Anglian Water

PR19 CMA Redetermination

Annex 2: Submission following November and December main party hearings

Submitted 17 December 2020

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Chapter A: Introduction

(1) The purpose of this document is to follow up on a series of targeted areas following the recent Anglian hearing with the CMA Panel on the 2nd December 2020 (the "**Hearing**").

(2) In addition, this submission responds specifically to material new arguments or evidence provided by the other main parties during their respective hearings.

(3) In order to support the CMA, wherever possible, Anglian references evidence already provided. This includes, where appropriate, references to its submission to the CMA of 23 November 2020, which at the time of the Hearing had not been reviewed by the Panel.

(4) Consistent with this submission, Anglian notes that Ofwat and the other main parties suggested to the CMA that they may wish to offer further comments on issues following their hearings. Should those submissions advance new evidence or analysis previously unseen, Anglian therefore reserves the right to comment on those further submissions.

Chapter B: Covid-19

1 Overview

(5) In this chapter, Anglian responds to the question raised at the Hearing in relation to the impacts of Covid-19 on the business, specifically drawing out evidence of material increases to household Per Capita Consumption ("**PCC**") and to the number of properties at risk of low pressure ("**Low Pressure**").

(6) Anglian asks the CMA to make adjustments to the relevant Performance Commitments and Outcome Delivery Incentives accordingly.

(7) The impacts of Covid-19 on Anglian have been many and varied. In some areas this has created increases in costs of operation and a diminution in productivity, as set out in the response to RFI 027. For water recycling, the impacts are very localised, with 13 Water Recycling Centres showing a marked deterioration in their performance as a result of lockdown. The effects of lockdown were very specific to the changes experienced in the different catchments. In some catchments flow has increased, and additional tankering has been needed to avoid capacity being exceeded, whereas in other catchments Water Recycling Centres were affected by a decrease in flow. For other parts of the business there have been some savings in costs, such as in relation to travel costs and overnight accommodation.

(8) For the issue of bad debt, it is expected that an increase will follow in 2021 as the benefits of furlough arrangements unwind, and the impacts of increased unemployment are felt. In anticipation of this, Anglian has already set out to Ofwat its plans to increase significantly the support it provides through social tariffs for those who are struggling to pay their bills, with a forecast take-up of up to 104,000 customers on its social tariff, LITE. This compares to the current take-up of approximately 22,000. This is in addition to the step-change uplift in the numbers of customers now on Anglian's Priority Services Register, a 72% increase since March 2020, taking the number of customers on the register to 141,923. However, Anglian does not consider it feasible for the CMA to take account of bad debt in its Redeterminations, as the impacts will not become apparent until later in 2021.

(9) Beyond this, there are particularly acute Covid-19 impacts on two areas of the Performance Commitment and Outcome Delivery Incentive package that Anglian believes the CMA should take into account as it concludes its work on the Redetermination. These relate to **PCC** and **Low Pressure**.

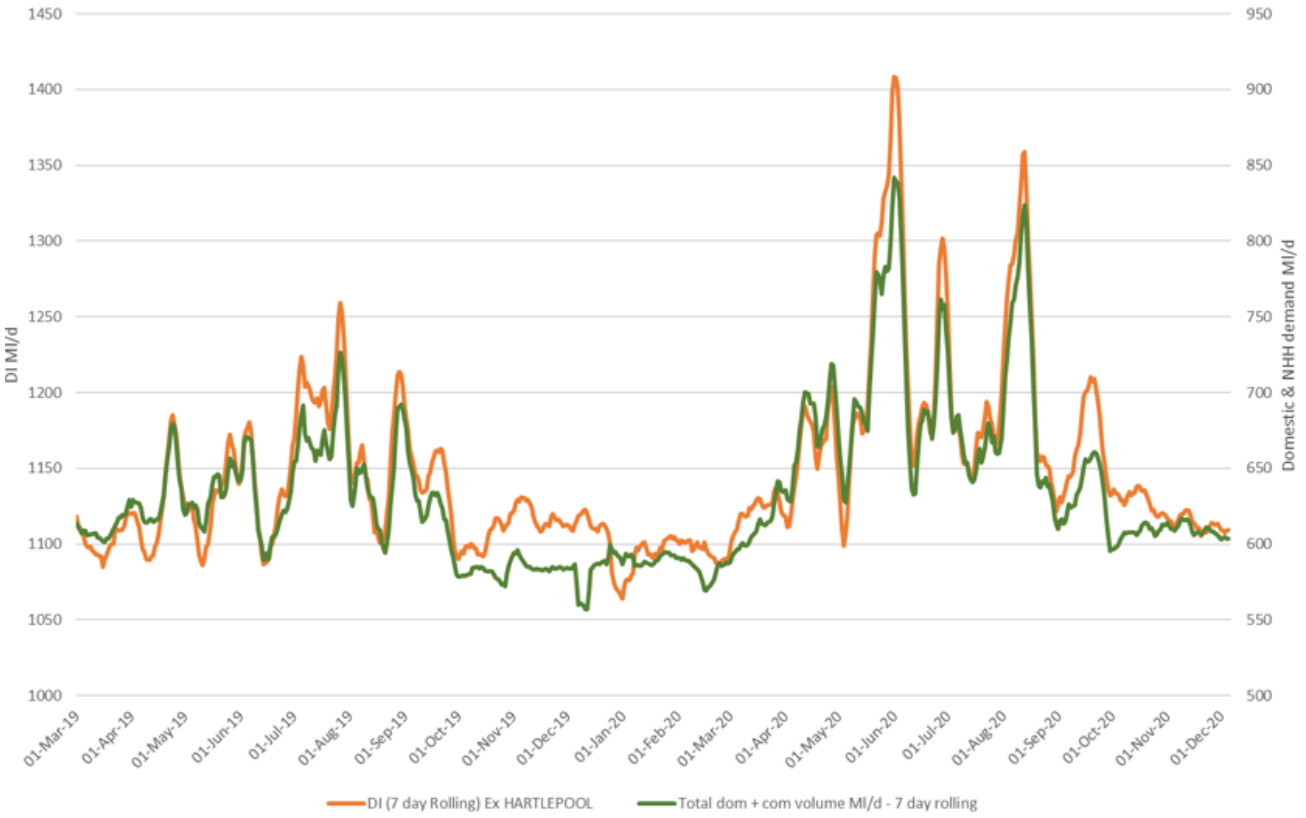
2 PCC[1]

(10) 2020 has been an exceptional year in terms of customer consumption and demand changes across Anglian's supply areas. With large proportions of the population working from home and the closure of schools, unusual demand patterns have been seen. This is characterised by an increase in demand overall in the region (linked to a collapse in commuting from the region into London) and a change in demand within the region so that more demand is experienced in rural areas and less in urban areas, and more coming through in household demand and less in non-household.

(11) As mentioned at the Hearing, Anglian estimates an increase in cumulative demand of around 7% compared to its forecast levels. This results from a sharp increase in household demand partially offset by a reduction in non-household demand. As the chart below shows, Distribution Input (DI) peaked at its highest level since reporting began in 2006, going above 1,400 Ml/d during June 2020, driven by the unprecedented Covid-19 impacts.

[1] Referenced as Performance Commitment PR19ANH_6 in SOC233.

Figure 1 Covid induced impact on Distribution Input and total demand



(12) Anglian is seeing a 12.55% increase in household consumption as a result of Covid-19. This figure is year to date and strips out effects of weather, so just captures Covid-19 impacts.

(13) Anglian believes the changes in patterns of demand are likely to subsist even after the Covid-19 impacts recede, putting further emphasis on the importance of taking action to ensure security of water supply during AMP7, as noted in Anglian's previous submissions.

(14) The PCL and ODI for PCC are based on a 3-year rolling average measure, so the impacts of Covid-19 for 2020/21 are diluted by the previous 2 years. However, Anglian believes that a recalibration of the PCL and the ODI should be included within the Redetermination to reflect the unprecedented impacts on PCC from the pandemic. Anglian proposes a deadband, expressed as a percentage change in the three year average performance, based on the 12.55% impact in the first year being unwound gradually over the AMP, recognising likely t long-term changes in home working and other factors even as the pandemic eases.

(15) Anglian therefore proposes that a deadband is introduced for the first three years of AMP7.

