorate.

Our PR14 target for AMP6 was based on 2013 performance. However, as a result of introducing a new Customer Relationship Management System (CRM) in October 2012 and a resultant review of our reporting methodology, we started to record a greater number of contacts.

We have made significant reductions in the AMP period to improve performance and have been ranked first (best) in the Chief Inspectors annual report for three of the four years starting 2015.

However, the result of our performance is an underperformance payment of £1.903m over the AMP7 period. This equates to a permanent reduction in customer bills of over £1.20 per year.

We are asking Ofwat to reconsider the magnitude of the penalty associated with this ODI in light of:-

1. The impact of the PR14 Determination Ofwat intervention on the level of this penalty
2. The improvement we have made in performance in AMP6
3. Our relative historic performance in AMP6
4. Our proposed future performance in AMP7
5. The proposed incentive rate for AMP7

The ODI applies a penalty of £226,550 per 0.01 per 1,000 population less than the AMP6 average target of 0.421 contacts per 1,000 population. This is capped at 0.084 higher than the target at 0.505 contacts per 1,000 population, with the capped value results in the ODI penalty of £1.903m.

This request is supported by our CCG. The CCG have been very engaged on this issue over the AMP6 performance and have challenged the Company to improve its performance, despite the re-basing of the measure.

PR14 Determination of the ODI

In our PR14 Business Plan we initially proposed a water quality contacts ODI based solely on reducing contacts associated with taste and odour only by 1% per annum in the AMP6 period.

Our customer research and willingness to pay analysis concluded that this ODI should be reward and penalty and should be based on the year 5 outturn only. Detail of the ODI is shown in the table below.

PR14 Business Plan Incentive rates for Water Quality Contacts

	Penalty	Reward
Performance measure	< 1% improvement each year	> 1% improvement each year
Incentive rate	-£48,318	£11,565
Maximum	-£96,636	23,130

The key point was that the reward and penalty were capped at two times the incentive rate.

The PR14 Final Determination widened the scope of the measure to include appearance and illness. Ofwat expanded the assessment period from a year 5 only measure to the average of the AMP6 period. Rewards and penalties were revised to be 5 year totals and the penalty increased to be £226,550 per 0.01 contacts per 1,000 population over that period. Finally, caps and collars were also increased significantly from 2 to 8.4.

The Company accepted the PR14 Determination given its position on water quality contacts at that time. However, as a result of introducing a new Customer Relationship Management System (CRM) in October 2012, we were, in 2014 in particular, recording water quality contacts more accurately and on an amended basis, resulting in a greater number of contacts. In retrospect we should have rebased our ODI commitment. This would still have resulting in us being upper quartile in the industry.

By intervening on our ODIs at PR14, we do not believe the Ofwat intent was to construct an ODI which would result in a penalty of £1.903m given our performance.

As this paper shows:-

- our performance in AMP6 has been industry leading,
- our targets for AMP7 are again industry leading,
- our targets are used to set the targets for the industry,
- the proposed incentive rates for AMP7 are significantly lower than AMP6.

We therefore propose revising the penalty to £96,636 per annum for AMP6, totalling £483,180.

This is in line with our original willingness to pay research and therefore reflects our customers' position at that time.

An alternative approach is to take the Ofwat valuation at PR14 £226,550 and multiply by 2 giving £453,100.

AMP6 Performance

Despite setting the target from the wrong base, we have strived to improve performance in this ODI and seen some significant improvements in performance. The reduction in Appearance and Taste & Odour are, we believe, a direct result for operating our network differently and ensuring our chlorination processes are non-intrusive yet effective benefiting our customers directly and resulting in lower contacts of dissatisfaction.

The table below shows the improvement in performance over the AMP 6 period. It highlights the 2013 performance, which was the base year for our PR14 commitment and the immediate impact the CRM system had on the recording of the data.

	2013	2014	2015	2016	2017	2018	2019
Appearance	147	308	180	262	152	114	136
Taste & Odour	155	253	194	189	222	180	145
Illness	5	22	24	17	15	18	24
Total	307	583	398	468	389	312	295
Population (000s)	708	693	698	703	707	714	717
Rate per 1,000 population	0.434	0.841	0.570	0.666	0.550	0.437	0.411
Industry average	1.91	1.75	1.64	1.35	1.31	1.31	
Industry ranking			1st	3rd	1st	1st	
Portsmouth Target			0.429	0.425	0.421	0.417	0.413

Source: Portsmouth Water

The 2019 data is a projection based on the first seven months of 2019, i.e. at the end of July 2019. Our 2019 performance is also strong year to date and we expect to outturn 2019 with an improved performance on 2018.

