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Dear Andrew

Business Retail Price Review 2016 - Representation

Thank you for your time in discussing our proposed approach to the representation. Your comments were extremely helpful and we have sought to address these within our representation. Attached is our representation which incorporates:

1. A commentary explaining our approach;
2. Appendix 1: PWC report;
3. Appendix 2: Revised data tables;
4. Appendix 3: Reconciliation table;
5. Appendix 4: Maximum Daily Demand Charge: Background and Case Studies;
6. Appendix 5: Gross margin calculations;
7. Appendix 6: Bill incidence effects
8. Appendix 7: Data tables with bill increases limited to 1%;

The next step is for Ofwat to publish Final Determinations on 15 December 2016. However, in the meantime it would be helpful if you would contact us should you have any queries on our representation.

Yours sincerely

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Non-household Retail Price Review 2016 – Draft Determination Representation

Introduction

On behalf of Anglian Water Services Limited this is our representation to the Draft Determination published on 15 September 2016. We are happy to discuss any aspect of our submission and to answer any questions that Ofwat may have. We look forward to receiving the final determination on 15 December 2016.

Context

It is clear that our proposals were not well received, not least because of the tone of our references to competition law considerations, and we think it may be useful to explain the context within which we prepared our PR16 July submission.

We are long standing advocates of greater competition in the industry and are committed to creating a successful non-household retail market. We are also aware of Ofwat's concerns that incumbents might - whether deliberately or otherwise - tip the playing field in favour of their associated retailers by supplying services or facilities either free of charge or below cost (i.e. on a basis that is not at arms length). Our Board is equally focussed on the risks of breaching Competition law, following our previous experience. The Board is particularly mindful of the Competition law risk of supplying retail services below cost – above all in circumstances where our wholesale business remains the monopoly supplier of water and water recycling services to retailers in the Anglian region.

With this concern in mind, we have focussed on building a sustainable stand-alone retail business which is capable of delivering competitive retail services. This has involved ensuring that our retailer operates without reliance on our wholesale business. Our approach was therefore to identify up-to-date costs based on our more recent experience of operating independently. We believed that setting default price caps based on this level of cost would ensure that all costs of the business could be recovered from customers. Our submission then sought to set out the steps necessary for us to avoid breaching Competition law as far as possible. However, Ofwat is right to point out that the Competition law risks rest squarely with each company and we acknowledge that the tone of our submission was unhelpful in this respect. We will comply with Ofwat's final determination and take the necessary steps to ensure we are compliant with Competition law.

Draft Determination

We have reviewed the Draft Determination and we understand that:

- for customers using less than 5 megalitres (Ml) per year, our Draft Determination is the same as those set at the PR14 Final Determination;

- for customers using more than 5MI per year, our Draft Determination reflects the uniform gross margin controls of 5% (water 5-50MI per year), 3.3% (water >50MI per year), 5.3% (wastewater 5-50MI per year) and 2.8% (wastewater >50MI per year);
- there is a 1% per year supplementary limit on price increases for customers within the uniform bands.

Representation

Ofwat has set out concerns with our July submission and we address each of these in turn below.

Retail non-household costs

Draft Determination: "Anglian Water has provided insufficiently detailed evidence to support its claim for increased costs of £11.9m particularly when these are associated with the implementation of a new target operating model."

Draft Determination: "It is not clear that the levels of the default tariff caps should be increased to provide additional funding for companies plans to restructure their businesses to compete across the wider market."

Ofwat was clear in its Statement of Method that it required strong evidence of higher costs to support any claim for increased non-household retail costs. We believed that we had strong supporting evidence in the form of a fully costed target operating model and organisational structure which had been externally benchmarked and independently audited and verified by the Professional Planning Forum.

Set out below in Table 1 is a roll forward from the allowed operating costs at PR14 to current actual operating costs for 2015/16.

Table 1

	£m	Notes
2013/14 base year costs allowed in PR14 FD	9.1	
2014/15 cost increases		
Vacant posts in 2013/14 cost base	0.4	2013/14 costs were low due to a high level of staff turnover in the non-household business
RPI uplift on 2013/14 costs	0.2	Predominantly driven by group wide pay rise awards
Other net costs/efficiencies	(0.1)	
2014/15 non-household expenditure per regulatory accounts	9.6	
2015/16 cost increases		
Increase in accommodation costs following move to separate premises	0.5	Increase in rent, rates and utility costs following move to separate premises
Increase in finance/regulation costs following restructure	0.3	Increased staff levels required in support functions to operate on stand-alone basis
Contact team separated from household retail	0.3	
Other net costs/efficiencies	0.1	
2015/16 underlying expenditure per regulatory accounts	10.8	

The majority of the increased costs against our PR14 cost base are already being incurred with underlying operating costs of £10.8m in 2015/16 and additional depreciation above the PR14 allowance of £0.2m to be incurred once the £1.1m of non-household retail assets acquired in 2015/16 are commissioned.