Table 1: Anglian's proposed deadband for PCC

	2020-21	2021-22	2022-23	2023-24	2024-25
Impact of Covid-19 on PCC %	12.55	10.04	7.53	5.02	2.51
Deadband, three year average %	4.2	7.5	10.0	7.5	5.0

3 Low Pressure[2]

(16) The end of AMP6 position for Low Pressure was Anglian's lowest-ever (i.e. best) recorded position with 148 properties on its Low Pressure Register. This is in line with a PCL of 150 properties for AMP7 years 1-4 (dropping to 106 in year 5). The customer properties remaining on the Register were largely small clusters of properties or single properties, typically in isolated locations, with specific issues making them challenging to resolve.

(17) Low Pressure is always a dynamic issue, with areas at risk of falling below the acceptable level of service monitored each year. Overall customer demand, weather and growth all affect pressure at these properties. Anglian carries out logging activity in the summer each year for all properties where there are concerns around Low Pressure.

(18) In a typical year around 250 properties become at risk of being added to the Register. But this year has been unprecedented: earlier in 2020, Anglian had c.3,800 properties at risk of being added to the Register, a 1,420% increase over a typical year.

(19) The spring and early summer of 2020 was characterised by a long period of warm dry weather as well as being in the height of the Covid-19 lockdown precautions. The summer of 2018 also had a warm spell causing a higher-than-normal number of properties (1,050) being investigated. However, this is only a fraction of the properties seen in 2020, showing that the Covid-19 impact has significantly amplified the effects from a warm summer.

(20) The areas affected this year are predominantly rural in nature, where the impact of home working/schooling has increased demand and caused consequential Low Pressure in other properties. Areas which have been the worst affected have been in smaller communities where it is likely many residents will have previously commuted to regional cities such as Cambridge and Ipswich, as well as to London.

(21) To ease the problems customers were facing, some 35 emergency schemes and actions were put in place over the summer, such as network booster station installations, rezoning of networks, and network reinforcement. All of these have added to Anglian's base costs.

(22) These schemes have been promoted to prevent a repeat of issues next summer should similar demand patterns occur. But Anglian faces challenging timescales: although it is confident these will be delivered prior to likely demand increases next summer, the PCL requires delivery before 31 March. If not, and if 3,800 properties remained at risk of Low Pressure, a penalty of potentially over £43m in a single year could be incurred, driven by Covid-19 impacts that are beyond management control. Anglian asks therefore that this PC and ODI be reconsidered for the Redetermination.

(23) Anglian would expect to retain responsibility (and financial ODI risk) to cope with weather impacts. However, it is unreasonable that the impact of the pandemic should result in very high penalties associated with the level of properties at risk. Anglian therefore requests that the CMA puts in place a penalty collar for this measure. The proposed level of this penalty collar is shown in the table below and is taken from Anglian's Draft Determination Representation data tables.[3] This penalty collar is grounded in customer evidence, as a combination of the bottom-up valuation of improving service for low pressure, the relative priority of the measure for customers and the total bill impact customers supported for ODI.[4] Anglian considers this serves as an appropriate protection to mitigate the impact of Covid-19, whilst retaining an appropriate level of underperformance payment exposure.

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[2] Referenced as Performance Commitment PR19ANH_16 in SOC233.

[3] See SOC176 AW DD Financial Model table App1.

[4] Anglian's approach to setting caps and collars for low pressure is explained in its IAP response, SOC104, section 7.13.2.

Table 2: Anglian's proposed penalty collar for low pressure

2020-21	2021-22	2022-23	2023-24	2024-25
491	491	491	491	447

(24) This figure is relatively close to Anglian's estimate of P10 performance at 505 properties per annum which is a proxy for poor performance without the impact of Covid-19.[5] Therefore this proposal retains incentives on management to minimise the impact of Low Pressure on customers while addressing the risk of unreasonable high penalties driven by Covid-19.

[5] See SOC178 table App1.

Chapter C: Botex

1 Overview

(25) In this chapter, Anglian responds to two main issues relating to botex discussed at the Hearing, relating to 2019-20 data and the role of average pumping head in explaining base costs. Specifically:

(i) Setting out the significant shortcomings of Ofwat's analysis of 2019/20 base costs;

(ii) Providing an explanation of the drivers of rising spend during AMP6 including the role of stretching performance commitments;

(iii) Average pumping head – providing clear evidence of the explanatory power of APH as a superior explanatory variable compared to pumping stations.

(26) Anglian requests that, in reaching its final redetermination, the CMA reflects both 2019/20 data and average pumping head in order to derive more robust botex allowances for Anglian in AMP7.

2 2019-20 data

(27) Ofwat has asserted that companies have brought forward significant investment in 2019/20 in preparation for AMP7 and that 2019/20 therefore represents an atypical year. Ofwat calculates that modelled botex plus was 13% higher in 2019/20 than the other years in AMP6, whereas in contrast, the closing year was between -9% and +2% higher for other AMPs.[6] As a result, Ofwat suggests that the 2019/20 data should not be included in the CMA's cost assessment.

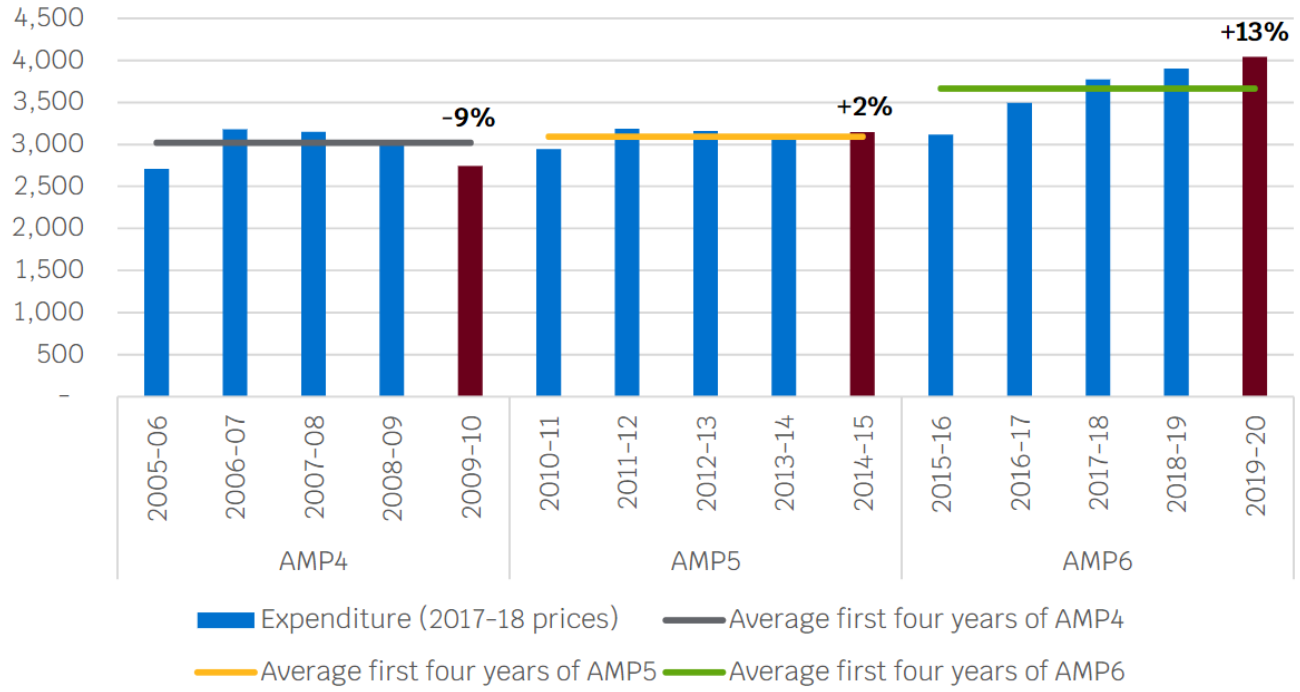
2.1 Ofwat's analysis is highly misleading

(28) First, **Ofwat's analysis is misleading because it focuses only on wholesale water, and ignores wholesale wastewater**. In wholesale wastewater, modelled base costs in 2019/20 are 0.1% *lower* than the preceding four years. That is, Ofwat's analysis appears to imply that, while spend is supposedly brought forward in water, this is not the case for wastewater (where companies also need to meet stretching targets and performance commitments over AMP7). Ofwat has not provided any explanation of this discrepancy. **When considering both wholesale water and wastewater services, 2019-20 is only 6.5% higher than the first four years**, which is entirely driven by wholesale water.