- **We consider the significant penalty is inconsistent with the significant improvement in performance of the company over the AMP6 period.**

Industry performance in AMP6

The table below shows the industry performance for water quality contacts for the 4 years starting 2015.

Water Quality Contacts per 1,000 population

	2015	2016	2017	2018
Affinity	0.98	0.98	0.96	0.80
Anglian	1.33	1.35	1.23	1.18
Bournemouth	0.84	0.94	0.90	0.76
Bristol	1.93	1.80	1.53	1.69
Cambridge	0.75	0.83	0.98	0.78
Dee Valley	2.72	2.70	2.10	2.87
Dwr Cymru	3.29	3.38	3.27	3.42
Essex & Suffolk	0.72	0.78	0.74	0.69
Portsmouth	0.57	0.67	0.55	0.44
Severn Trent	1.95	1.98	1.74	1.64
South East	2.18	1.98	1.89	1.52
South Staffs.	2.27	1.88	1.53	1.70
South West	3.56	3.25	2.81	2.82
Southern	1.29	1.45	1.40	1.26
Sutton & East Surrey	0.65	0.57	0.56	0.59
Thames	0.64	0.61	0.58	0.61
United Utilities	1.80	1.84	2.13	2.06
Wessex	1.90	1.68	1.56	1.54
Yorkshire	2.15	1.94	1.51	1.64
Average	1.64	1.35	1.31	1.31

Source: DWI Chief Inspectors Reports

For three of the four years we have been ranked first (best) in the industry with the lowest number of contacts. In 2016 we were ranked third after Sutton & East Surrey and Thames Water.

Our 2018 performance is now 25% better than the second placed company, Sutton & East Surrey Water and only one third of the industry average.

Our 2019 performance is also strong year to date and we expect to outturn 2019 with a similar performance to 2018.

- **We consider the significant penalty is inconsistent with the relative performance of the company over the AMP6 period.**

Proposed AMP7 performance

The table below allows a comparison between the targets set by Ofwat in the Draft Determination for each company.

We note that our proposal to reduce the number of contacts from 0.45 to 0.41 per 1,000 population has gone unchallenged. We also note this is the lowest target in the industry for 2024/25 and better than the upper quartile target of 0.67 contacts per 1,000 population.

Water Quality Contacts per 1,000 served population

Company	Forecast (2019-2020)	Performance (2024-2025)	Good performance level, (2024-2025)	Upper quartile performance level, (2024-2025)
ANH	1.17	0.77	1.08	0.67
BRL	1.37	0.68	1.08	0.67
HDD	5.52	3.57	1.08	0.67
NES	0.80	0.95	1.08	0.67
PRT	0.45	0.41	1.08	0.67
SES	0.52	0.50	1.08	0.67
SEW	1.62	1.08	1.08	0.67
SRN	1.16	0.68	1.08	0.67
SSC	1.23	0.76	1.08	0.67
SVE	2.97	1.96	1.08	0.67
SWB	1.77	1.17	1.08	0.67
TMS	0.60	0.60	1.08	0.67
UUW	1.85	1.22	1.08	0.67
WSH	2.40	1.58	1.08	0.67
WSX	1.41	0.93	1.08	0.67
YKY	1.22	0.81	1.08	0.67

Source: Ofwat Draft Determinations July 2019

- **We consider the significant AMP6 penalty is inconsistent with the proposed AMP7 performance targets for the industry, where in particular, the fact that our AMP6 performance of 0.56 contacts per 1,000 population, is better than any companies targets (excluding SES Water) in the AMP7 period.**

The proposed incentive rate for AMP7

The ODI applies a penalty of £226,550 per 0.01 per 1,000 population less than the AMP6 average target of 0.421 contacts per 1,000 population. This is capped at 0.084 higher than the target at 0.505 contacts per 1,000 population, with the capped value results in the ODI penalty of £1.903m.

The additional number of water quality contacts over the AMP6 target is 373. This implies each contact over and above the target “costs” the Company over £5,000 recovered through lower revenue.

			2015	2016	2017	2018	2019	Total
Target	Number of WQCs	#	300	299	298	297	296	1489
	Population	000s	699	703	707	712	717	3538
	Ratio		0.429	0.425	0.421	0.417	0.413	0.421
Actual	Number of WQCs	#	398	468	389	312	295	1862
	Population	000s	699	703	707	712	717	3538
	Ratio		0.569	0.666	0.550	0.438	0.411	0.526
Penalty		£	-501204	-864333	-466595	-76614	5726	-1903020
Additional contacts			98	169	91	15	-1	373
Cost per contact		£						-5108

Source: Portsmouth Water – own calculation

By comparison the proposed incentive rate for AMP7 equates to £100 per contact over the target, given the incentive rate is -£72,700 per additional unit of contact per 1,000 population.