Therefore, around two-thirds of the additional costs requested are based on 2015/16 actual expenditure which we continue to believe gives strong justification for the robustness of the forecast. In addition, we provided the actual costs associated with separate accommodation, IT, telephony and other systems (e.g. billing, consumption management etc.).

Set out below in Table 2 below are the additional costs we anticipate to incur for 2017/18.

Table 2

	£m	Notes
Actual 2015/16 reported operating costs	9.1	
Remove Exceptional credit	1.8	Arises from resetting bad debt provisioning rates
2015/16 underlying expenditure per regulatory accounts	10.8	Difference due to rounding
2016/17 cost increases		
Depreciation	0.4	Impact of additional spend in 2015/16 and anticipated spend in 2016/17 on retail systems, not commissioned or depreciated in 2015/16
Wholesale interfaces	0.4	Additional FTEs to liaise with wholesale businesses including metering and new connections
New billing system	0.3	Ongoing operating cost associated with installation of new billing system
2017/18 calculated required expenditure	11.9	

Note: There is no allowance in the above costs for additional MOSL market operator costs proposed since our submission in July which could be a material cost increase for retail businesses.

PwC have reviewed the bridge between actual expenditure for 2015/16 and forecast expenditure for 2017/18 and beyond. The results of PwC's work is included in their agreed upon procedures report set out in **Appendix 1**.

Draft Determination: "It is notable that its actual costs of £9.1m in 2015/16 are broadly equal to those allowed at PR14."

In 2015-16 our underlying non-household retail operating costs were £10.8m, with the increase against the PR14 Final Determination offset by a one-off exceptional credit of £1.8m relating to the resetting of bad debt provision rates.

Historically, Anglian Water has adopted a single set of provisioning rates for household and non-household customers. However, for AMP6 and in line with non-household retail separation, this approach is no longer appropriate. Therefore, separate provisioning rates for household and non-household customers have been calculated based on the independent payment history for each. This resulted in a one-off exceptional credit for non-household of £1.8m. This was highlighted in our July submission (page 4, paragraph 5) and in our Annual Performance Report (page 199, paragraph 6).

Draft Determination: "we were unable to reconcile its narrative with the information contained in its data tables, where a lower overall retail cost allowance appears to have been used compared to that allowed at PR14. This has undermined our confidence in both the Board assurance that it has given and in its calibration of its proposals for changes to its default tariff caps."

We note that Ofwat was unable to reconcile our narrative with the information contained in our data tables and that undermined confidence in both our Board assurance and our proposals for changes to the default tariff caps. We can now see that the format in which we presented the data meant that Ofwat could not extrapolate it on a basis consistent with the submissions of other companies, and that this created a reconciliation issue. This is explained further below.

We completed the July submission data tables by showing the number of unique customers within each particular tariff band. For wastewater, there are three different services, namely foul drainage, surface water drainage and highway drainage. We identified the retail cost as an average cost for each service the customer receives. This recognised that customers can receive two or three wastewater services. We thought having a retail cost for each separate service enabled us to price on a more cost reflective basis. Had we identified a single combined retail cost for all wastewater services, irrespective of the number or combination of services the customer received, we concluded we would be over-recovering from customers receiving two services and under-recovering from those receiving all three.

The guidance did not set out how Ofwat would calculate the overall retail cost allowance. We can now see that Ofwat has used the individual lines and multiplied by the number of customers. However, on the basis of our analysis, set out above, this does not reflect that some customers receive more than two wastewater services. However, this is easily resolved.

We have revised our approach in line with Ofwat's reconciliation and provided revised data tables for all customer groups, see **Appendix 2**. As a result, the amended tables now easily reconcile with the narrative. At PR14 there was a reconciliation table that set out how tariffs related to the overall costs and revenues. We have attached a similar reconciliation table (see **Appendix 3**) to evidence that the July submission data tables and narrative are consistent). This has been reviewed by PwC and the findings are included in their agreed upon procedures report set out in **Appendix 1**. Therefore, whilst we could have presented the data in a better format, we confirm that the data in our July submission did not contain errors and Ofwat can be assured as to the integrity of our Board assurance.

Draft Determination: "We also note that in 2015/16, eight out of ten water and sewerage companies had retail costs as a percentage of retail revenue (which also includes the recovery of wholesale charges) below the 4.5% level that Anglian Water suggests is appropriate for its business retail activities. So rather than supporting its position the latest data suggests that the large majority of water companies that Anglian is most comparable to have reported cost levels below the levels Anglian claims is appropriate."