(29) Second, Ofwat's calculation is misleading as it compares 2019/20 to the *average of the preceding four years.* However, **the 13% is *not* due to a sudden increase in costs in 2019/20** (which would be more characteristic of 'brought-forward' expenditure), **but rather a *gradual* increasing pattern of spend over the AMP.** This is evident from Ofwat's own chart in 'Cost and outcomes - response to provisional findings response', reproduced below.

[6] Ofwat (2020), 'Reference of the PR19 final determinations: Costs and outcomes – response to the provisional findings responses', November 2020, p.89-90.

Figure 2 Industry wholesale water modelled base costs (£m)



Source: Ofwat: Reference of the PR19 final determinations: Costs and outcomes – response to provisional findings responses. Page 90 figure A6.1

2.2 Reasons behind the pattern of rising spend across AMP6

(30) Anglian can identify a number of reasons to explain why base expenditure rose steadily across AMP6:

(i) Firstly, **companies had a 'slow-start' to AMP6**, whereby they appear to have deferred spending to plan for the rest of the AMP and to adjust to the new totex regime. AMP6 was the first price control period when performance commitments with financial incentives had been used in the water industry and companies took time to assess how to deploy their resources in the most effective way. This is evident from the chart above when comparing the first year botex numbers between AMP6 and earlier AMPs when the ODI regime was not in place.

(ii) Secondly, **underlying cost drivers increased costs over the period**. The CMA's and Ofwat's water models predict that costs would rise by 2.1% in 2019/20 compared to the average of 2015/16 to 2018/19 due to the changes in the cost drivers over the period. This is driven by increasing cost drivers, such as the number of connected properties, which increased by 3.6%, and the percentage of water treated in complexity bands 3-6, which increased by 1.1%, in 2019/20 compared with the preceding four years.

(iii) Third, **spend has gradually increased over AMP6 in order to meet each company's obligations** *within* the AMP. In general, performance commitment levels were more onerous than those which companies had achieved prior to AMP6 and investment was required to meet them. The number of commitments increased as the AMP progressed: of the 374 performance commitments (PCs) with performance commitment levels (PCLs) for WASCs in the final year of AMP6, 73 (or 20%) had PCLs *only* in the final year.

(31) The number of Anglian's PCLs in each year of AMP6 is set out below. The table below shows that it had twice as many PCLs in the final year than in any other single year.

Table 3 Anglian Water's PCLs in each year of AMP6

	2015/16	2016/17	2017/18	2018/19	2019/20
Number of PCLs	15	15	16	15	32

(32) Furthermore, performance commitment levels typically became more challenging as the AMP progressed. Of Anglian's 15 performance commitments which had PCLs in every year of AMP6, five had PCLs which became more onerous as the period progressed. These included high-profile, 'high-value' measures such as pollution incidents, mean zonal compliance (the drinking water quality measure), supply interruptions and water quality complaints. That is, the pattern in spend over AMP6 is evidence of the impact of the new ODI/totex regime and the cost of improving quality of service. Anglian would expect to see the same pattern again over AMP7. The link between expenditure levels and performance requirements is clear from the fact that the industry outperformed its totex allowance and made net rewards early in the AMP, but, as the PCLs tightened, companies had to spend more and more to limit the associated penalties. As a result, by the end of the AMP the industry more or less spent its totex allowance.[7] The pattern of spend is an almost inevitable consequence of those tightening PCLs.

(33) Finally, a proportion of the 13% calculated by Ofwat is attributable to **real price effects** over the period which were higher in AMP6 compared to AMP5.

2.3 Problems with Ofwat's assertion of 'brought forward' expenditure

(34) Ofwat's own charts show that base expenditure rose steadily across AMP6 and Anglian has set out the reasons to explain that observation. However, Ofwat's interpretation of the higher spend in 2019/20 figures is implausible because **most costs simply cannot be brought forward** in this way. A significant proportion of botex plus costs (such as power, wages, business rates, abstraction licence fees, environmental permits) represents in-period spend. These costs[8] account for c. 40% of all botex plus in AMP7.

(35) Furthermore, spend in several other areas was **already at, or close to, 2019/20 levels by 2018/19** so cannot represent brought forward expenditure. Ofwat asserts that spend in 2019/20 is due to investment brought forward, especially highlighting the example of leakage. However, the spend in infrastructure maintenance (which, in contrast to what one would expect if leakage were a major driver of Ofwat's 'brought forward' spend, contributes only 1.2% to Ofwat's 13%) in 2019/20 was £399m, an increase of less than 1% over the 2018/19 figure of £396m.[9] In other maintenance and renewal areas, the story is similar in that much of the spend already occurred by 2018/19.

2.4 2019/20 data is essential for providing a robust view of the expenditure need over AMP7

(36) Anglian consider there are very strong reasons for including the 2019/20 data:

(i) to set accurate efficient cost allowances, the most recent information on company's relative efficiency position needs to be used. Going further back in time becomes less and less relevant to managements' current performance and thus current ability to improve efficiency;

(ii) in any case, company inefficiency during years prior to AMP6 was corrected when cost allowances were set at PR14. Setting AMP7 allowances on the basis of inefficiency during AMP6 alone removes any chance of double jeopardy;

[7] Ofwat (2020), Service delivery report 2019/20 https://www.ofwat.gov.uk/publication/service-and-delivery-2019-20/.

[8] Botex plus excluding growth, maintenance and renewals.

[9] Anglian spent substantially on leakage but still fell well short of its 2020 target of 172 Ml/d, turning out at 182 Ml/d.

(iii) the additional year provides valuable new data on how companies have responded to the introduction of the outcome delivery incentive and totex regime, which will continue in AMP7. (As discussed above, Anglian would expect the pattern in spend over AMP7 to be similar to that over AMP6 rather than previous AMPs where performance was not incentivised in this way);

(iv) the additional year provides a *complete* AMP over which allowances have been set. Any differences in reprofiling of spend by companies within the AMP will have a less misleading impact if the efficiency benchmark is calculated over the AMP; and

(v) the inclusion of the additional data allows the CMA's cost models to be more precisely estimated.

(37) Therefore, the inclusion of the 2019/20 data in the estimation period (from 2011/12 to 2019/20) helps improve the precision of the estimated models, while determining the benchmark using the whole of AMP6 ensures that the latest efficiency position and the characteristics of the AMP (which is expected to be similar to AMP7) are well captured and mitigates any misleading impact of reprofiling expenditure. Alternatively, model estimation and benchmark estimation could both be based on AMP6. This would ensure consistency between the estimation period of the model and the benchmark (at the possible expense of some accuracy in cost prediction), while also maintaining all the other advantages of focusing on AMP6.

2.5 The credibility of the resulting allowances after updating with 2019/20 data

(38) Ofwat has asserted that updating the base cost models with 2019/20 data would result in allowances that are £1.5 billion higher than companies requested for water and £300 million lower than they requested for wastewater.

(39) Anglian notes that revised allowances will only be made for the disputing companies so it is academic how the allowances might change for the rest of the industry. Furthermore, it notes that the allowance for Anglian remains well below the forecast in its plans, even after adding the impacts of updating models with 2019/20 data calculated by Oxera. The same is true for Yorkshire, while the effect for Northumbrian is for its allowance to exceed its forecast by a modest amount. The numbers are shown in the table below.

Table 4 Impact on botex plus gaps of updating the wholesale base cost models

	Anglian £m	Northumbrian £m	Yorkshire £m	Source
Gap between company plan and FD	-510	-61	-140	PR19 Final Determination, Securing cost efficiency technical appendix, Table A1.2
Impact on base allowances of provisional findings	+47	+8	-11	CMA Provisional Findings, tables 4-26 and 4-28
Revised gap	-463	-53	-151	Calculation
Impact on base allowances of updated models	+46	+76	+102	On the use of 19/20 APR data on econometric modelling, Oxera, adjusted by responses to RFI025 question 5
Revised gap	-417	+23	-49	Calculation

3 Average Pumping Head

(40) During the discussion on the use of Average Pumping Head (APH) at the Hearing, Robin Cohen asked why, in the graphs Anglian included in its PF Response, Anglian had multiplied APH by Distribution Input

(DI).[10] In brief: Anglian does so because APH needs to be multiplied by a scale variable, to produce a driver for total costs. In contrast, Ofwat's preferred measure of 'pumping stations', needs no such multiple. It is already proportional to company size (which is effectively the only reason it correlates with cost: bigger networks have higher costs). When comparing like-with-like, APH contributes additional information to scale alone, in explaining total costs, while 'pumping stations' does not. In the paragraphs below, Anglian explains these points in more detail.