- **We consider the AMP6 penalty to be disproportionate at over £5,000 per contact (in excess of the target) relative to the AMP7 rate which equates to £100.**

5.2 Consultation under section 13 of the Water Industry Act 1991 on proposed modifications to Condition B of the licences of 17 water companies

Thank you for your letter 18 July 2019 proposing a modification to Condition B of the Company's appointment as a relevant undertaker.

We note the two changes proposed allow:-

- the company to recover any shortfall in previous years in accordance with the Revenue Forecasting Incentive (RFI) and
- the process by which the opening revenue allowances in the price control for network plus activities are established.

The Company accepts the proposed Licence modifications to Condition B and makes no representations to amend the content.

5.3 **Our proposed approach to regulating developer services - treatment of diversions**

We note Ofwat are inviting company views on the treatment of diversions at the Price Review. We have read Section 5 of the PR19 Draft Determination document entitled “Our proposed approach to regulating developer services.”

We agree with the observations presented by United Utilities and Severn Trent that diversions are typically unknown precisely at the time of determining the Price Review and the magnitude of the work / timing / expenditure / income is highly variable given on such projects. Whilst their comments relate to very big schemes such as HS2, Portsmouth Water face the same issue on a much smaller scale.

We therefore support the exclusion of diversions for the purpose of Condition B in calculating revenues at the price review, and are comfortable with the definition of diversions provided on page 18 of the document.

6 ACCEPTED INTERVENTIONS

Please find below a list of Draft Determination interventions that have been accepted by the company.

Draft determination interventions	Action Reference	Intervention
Affordability & Vulnerability	AV.A1	New common ODI on Priority Service register
ODIs	OC.A1	HTWSR ODI
	OC.A7	Asset health ODI not appropriate
	OC.A8	Customer protection - better mechanism
	OC.A10	Water Quality rate (explain or revise)
	OC.A11	Water Quality Cap/Collar
	OC.A12	Interruptions level - reset based on published data
	OC.A13	Interruptions rate - based on better valuation data
	OC.A17	Leakage Rate - evidence
	OC.A21	PCC valuation
	OC.A26	Mains repairs rate
	OC.A28	Unplanned outage forecast performance level
	OC.A30	Unplanned outage - valuation
	OC.A34	Water Quality Contacts - challenge outperformance payments
	OC.A37	Void & Gap Sites valuation of penalty
	OC.A45	Carbon - not sufficiently defined
	OC.A46	Carbon target not sufficiently defined
	OC.A48	AIM - use of cap and collar
	OC.C1	Voids - ODI Rates
	OC.C2	NEP - Additional commitment
	OC.C3	NEP - Additional commitment
	OC.C4	Leakage Rate - evidence
	OC.C5	PCC
	OC.C6	Interruptions to supply
	OC.C7	AIM - use of cap and collar
	OC.C8	TUB's - renaming
Targeted Controls, Markets & Innovation	CMI.C1	New - change to Wr7
Risk and Return	RR.A5	Assessment of revenue variance - Ofwat note wider than typical risk range
	RR.C2	New - HTWSR - PAYG and RCV run off
	RR.C3	New - HTWSR - PAYG change due to separate price control
	RR.C4	New - RoRE changes
Past Delivery	PD.A2a&b	ODI calculations
	PD.C002.02	Change to WQ penalty

	PD.C008.01	Modification factor rounding
	PD.C008.02	WACC Discount Rate
	PD.C009.01	SIM reward change
	PD.CO11.01	Standardisation of discount factor