(41) Anglian's graphs show a strong correlation between (APH x DI) per property and power costs per property and a poor correlation between Booster Pumping Stations per length of main (the cost driver in Ofwat's and the CMA's botex plus models) and power per property.[11]

(42) Differences in costs between companies are primarily driven by scale. Length of main, number of connected properties and DI are good scale variables. Factors measuring other differences between companies (e.g. on topography) are important in explaining differences in costs but second order to scale. This is exactly how Ofwat's cost models work—scale explains the majority of cost differences between companies and then the other drivers explain the residual variation once scale has been accounted for (this is why Ofwat's topography driver is normalised for length of main).

(43) APH merely measures the average vertical height which each unit of water needs to be raised. It is unrelated to scale: small companies can have a high APH and large companies can have a low APH.

(44) There is therefore no reason why one should expect a relationship between APH and *total* power costs. Ofwat's figure A4.2, and its comment on that figure, is incorrect in assuming such a relationship should exist.[12] What Anglian is seeking to identify is the best measure of topographical differences that can explain differences in unit power costs.

(45) Multiplying APH by DI seeks to normalise for company scale as it represents the total work done by a company. One should therefore expect a correlation between it and total power costs. This approach replicates Ofwat's water power cost model as used in price control reviews up to PR09.[13] Critically, what Anglian then shows is that APH x DI per property is a good explanatory factor for power costs per property, while Booster Pumping Stations per length of main is not.

(46) Mr Cohen went on to ask whether Anglian should have included DI in the comparable pumping station graphs.

(47) Anglian did not do so because the number of pumping stations is already proportional to company scale. Anglian would therefore expect a strong correlation between power costs and the number of pumping stations: both factors are proportionate to company scale. Ofwat's figure A4.1 shows that bigger companies incur higher power costs.[14] The same pattern would also be seen in *any* measure which is proportionate to scale. Ofwat's inference that the chart proves that the number of pumping stations is a good control for topography-induced power costs is thus incorrect and misleading.

(48) In the charts Anglian therefore normalised both pumping stations numbers and power costs for scale to eliminate the scale differences between companies and reveal the impact of pumping stations number alone (just as Anglian did when plotting power costs and APH x DI). There was no need to include DI as a second scale variable in this formulation. Furthermore, doing so allows comparison of the power

[10] Anglian Hearing transcript, page 46, line 13.

[11] Anglian's PFs response Figures 1 and 2, para 88 and 89, page 16.

[12] Ofwat's Response to the Provisional Findings Responses, page 80.

[13] For example, see: Ofwat (2009), 'Relative efficiency assessments 2008-09 – supporting information'. https://webarchive.nationalarchives.gov.uk/20130702114315/http://www.ofwat.gov.uk/publications/pricereviewletters/ltr_pr0939_relefficiency

[14] Ofwat's, Response to the Provisional Findings Responses, page 79.

of Ofwat's approach in addressing topography (where PS/length is used as the control variable in its botex plus models) with Anglian's own proposed approach.

(49) Developing the logic set out above, Anglian would expect to see the following relationships:

(i) A good correlation between DI, a scale variable, and total power costs.

(ii) An improved correlation once Anglian adds in a variable that controls for differences in topography. Anglian can test Ofwat's preferred variable, pumping stations per length of main, or Anglian's, APH.

(50) The following table shows the results of these tests. The first line confirms that DI accounts for a significant proportion of the difference in companies' power costs. The next two lines show that the correlation is improved when APH is added as the topography variable but deteriorates when pumping stations / length is added. These relationships are observed for both treated water distribution and total water. (As stated above, the second row replicates Ofwat's water power cost model specification as used in price control reviews up to PR09, for which Ofwat similarly estimated (logged) models with high R^2 values.)

Table 5 Measures of correlation between total power costs and various explanatory variables

X axis	Y axis	R^2: Treated water distribution	R^2: Total water
DI	Power costs	0.7635	0.9207
DI x APH	Power costs	0.8816	0.9688
DI x PS / length	Power costs	0.6647	0.8278

Chapter D: Growth

1 Overview

(51) In this Chapter, Anglian provides the CMA with the requested analysis which sets out a triangulated view for setting the capacity baseline for the proposed Growth at Sewage Treatment Works adjustment mechanism. Anglian also provides confirmation of the third-party assurance undertaken during this process, specifically highlighting REP36.

2 Setting a baseline level of population equivalent (PE) capacity enhancement

(52) During the Hearing, the CMA enquired about the relevant baseline for a true-up mechanism.[15] Anglian responded that ideally the baseline from its investment plan should be used. This is on the basis that associated investments have been developed on a bottom-up analysis of growth, its location and asset capacity. Anglian is the only company to have developed a Water Recycling Long Term Plan ("**WRLTP**") [16] to support its PR19 business plan. This sought to understand long terms needs and plan investments on a granular, bottom-up basis.

(53) However, if the CMA continues to use the ONS2018 forecast of household growth then the baseline capacity from Anglian's May 2020 forecast will need to be adapted.

(54) Ideally this would be done on a bottom-up basis. However, the mapping of growth to catchments and understanding investment triggers is a complex and time-consuming process involving mapping of growth to each of Anglian's 1,000+ water recycling catchments, reviewing whether that growth triggers investment, and then scoping the appropriate investment to meet the increased demand. It could be done imperfectly on a top-down basis, as proposed by Ofwat. However, such a baseline is sensitive to the underpinning assumptions. Ofwat's proposal is that this be based on the relationship between Anglian's May 2020 forecast of connections, the proposed PE capacity to be created and the difference between Anglian's forecast of connections and the CMA's.

(55) In its letter of 23 November 2020, Anglian highlighted that that the baseline proposed by Ofwat is not based on a bottom up-forecast of growth, but on the relationship between PE capacity and connections implied by *Anglian's* forecast of growth, submitted to the CMA in May 2020. By relying on two volume drivers derived from a single forecast, significant weight is being placed on that forecast representing the location and type of growth that materialises. This is a significant leap and introduces significant complexity.

(56) Anglian illustrated this point by showing how the relationship between its forecast of connections and PE capacity changed from its business plan forecast of growth and its May 2020 forecast.[17] To aid the CMA in preparing a baseline on a top-down basis for its forecast of growth, Anglian proposes that a broader set of data points be used to underpin the setting of this baseline. Anglian notes this is only necessary if the CMA chooses to pursue a PE based mechanism. Anglian proposes that the relationship is based on a triangulation of the relationship in its AMP6 actual outturn connections and PE, its business plan forecast, and its May 2020 forecast. These three data sources suggest a **baseline of 150,986 PE capacity** for the CMA's forecast of growth. These data points and the resulting baseline for Anglian are shown in the table below.

[15] Anglian Hearing transcript, page 57 line 23.

[16] See SOC212 and SOC332

[17] Anglian letter to Douglas Cooper dated 23 November 2020, page 20 to 22.

Table 5 Setting a baseline level of PE capacity enhancement

Data	Connections	PE capacity	PE per connection	Baseline PE for PF connections
AW DD reps	218,348	249,761	1.14	132,740
AW May 2020	182,547	321,994	1.76	204,691
AW AMP6 actuals	134,561	133,960	1.00	115,527
Average			**1.30**	**150,986**

(57) As outlined in its letter of 23 November 2020, Anglian contends that either a pure connections or PE based mechanism should be used for uncertainty of growth costs at water recycling centres, not an amalgamation of the two.

3 Third party assurance of Anglian's growth forecasts

(58) At the Hearing, the CMA asked whether Anglian's growth forecasts and baselines had been subject to third party review and challenge. Anglian's forecasts of growth have been subject to third party review and challenge at various points during the development of its plans.

(59) During the PR19 process, Anglian's growth forecast, which is based on Local Authority Local Planning data, was developed as part of the WRMP process. The forecast was subject to external assurance[18] and the same forecast was used for the WRMP, the WRLTP and the PR19 business plan.

(60) When Anglian revisited its growth forecast as part of the Redetermination process it took account of latest market information, the mapping of growth to its catchments, investment triggers and costing. This work was assured by Jacobs Engineering Group. The baseline is the product of triggered investments. Jacobs' assurance report was submitted to the CMA as document REP36 Growth Technical Assurance Report, as part of Anglian's reply to Ofwat's statement of case response.

[18] See SOC063 AW Jacobs Technical Assurance. On page 6 Jacobs confirmed they reviewed Water Recycling Growth, Developer Growth, and WRMP as part of their assurance.

Chapter E: Enhancement

1 Overview

(61) In this chapter, Anglian provides the CMA with responses to the requested information related to proposed enhancement investments, specifically:

(i) **Smart meters**: Further analysis building on previous RFI responses to provide the CMA with the profile of asset lives of meters underpinning Anglian's smart meter cost adjustment claim; and

(ii) **Water in Buildings**: Highlighting the flaws in Ofwat's approach to the assessment of Anglian's Water in Building proposed lead investment.

(62) Anglian continues to request that the CMA accepts its smart metering cost adjustment claim, supported by the previous proposal to reflect the early replacement of meters; on which further detail is given below.

(63) In terms of its proposed Water in Buildings enhancement investment, Anglian has highlighted the shortcomings of Ofwat's approach to analysing these costs which erroneously bundles these into its lead replacement model which fails to capture the different cost driver, resulting in a flawed conclusion on Anglian's efficiency for its lead programme.

2 Smart Metering

(64) Anglian has a firm understanding of each meter in its region. Every meter is logged and tied with data including location and year of its installation. Anglian has previously provided[19] a breakdown of the proportion of meters in each planning zone within the smart meter rollout areas, which will be replaced either at or before end of life. Anglian also provided a table showing, for all early meter replacements, the age of the meters replaced in each year of the AMP. The table below presents this information in a different way, showing, for every meter to be replaced before the end of its asset life in AMP7, the year in which it was installed.

Table 7 Early Life Replacement

	2012	2013	2014	2015	2016	2017	2018	2019	Total
2020/21	17,956	20,324	16,029	9,487	13,831	13,825	9,839	6,091	**107,382**
2021/22	10,544	9,082	6,472	5,456	3,075	10,399	11,634	4,238	**60,900**
2022/23	28,675	22,814	19,083	9,376	10,550	35,661	19,916	9,954	**156,029**
2023/24	23,284	23,695	16,427	11,149	16,886	15,872	22,292	14,143	**143,748**
2024/25	18,615	19,801	17,791	9,006	13,738	7,032	28,396	12,206	**126,585**
	99,074	**95,716**	**75,802**	**44,474**	**58,080**	**82,789**	**92,077**	**46,632**	**594,644**

(65) Absent the proposed investment in AMP7 to roll out smart meters, none of these would be replaced in AMP7, and none of the benefits to the supply demand balance would be achieved. In this alternative scenario, only meters that reach the end of their asset lives (14 years for the vast majority of meters) or those that are faulty would be replaced.

[19] RFI008 question 41.

(66) Table 6 shows the total number of meters Anglian expects to replace with a smart meter in AMP7 by Planning Zone. Under this counterfactual scenario (no mass smart meter rollout) Anglian would only replace those under the 'end of life' column (the cost of replacing these meters are within modelled base, and so are not included in the cost adjustment claim).

Table 6 Total number of meters to be replaced by a smart meter in AMP7 by planning zone

Planning Zone	Name	Early Life (nr.)	End of Life (nr.)
PZ01	Barnoldby	2,971	983
PZ02	Barrow	6,750	2,631
PZ03	Elsham	3,748	1,193
PZ04	Grimsby	37,690	20,773
PZ05	Scunthorpe North	5,639	2,920
PZ06	Scunthorpe South	18,771	8,554
PZ09	Branston	5,770	3,082
PZ14	Lincoln	38,607	34,379
PZ16	Waddingham	3,103	1,088
PZ17	Welton	4,398	3,532
PZ18	Fulstow	5,318	2,046
PZ19	Louth	13,700	5,320
PZ20	Skegness	22,201	7,630
PZ21	Boston	25,901	12,771
PZ23	Feltwell	2,599	1,159
PZ27	Wisbech	25,655	11,788
PZ43	Brundall	4,400	1,913
PZ44	Hethersett	7,358	4,659
PZ45	Lyng	4,111	2,896
PZ46	Norwich	68,948	32,392
PZ47	Poringland	7,577	3,791
PZ50	Ely	25,783	10,052
PZ54	Braintree	15,977	14,407
PZ55	Bures	1,547	2,128
PZ56	Colchester	35,180	25,724
PZ63	Tiptree	1,828	2,726
PZ69	Corby	20,602	15,036
PZ70	Daventry	10,677	11,335
PZ72	Kettering	19,730	15,565
PZ74	March	13,588	4,525
PZ79	Northampton	53,112	56,450
PZ80	Oundle	4,034	3,208
PZ81	Peterborough	41,122	50,139
PZ82	Ravensthorpe	4,885	3,271
PZ83	Rushden	16,283	15,810
PZ84	Wellingborough	15,081	13,064
	AMP7 Total	**594,644**	**408,940**

(67) Using this data, Anglian is therefore confident in the number of meters that it will be replacing before they reach the end of their asset lives as set out in the tables above. These 594,644 meters are those that would not otherwise be replaced in AMP7 under a counterfactual scenario without Anglian's smart meter programme, and it is only these meters against which its base cost adjustment claim applies.

3 Water in Buildings

(68) Ofwat, in response to RFI026 question 11 (submitted on 7 December), makes several points about Anglian's Water in Buildings programme which are inconsistent with its PR19 approach and previous submissions. The significance of this is twofold: firstly, it results in the rejection of Water in Buildings costs without due consideration of the programme; secondly, it artificially increases Anglian's lead pipe replacement costs in the enhancement cost model, which Ofwat has used to argue that Anglian is inefficient more broadly.

3.1 Inconsistent treatment of companies

(69) Anglian highlighted in its response to the Provisional Findings that Ofwat had allowed greater unit costs for Hafren Drfydwy ("**HD**") on lead pipe replacement.[20] In response Ofwat stated:

"We note that Hafren Dyfrdwy's lead strategy includes a variety of interventions at schools and domestic properties, and the costs are not limited to pipe replacement but also to associated measures and research costs which invalidate a simple unit cost comparison."[21]

(70) Whilst Ofwat has made allowance for one company, (HD) to reflect costs unrelated to lead pipe replacement, it has not done the same for Anglian for its Water in Buildings programme. For HD, Ofwat argues that a simple unit cost comparison is not valid, but for Anglian it **relies** on a simple unit cost comparison to determine Anglian's allowance, despite the inclusion of costs of Water in Buildings (which are not lead pipe replacement costs).

3.2 Cost assessment approach

(71) Ofwat's recent arguments categorise the Water in Buildings programme as an immaterial area of expenditure. For other areas of "immaterial" expenditure, Ofwat allows the proposed costs with a shallow dive assessment (e.g. Anglian's £1.193m wastewater security costs and the £0.987m water investigations allowance). Whether costs were submitted as a free-from line or not does not affect whether it should be considered. Lead treatment was included in the same line as pipe replacement but considered separately and was subject to a shallow dive assessment. There is therefore no clear justification for assessing Water in Buildings programme costs through a combined unit cost with lead pipe replacement.

3.3 Immateriality

(72) Ofwat references that the Water in Buildings costs are below the materiality for cost adjustment claims. However, the Water in Buildings costs were never put forward as a cost adjustment claim and would not be suitable for a cost adjustment claim in any event. It was put forward as an enhancement cost and should be considered as such. For similar activities, Ofwat has undertaken a shallow-dive assessment.

3.4 Treatment as enhancement

(73) Ofwat references that the programme is a continuation of expenditure of an AMP6 strategy. However, Anglian was explicit in its business plan[22] that this referred to **enhancements** to the Water In Buildings strategy, and that the expenditure enhances water quality for customers. It therefore should not be considered to overlap with base expenditure.

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[20] Anglian's Response to Provisional Findings, page 44.

[21] Reference of the PR19 final determinations: Cost and outcomes – response to provisional findings responses, page 16.

[22] SOC004 September 2018 Plan Water Data Tables Commentary, page 70.