Glossary of Terms

Term	Definition
AIC	Average incremental cost (used to evaluate options)
AICR	Adjusted Interest Cover ratio (a financial measure of our ability to pay our interest on our loans)
AIM	Abstraction Incentive Mechanism (a financial incentive framework used to incentivise water companies to reduce abstraction on environmentally sensitive water bodies).
AMP	Asset Management Plan
AMP5	Asset Management Plan 6 (the period 2010 to 2015 that the PR9 Business Plan will be delivered over)
AMP6	Asset Management Plan 6 (the period 2015 to 2020 that the PR14 Business Plan will be delivered over)
AMP7	Asset Management Plan 7 (the period 2020 to 2025 that the PR19 Business Plan will be delivered over)
AMP8	Asset Management Plan 8 (the period 2025 to 2030 that the PR19 Business Plan will be delivered over)
Ancala	Ancala Partners LLP (UK based infrastructure fund manager and owners of Portsmouth Water)
App	Application for a mobile device
App1	Business Plan table commentary App1
App31	Business Plan table commentary App31
APR	Annual Performance Review
Atkins	A consulting services company that Portsmouth Water have used during the planning process
Baa1	Credit rating – an assessment made by Moody's, and Standard & Poor of our credit worthiness
Baa2	Credit rating – an assessment made by Moody's, and Standard & Poor of our credit worthiness
BAC	Bid Assessment Criteria (document providing a structure for third parties and incumbents to submit solutions, it covers both supply-side and demand-side schemes and includes for leakage services, water efficiency and improvements to production capability)

BIG	Business Improvement Group (group with senior representatives from all key internal disciplines and Business Systems Analysts).
BSA	Bulk Supply Agreement
CAB	Citizens Advice Bureau
CAP	Customer Advisory Panel (a group of customers brought together by Portsmouth Water to understand their views)
Capex	Capital expenditure (spend on assets in our business)
CAP	Competitively Appointed Provider
CAR	Conservation Access and Recreation
CBA	Cost Benefit Analysis
CCG	Customer Challenge Group (independent group formed to challenge Portsmouth Water's plans)
CCWater	Consumer Council for Water (national consumer body representing water customers)
CEO	Chief Executive Officer
CIS	Capital Incentive Scheme (established by Ofwat)
CMA	Competitive & Markets Authority
C-mex and D-mex	Metrics used by Ofwat to measure water companies' customer service for commercial customers (C-Mex) and domestic customers (D-Mex) for AMP7
COPI	Construction Output Price Indices
CPES	Channel Payments for Ecosystems Services
CPI	Consumer Price Index
CPIH	Measure of consumer price inflation
CRI	Compliance Risk Index (Water quality compliance measure)
CRM	Customer Relationship Management System
CSMG	Common Standards Monitoring Guidance
CUSP	Construction & Utilities Solutions Partnership
D&B	Design and Build

DB	Defined Benefit
DBFM	Design-Build-Finance-Maintain
DC	Defined Contribution
DEFRA	The Department for Environment, Food and Rural Affairs
DMAs	District Metered Areas (metered areas containing around 500 properties each)
DO	Deployable Output
DPC	Direct Procurement for Customers (an alternative method of procuring and constructing a large asset)
DWI	Drinking Water Inspectorate (water quality regulator)
EA	The Environment Agency
EPEC	European PPP Expertise Centre
ERP	Enterprise Resource Planning
EU	Estimating Uncertainty
EY	An accountancy and advisory company
F&G	Faithful & Gould
FD	Final Determination
FFO	Funds From Operations
FOAK	First of a Kind
GDPR	General Data Protection Regulation (EU law on data protection)
GIS	Geographic Information System (system used for gathering, managing and analysing geographic information).
HBF	the Housebuilders Federation
HH	House hold
HMG	Her Majesty's Government
HNC	Higher National Certificate
HOF	Hands off Flow

HOT	Heads of Terms
HTWSR	Havant Thicket Winter Storage Reservoir
Hydroco	Water engineering consultants
IACCM	The International Association for Contract & Commercial Management
ICR	Interest Cover Ratio (a financial measure of our ability to pay our interest on our loans).
ICS	ICS Consulting Limited – Customer Research Company
IoCS	Institute of Customer Service
IFS	Industrial and Financial Systems
IoT	Internet of Things
IPP	Input price pressures
IT	Information Technology
ITT	Invitation to Tender
KPI	Key Performance Indicator
KPMG	A consulting services company that Portsmouth Water have used during the planning process
MARM	Mouchel's Asset Renewal Model (a forward looking method for determining the Capex/Opex balance together with the level of total investment required to adequately maintain assets in the next AMP and beyond).
MEAV	Modern Equivalent Asset Value
MEICA	Mechanical, Electrical, Instrumentation, Control and Automation
MOSL	Market operator of non-household retail water market
MOU	Memorandum of Understanding
MRF	Minimum Residual Flow
MZC	Mean Zonal Compliance
NAO	National Audit Office
NAV	Newly Appointed Variations (suppliers of water typical to new developments)