3.5 Draft Determination Representation

(74) The statement that Anglian did not make representations on the assessment of this expenditure is incorrect. Anglian highlighted to Ofwat that there was a distinction between the Water in Buildings programme of expenditure and lead expenditure in its Draft Determination Representation.[23] Anglian also provided an explanation of what is included in the Water in Buildings programme within its business plan, clearly demonstrating that the activities of the Water in Buildings programme, are distinct from those of lead pipe replacement.[24]

3.6 Presentation of Anglian's cost efficiency

(75) Ofwat's inappropriate treatment of Water in Buildings programme costs has also influenced Ofwat's broader arguments on efficiency. It has presented to the CMA comparative unit costs for enhancement.[25] This included lead pipe replacement unit costs, in which Water in Buildings costs were wrongly included, artificially pushing up the unit costs by £264 per lead pipe replaced (20% of the median unit cost) and contributing to the misleading presentation previously used by Ofwat that Anglian's lead replacement programme is inefficient.

[23] SOC169 DD Supplementary Evidence, page 27.

[24] SOC004 September 2018 Plan Water Data Tables Commentary, page 70.

[25] Ofwat CMA – initial presentation in response to water companies' statements of case, 20 May 2020, slide 35.

Chapter F: Base Leakage costs

1 Overview

(76) As Anglian has highlighted throughout the redetermination, leakage reduction in AMP7 is a necessity – not an option – to balance supply and demand within the Anglian region in AMP7. Whilst much focus has been placed on enhancement allowances, it is on base expenditure that Anglian faces the biggest cost gap on leakage (£106m in the Provisional Findings).[26] This gap stems from the fact that **the actual costs Anglian incurred to maintain leakage in AMP6 have not been properly reflected** in cost allowances for AMP7. The £106m gap is far greater than the entire enhancement allowance made to reduce leakage (£68m in the Provisional Findings), and thus **presents Anglian with a significant challenge in simply maintaining AMP6 levels of leakage, let alone achieving the significant further reduction required to ensure security of supply in AMP7.**

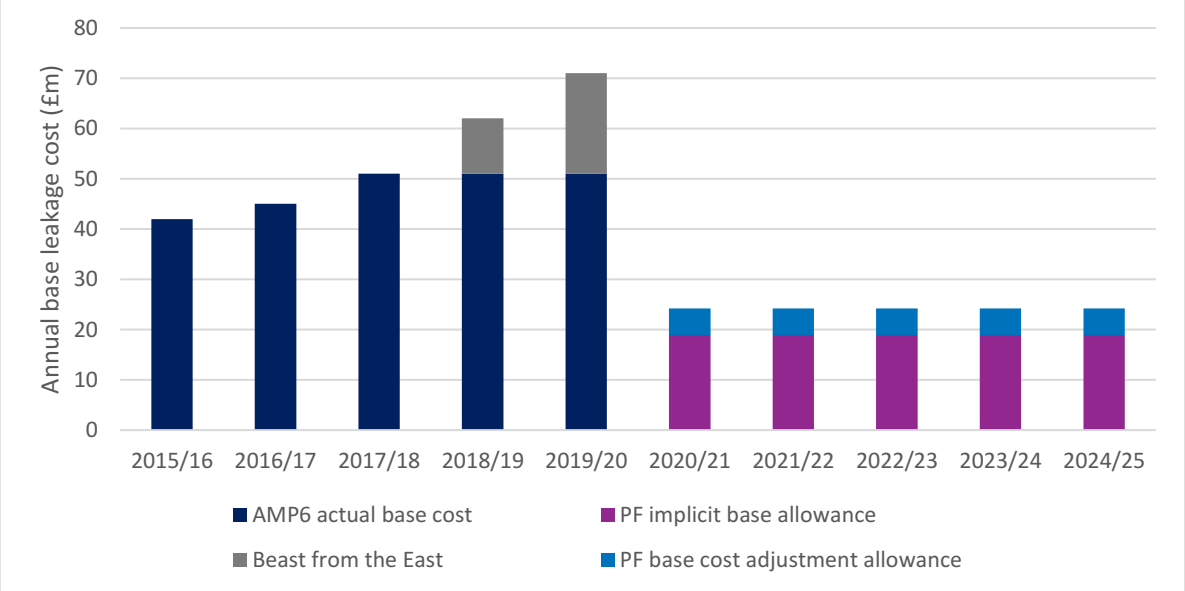
(77) Anglian welcomes the CMA's indication in the provisional findings that it would consider further the factors influencing companies' AMP7 leakage expenditure requirements. This chapter evidences the issues facing Anglian on its base leakage allowances.

(78) The CMA has placed emphasis on understanding the relationship between cost and leakage performance both historically and in companies' AMP7 proposals. The costs of these proposals are heavily influenced by a range of factors, including historic performance (i.e. whether a company is at the frontier). This formed the basis of Anglian's cost adjustment claim to its base costs.

(79) Given the significance of this issue, and to aid the CMA, Anglian sets out below further explanation of its historic AMP6 expenditure which informs the base expenditure requirement for AMP7.

(80) Figure 3 compares AMP6 actual base leakage costs and the estimated implied allowance for base leakage costs in AMP7 as set out in the CMA's Provisional Findings**. This demonstrates the insufficiency of the implicit allowance of Ofwat's botex models allowance (£95m over AMP7), combined with the CMA's PFs uplift (£26m over AMP7) relative to the actual base costs (£271m over AMP6) incurred by Anglian to maintain the leakage levels it has achieved during AMP6.**

Figure 3 AMP6 base leakage costs and Provisional Findings allowance



[26] This is the difference between cost allowance in Provisional Findings and the amount requested by Anglian.

(81) As highlighted in Anglian's responses to RFI018A question 1b, and RFI012 supplementary note, **these costs are recurring and therefore will be incurred again in AMP7.**

(82) Ofwat's base models do not adequately reflect the costs faced by a frontier leakage performer. The base models take an industry average position on base costs. Anglian estimates that this equates to an implicit leakage cost allowance of no more than £95m in AMP6. Anglian could only maintain the leakage level it achieved in AMP6 by overspending this allowance, due to the higher costs of maintaining frontier performance. For PR19, Ofwat's botex models again take an industry average position. Therefore, without its cost adjustment claim, Anglian faces the prospect of needing to overspend its base allowance for leakage to maintain its leading performance. A key difference between AMP6 and AMP7 is that - as raised in Anglian's Hearing - whilst the overall totex gap at PR14 was £13m, in the Provisional Findings it is circa £630m. Anglian therefore had flexibility in AMP6 to reallocate efficiencies it could achieve in other areas of the business towards leakage. This flexibility is not available to it in AMP7.

(83) Both the CMA and Ofwat have identified the need for an adjustment, but the scale of the adjustment at PFs remains significantly below what is required.

(84) **Such a huge difference between Anglian's actual costs in AMP6 and those allowed in AMP7 allowances cannot be linked to "efficiency". They can only be ascribed to a fundamental failure to appropriately reflect Anglian's base costs of achieving its frontier level of leakage performance;** a necessary requirement to maintain the supply demand balance of water in the region.

2 Existing allowance in AMP6

(85) Figure 4 demonstrates how the PFs allowance for base leakage costs falls far short of the actual costs incurred during AMP6, irrespective of the additional costs incurred to aid the recovery from the Beast from the East.[27]

(86) The scale of the shortfall goes far beyond an appropriate efficiency challenge. For comparison, on enhancement, Ofwat has applied an efficiency factor, upheld by the PFs of 10%. The current allowances for base leakage imply an effective efficiency factor of c.50%. This comes on top of the cost challenges Anglian has already applied when reaching its cost adjustment claim value, including:

(i) assumption that there will not be a Beast from the East style event which will increase repair costs;

(ii) only the costs of maintaining the end of AMP6 leakage level are included in the CAC, not those of maintaining the levels that will be achieved during AMP7; and

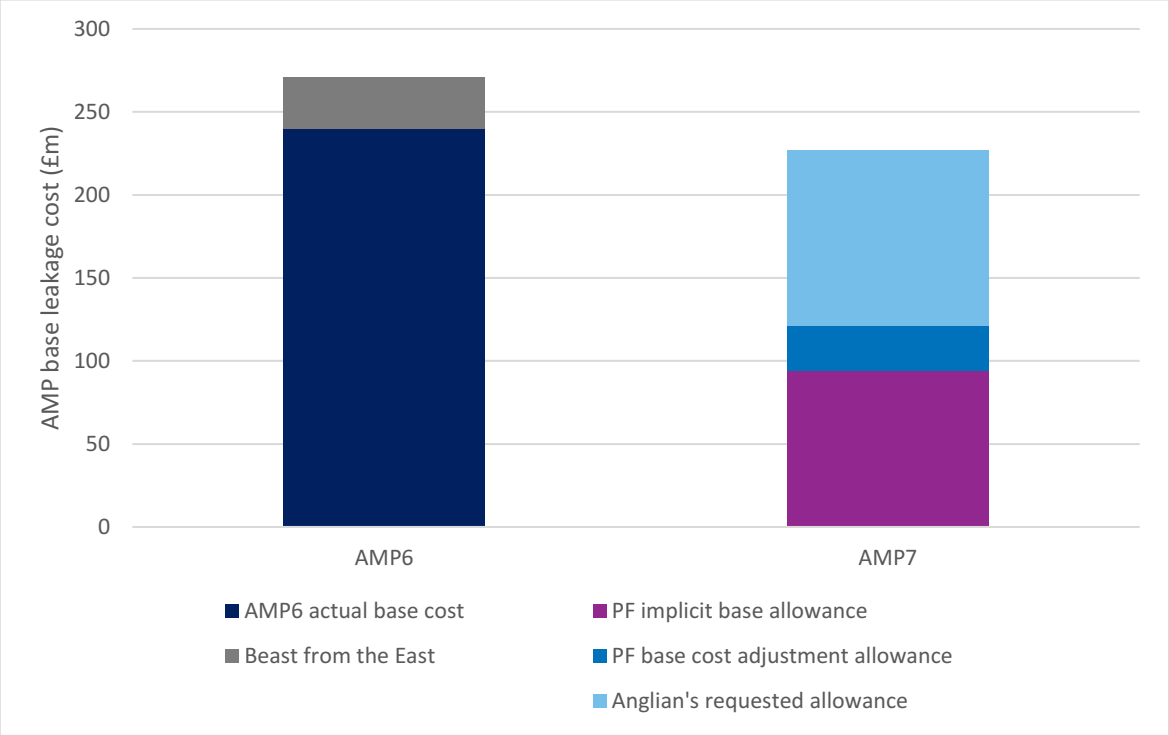
(iii) a frontier shift challenge has been applied, reducing the CAC by a further £4m.

(87) Ascribing the difference between Anglian's incurred AMP6 base costs and the allowed AMP7 leakage costs in the PFs as "inefficiency" is clearly a misdiagnosis. Section 3 shows how Anglian's cost adjustment claim resolves this deficit, whilst still presenting a significant cost challenge for Anglian.

[27] For the purpose of this chart, Anglian have assumed the costs which are greater than those seen in 2017/18 to be attributable to Beast from the East.

3 Anglian's proposal for base leakage

Figure 4 Anglian's proposal for base leakage



(88) Anglian prepared its cost adjustment claim (CAC) in recognition of the fact that Ofwat's botex models were unable to reflect the base costs if maintaining a frontier level of leakage. The CAC reflects the differential between the costs of maintaining leakage at a frontier level, and the inferred implicit leakage allowance included in base models. Anglian calculates an implicit allowance using the costs of maintaining leakage at Anglian's SELL. Anglian's SELL is 211Ml/d. This is a lower level than the industry upper quartile figure of 228.5Ml/d, and cost upper quartile figure of 324.4Ml/d.[28] Therefore, should it be assumed that base costs reflect upper quartile performance, Anglian's full cost adjustment claim remains appropriate.

(89) Even with the CAC, Anglian faces a significant challenge on base costs. It assumes an annual cost of £46.5m for base leakage, c. 10% lower than 2017/18 (i.e. pre- Beast from the East) costs, despite needing to maintain much lower levels of leakage in AMP7.

(90) As explained in Anglian's response to the CMA's Provisional Findings, [29] despite incurring additional costs recovering its leakage position driven by the Beast from the East, Anglian did not include these costs in its CAC model.

(91) Anglian's cost estimate is therefore already absorbing the risk of similar high-cost severe weather events within its base cost allowance for AMP7.

(92) Anglian has demonstrated its costs for delivering frontier leakage performance are efficient, specifically:

(i) On a bottom-up basis through rigorous procurement, and staff incentives to reduce leakage efficiently (RFI018a question 1d); and

[28] Using m3/km/d data from Ofwat's RFI025 response.

[29] See Anglian's response to the CMA's provisional findings, paragraph 311.

(ii) On a top-down basis through Oxera's analysis of Anglian's cost adjustment claim (Provisional Findings response (PF015)).

(93) Anglian's cost adjustment claim resolves the significant deficit in the Provisional Findings whilst maintaining a significant efficiency challenge on base costs (as it assumes Anglian will spend less on botex than in AMP7 despite expecting to deliver even lower levels of leakage and that it will absorb future shock events such as Beast from the East).

Chapter G: Outcomes

1 Overview

(94) In this chapter Anglian provides further evidence to assure the CMA that, in contrast to Ofwat's suggestion that the proposed revisions to the Strategic interconnector programme would represent a diminution in the commitment to Anglian's customers to address the supply demand challenges facing the region, that the proposed amendments are necessary to ensure the proposed investment addresses the issues facing the region in AMP7. Anglian also provides further evidence to demonstrate that the challenges facing the region, specifically in-period abstraction licences changes not foreseen at the time of the business plan, continue to stress the need for flexibility to deliver the supply demand requirements of the region.

(95) This remains a material issue for Anglian and its customers. **The request to the CMA is for flexibility to deliver the necessary outcomes for the region. Anglian is concerned that the current level of prescription in the Interconnector ODI may prevent it from being able to respond to changing challenges in its water-stressed region during AMP7.**

(96) In this chapter Anglian also responds to specific questions at the Hearing relating to the proposed Water Quality Contacts performance commitment level and clarifies the relevance of upper quartile performance in the context of customer preferences and Ofwat's policy objectives for which measures should be aligned to forward-looking upper quartile forecasts.

2 Strategic interconnector programme

(97) At the Hearing, the CMA sought views on Ofwat's critique of Anglian's proposed customer protection mechanism for this investment programme. Anglian proposed an outcomes based approach instead of Ofwat's more output focused mechanism. An outcomes based approach protects customers while providing room for innovation and flexibility in securing resilient water supplies. The mechanism will ensure Anglian delivers the outcome of net increases in supply capacity as identified by the Water Resources Management Plan (WRMP).

(98) In its provisional findings, the CMA removed Ofwat's scope and efficiency challenges to Anglian's proposed programme. The CMA position aligns with that agreed with the Environment Agency in the WRMP19 process. Anglian welcomes and supports this decision, which respects the statutory WRMP19 process.

(99) The final WRMP19 supply solution was the Best Value Plan (BVP), which included additional capacity in a number of grid sections to ensure a coherent grid is produced, whilst retaining some flexibility to deal with future risk and uncertainty.

(100) Anglian's proposed customer protection mechanism based on net supply benefit is consistent with the BVP and WRMP19. The beneficiary zone values match those in the BVP and WRMP19, Anglian is not proposing to deliver a lower level of net capacity. It is designed to give Anglian design flexibility and to cope with additional uncertainties e.g. Cambridge Water export; these could require a different or additional source WRZs or routes. However, the destination water resources zones (WRZs) that benefit from a net increase in supply must remain the same in order to meet WRMP19 and resilience obligations; the proposed customer protection mechanism focuses on this outcome.

(101) It would be very difficult to meet the proposed net supply benefit without including the additional capacity in the BVP, unless Anglian incurred significant additional cost. For WRMP19 scheme SEX4 the BVP capacity is the same as the Net Supply Benefit; the only alternative to SEX4 would be a new resource scheme or an import, both of which are less favourable (as set out in WRMP19). Similarly, providing

15 Ml/d to SEX4 will require a continuous pipeline at 20 Ml/d though Suffolk (NFN4 to ESU8); Anglian has no realistic alternative options in this area. Note that 20 Ml/d through Suffolk is required in any case to meet the resilience obligation for Ipswich (Alton).

(102) Moreover, Anglian is planning to deliver the additional capacity in the BVP. Anglian has put considerable effort into analysing, explaining and making the case for its BVP. As stated at the Hearing, recent events such as the Environment Agency's ("**EA**") position on AMP7 licence changes,[30] indicate that the additional capacity (if not more) will be required, and also that some flexibility in exactly how it is delivered is needed.