NED's	Non-executive directors
NEP	National Environment Programme
NERA	NERA Economic Consulting
NGO	Non-Government Organisation
NHH	Non-household
NIC	National Infrastructure Commission
NPS	National Policy Statement
NPV	Net Present Value (calculation used in Investment Appraisals)
"Not for Revenue"	Meters installed for information but will not be used to generate bills
NVQ	National Vocational Qualification
O&M	Operation & maintenance
OBC	Outline Business Case
ODI	Outcome Delivery Incentive (a system of reputational and financial rewards and penalties that are applied to Portsmouth Water in relation to exceeding or failing its Performance Commitment Targets)
Ofwat	Water Services Regulation Authority (Office of Water Services)
OJEU	Official Journal of the European Union
Opex	Operating expenditure
OT	Operational Technology/optimisation tool
Oxera	A consulting services company that Portsmouth Water have used during the planning process
P90	Values in a Monte-Carlo simulation
P10	Values in a Monte-Carlo simulation
PA	PA Consulting (a consulting services company that Portsmouth Water have used during the planning process)
PAYG	'Pay as You Go' (in this case a measure of the cost that capital investment has on current customer bills as defined by Ofwat)
PCC	Per Capita Consumption (amount of water used daily by each customer)

PCs	Performance Commitments (by Portsmouth Water in its Business Plan)
PFI	Public Finance Initiative
PMC	Project management contractor
PMO	Project Management Office
PPE	Personal protective equipment
PPP	Public Private Partnership
PQQ	Pre-Qualification Questionnaire
PR14	Periodic Review 2014 (the process through which Ofwat determines Portsmouth Water's targets and bill levels for the period 2015 to 2020)
PR19	Periodic Review 2019 (the process through which Ofwat determines Portsmouth Water's targets and bill levels for the period 2020 to 2025)
PwC	PricewaterhouseCoopers – An accountancy and advisory company
PWL	Portsmouth Water Limited
QRA	Quantitative Risk Analysis
QS	Quantity Surveyor
R&D Projects	Research and development
RAG	Regulatory Accounting Guideline
RAG rating	Red, amber, green rating
RBS	Royal Bank of Scotland
RCM	Revenue Correction Mechanism
RCV	Regulatory Capital Value (Ofwat's assessment of the value of the Company)
R-mex	Retailer's measure of experience
RoRE	Return on Regulated Equity (measure of the amount of profit for shareholders relative to the total equity in the regulated business)

RoSPA	Royal Society for the Prevention of Accidents
S&P	Standard and Poor
SAM	Small Area Meters
SELL	Sustainable economic level of leakage
SEMD	Security and Emergency Measured Directive (defined by DEFRA)
Servalec	Technology company that Portsmouth Water have consulted with as part of the planning process
SESW	SES Water (formerly Sutton and East Surrey Water)
SIM	Service Incentive Mechanism (determined by Ofwat as a measure of customer satisfaction)
SMA	Strategic Metered Areas (metered areas each with an average of approximately 3,400 properties)
SMS	Short messaging system
SPA	Special Protection Area
SPONS	Job costing database
SPORT	Supply and Production Optimisation Project (system that will automate the control of our treatment works to deliver efficiencies).
SPZ1	Source protection zone 1 (where the company monitors activity as it may impact raw water quality)
SSE	Scottish and Southern Electric
STW	Sewerage Treatment Works
SWS	Southern Water
TMC	Tooms Moore Consulting (a consulting services company that Portsmouth Water have used during the planning process for leakage)
Totex	Total expenditure of the business (both Opex and Capex)
TTT	Thames Tideway Tunnel
TUBs	Temporary use bans (formerly hosepipe bans)
UARL	Unavoidable Real Losses (used in leakage calculations)

UK CSI	UK Customer Satisfaction Index (undertaken by the Institute of Customer Service)
UK GAAP	Generally Accepted Accounting Practice in the UK
UKAS	United Kingdom Accreditation Service
UKWIR	UK Water Industry Research
UQ	Upper Quartile
UV	Ultra Violet
VFM	Value for Money
VOIDS	Empty properties not in charge
WACC	Weighted Average Cost of Capital (the allowed return by Ofwat)
WAFU	Water Available for Use
WaSC	Water and Sewerage Companies
WaterSure	Payment Scheme to assist those on a meter but where health issues require high water usage
WATRS	Water Redress Scheme
WINEP	Water Industry National Environment Programme
WISER	Water Industry Strategic Environmental Requirements
WMMB	Wall Mounted Meter Boxes
WoC	Water only Company
WRc	Water Research Centre
WRE	Water Resources East
WRFIM	Wholesale Revenue Forecasting Incentive Mechanism (established by Ofwat)
WRMP	Water Resources Management Plan (statutory 25 year water supply and demand planning document)
WRSE	Water Resources in the South East
WTWs	Water treatment works