(103) Nonetheless until the design process is complete, Anglian believes that an outcome focused approach provides important flexibility. Anglian's proposed mechanism retains compliance with WRMP19 obligations, the resilience objective and the additional capacity of the BVP. Anglian notes that there are very few examples of performance commitments being changed during an AMP. By setting the right mechanism at the outset, the need for further work for both Anglian and Ofwat to adapt to future changes is avoided.

3 Water quality contacts

(104) At the Hearing, Anglian's proposed performance commitment level being outside the potential future upper quartile was discussed. Ofwat's FD and the CMA's provisional findings set a stretching target for Anglian linked to the upper quartile of percentage improvements proposed by companies in their business plans. Anglian does not believe that the future upper quartile performance is a relevant factor for setting the performance commitment level of water quality contacts and sets out its views in more detail here.

(105) Water quality contacts is a bespoke performance commitment. This means that its inclusion for each company is voluntary and some companies do not have it as a performance commitment for AMP7 and consequently have no performance commitment level. As such a focus on a common industry target of the forward-looking upper quartile is far less relevant than it is for common performance commitments.

(106) As there is no common performance commitment and improvement is funded by the base models, it seems reasonable that the historic rate of improvement for a company like Anglian is applied as the stretch challenge for Anglian in AMP7. This is what Anglian has proposed and this is beyond the level of improvement customers expect to see. It is also far more stretching than the FD for some companies – e.g. Severn Trent who must deliver a 5% reduction in contacts in AMP7 despite having a 1.40 Acceptability score last year (compared to Anglian's performance of 1.1).

(107) Ofwat has highlighted that Anglian's proposal is based on Drinking Water Inspectorate (DWI) water acceptability data which may include other factors such as illness related contacts, so may not be a relevant source of data. While this is true, the DWI acceptability data is the best source of historic data and for Anglian 95% of its Acceptability performance is made up of the same factors that are part of the water quality contacts PC.

[30] See HII001 and HII002. Letters between Anglian and Sir James Bevan of the EA in November 2020 regarding the new policy to cap abstraction licences using a different method to that agreed and included in WRMP2019.

Chapter H: Financing

1 Overview

(108) Anglian recognises the significant work that the CMA has put into its Provisional Findings regarding the assessment of the appropriate cost of capital and financeability.

(109) Acknowledging that the CMA has committed to both a discussion paper on the remaining residual discussion points and a further cost of capital roundtable in the New Year, there are nonetheless a number of specific areas explored in the Main Party hearings which Anglian considers it beneficial to the CMA to provide comment on ahead of those planned engagements. Specifically these are:

(i) Role of a cross check on the benchmark-led approach;

(ii) Debt composition of the notional company and treatment of floating rate debt;

(iii) Comparison to Annual Performance Reports ("**APRs**") is misleading;

(iv) Faster transition to CPIH.

2 Role of a cross check on the benchmark-led approach

(110) Ofwat set the cost of debt in its FD primarily based on a benchmark-led approach. Ofwat did this because of its incentive properties and confidence that the benchmark selected would secure recovery of efficient costs for the notional company. Ofwat also cross checked the benchmark-led approach using its balance sheet approach.

(111) A benchmark-led approach in general is appropriate for estimation of the cost of debt for the notional company. As set out previously by Anglian[31] and KPMG,[32] the benchmark-led approach applied by the CMA reflects long term 20Y financing, which is consistent with average sector debt issuance of 20Y tenor (fixed debt) and 25Y including index-linked debt. 20Y is also in line with asset lives and the investment horizon so has the right incentive properties based on standard infrastructure financing (which supports asset liability matching). This approach also recognises the importance of timing of issuance which is critical to the recovery of efficient financing costs given market movements. It is also in line with regulatory guidance – which in the past consistently recognised the long-term nature of the industry and encouraged long-term financing to match this.

(112) An allowance based on benchmarks might differ from a robust estimate of an industry average, as companies can choose to take on some risk. So it would not be appropriate to align allowances and costs as this would transfer risk taken on by some companies to customers.

(113) Where variances are driven by deviations from the 20Y benchmark e.g. some companies adopting different risk positions, these do not justify changes to the benchmark as this would create perverse incentives to issue (for example) short tenor or floating rate debt.

(114) An approach which directly reflects industry average company financing positions (directly or indirectly) via cross checks can (1) increase exposure for companies which have issued long term financing in line with the selected benchmark and past regulatory policy; (2) transfer risks from companies to customers over time; (3) blur the difference between the notional benchmark-led approach and actual company financing; (4) create perverse incentives such as firms trying to match others' financing activities; and

[31] See for example, Anglian's Response to Provisional Findings, p. 85, Anglian's Statement of Case, p. 270.

[32] See KPMG Embedded Debt Report, section 6.2, 6.6 (SOC 441).

(5) increase ex ante risk as it is not possible to hedge a cost of debt allowance based on actuals ex ante.

(115) As a result, the use of industry average actual costs should be used to check that costs incurred by companies are not very materially different from the benchmark-led approach. But this should not be a substitute for the benchmark led approach or for direct calibration.

(116) Moreover Anglian considers that a cross check based on actual company costs is generally very difficult, as it requires detailed and complex analysis of company portfolios and (depending on the reported data used) adjustments to reported costs across multiple factors including application of a forward rate adjustment for floating rate debt to estimate expected costs across AMP7, use of yield at issuance rather than coupon, removal of liquidity/working capital management facilities and the inclusion of costs associated with derivatives.

3 Debt composition of the notional company and treatment of floating rate debt

(117) Given the long-term financing structure assumed for the notional company over time, it would not be appropriate *ex post* to determine what an efficient financing structure or debt mix is for the notional company. Rather, this needs clear *ex ante* signalling:

(i) The allowance for embedded debt is fixed *ex ante* so by design does not reflect risks associated with floating rate debt. If the notional company raised floating rate debt and interest rates were then to increase there would be exposure to these movements which is not captured by the dynamics of the allowance.

(ii) Adoption of floating rate debt would penalise *ex post* companies which have already issued fixed rate debt in line with benchmark/allowances/risks implied by the regime and the notional financial structure. The notional financial structure has consistently assumed only fixed and index linked debt as can be seen in table 6.2 from Ofwat's aligning risk and return annex, which shows that the notional company has raised fixed and index linked debt only from at least PR09.

(iii) One of the functions of the notional company construct is to provide *ex ante* predictability over how debt costs will be remunerated. This approach is particularly difficult where the debt composition for the notional company is adjusted based on *ex post* knowledge of market movements and financing strategies implemented by some companies, which could not have been known *ex ante*.

(iv) To the extent that more floating debt is a reasonable adjustment to the assumed notional financial structure, it should therefore only be for new debt.

4 Comparison to Annual Performance Reports (APRs) data is misleading

(118) Ofwat has pointed the CMA to data in the APRs to support its estimated cost of embedded debt of 4.44% as against Anglian's estimate of 4.97%.[33] As explained in the Hearing, the APR includes a short-term facility that Anglian drew down in March 2020 to deal with Covid-19. While required to be disclosed in the APR, it is short-term debt that Anglian considers has been incorrectly included in embedded debt calculations.

(119) The cost of debt reported in the APR requires a number of adjustments to be considered to derive a robust estimate of embedded debt.

[33] Ofwat Hearing Transcript 30 November 2020, page 33.

(120) Anglian notes that the expected consultation document will provide an opportunity to respond to this issue and expects to provide a full explanation of the differences between its embedded debt and APR data as part of its response.

5 Faster transition to CPIH

(121) Finally, the CMA has raised the question of whether future issues could be mitigated by completing a faster transition to CPIH indexing.[34] Ahead of PR19, Ofwat undertook a consultation to consider views on a faster transition to CPIH.[35] The majority of responses to this consultation were opposed to a faster transition and instead supported an approach proposed by Anglian[36] which proposed a more measured transition. This approach recognises that companies carry long-term RPI linked debt liabilities, some of which will remain on the balance sheet until 2065. This debt was taken on the expectation that the RCV will remain linked to RPI, thus providing a pure hedge to long-term debt liabilities. Removing this hedge would create a new long-term risk for the sector.

[34] Anglian Hearing Transcript, page 98.

[35] Ofwat, Water 2020: Our Regulatory approach for water and wastewater services in England and wales (2016). https://www.ofwat.gov.uk/wp-content/uploads/2015/12/pap_pos20150520w2020.pdf

[36] Potential approaches for transition from RPI to CPI (Updated) February 2016. https://www.anglianwater.co.uk/siteassets/household/about-us/CPI_transition_v1.pdf