We consider that a weighted average approach gives the most representative average of cost to serve across the industry. We accept that the weighted average approach is driven by the largest companies, but the combination of Thames, United Utilities, Severn Trent and Anglian represent nearly 60% of the industry and all spend at or above 4% of revenue on cost to serve (Anglian, 4.0% on underlying basis). We believe that there is a clear direction of travel in non-household retail towards significantly higher expenditure as retail activities

are functionally separated from wholesale activities to allow a fair market to exist. It is therefore likely that further cost pressures will continue to occur in the current year.

Draft Determination: "We have highlighted the Anglian Water margins in red as we have concerns with the data they submitted with their proposals."

For water 5-50MI per year customers, we think that there is a strong case to support the higher retail costs which arise uniquely because of the Maximum Daily Demand (MDD) tariff. This would result in a higher gross margin uniform control. This is explained further below.

Ofwat will be aware that Anglian Water's wholesale water tariff structure includes a MDD charge to price signal to customers the cost of supplying the daily peak requirements for those customers using more than 10MI per year. The tariff is managed through the use of logger data, and the Charges Scheme sets out how increases and decreases in customer peak requirements are processed and reflected in charges. The MDD charge assists in managing peak demand and mitigating the costs otherwise incurred of increasing the capacity of the network infrastructure to fulfil unrestrained peak day customer demand requirements. Furthermore, the greater focus on customer water use also encourages water efficiency from customers which is a further benefit in a water stressed area, reducing the required investment in treatment capacity. Consequently all customers benefit from reduced bills. Attached in **Appendix 4** is further background to the MDD charge and brief case studies as to the operational benefits it provides.

This additional sophistication in charging structure has seen the development of account management support from the retailer in response to the needs of customers on the MDD tariff. We recognise that this is an additional retail cost of serving customers in the Anglian region who use 10MI per year. Nevertheless, all retailers operating within the Anglian wholesale area are likely to face the same additional retail costs.

These additional costs result in an overall higher gross margin of 6.8% for retail water customers in the band 5-50MI per year. Given this position, we propose that the calibration for back-stop protection should be set at 6.8% for water 5-50MI per year. Whilst these additional costs associated with MDD also apply to customers using above 50MI of water per year, Ofwat's proposed gross margin of 3.3% is already sufficient to recover these.

However, if these costs for 5-50MI per year are capped at 5%, we will consider what efficiencies are possible to ensure that we are able to recover the costs of servicing this group of customers.

The table attached in **Appendix 5** shows how we have calculated the proposed gross margin of 6.8%. In the Draft Determination Ofwat calculated this as 8.5% because it only used the information on the tariffs which fall wholly within the 5-50MI per year band (confirmed in an email by Phil Griffiths on 13 October). As we have four tariffs which cut across this band, we have included appropriate proportions of these tariffs.

Appendix 5 also shows the gross margins for the other three bands calculated using appropriate proportions of tariffs for each. Our calculations are higher than those shown for us in the Draft Determination, therefore we think the gross margins in the Draft Determination were understated. For wastewater, we think this may be compounded because of the different approach we used in identifying the number of wastewater customers receiving more than two wastewater services. **Appendix 5** sets out a more accurate calculation of gross margins.

Draft Determination: "We also note Anglian Water's suggestion that it may not comply with the supplementary restraint on charges for larger (greater than 5MI/a) customers. Ofwat would take this into account in company monitoring framework and possible enforcement action."

Whilst we raised some concerns about the impact of the supplementary restraint, if introduced, we did not mean to imply that we would not comply with it. For customers using more than 5MI per year, where Ofwat introduces the uniform bands, we confirm that our tariffs will not recover more than the gross margins allowed in the Final Determination and we will not increase the retail element of customer bills by more than 1% per year in line with the supplementary restraint. We will also ensure that we take whatever action is necessary to reduce our costs where necessary to comply with Competition law. This may require us to review our target operating model and consider options for reducing costs while continuing to provide good retail services to customers.

Draft Determination: "the data tables do not provide sufficient granularity to map to the simplified structure. Anglian Water's objections to the simplified structure do not appear to recognise the distinction between tariffs and the average revenue controls (which allow for differential pricing for different customer types within a single default tariff cap)."

We have considered our proposals for direct debit price controls further and on reflection we conclude that we will not pursue these as any such new retail tariffs can be expected to develop as part of the operation of the market.

We will remove the default price controls we originally proposed for direct debit customers. We note that other companies did not put forward similar proposals. We also note Ofwat's wish to simplify price controls whilst not constraining the development of tariffs within these price controls. This change has been reflected in the data tables in **Appendix 2**.

To assist understanding of the impact on customer bills from our revised proposals, we have provided the incidence effects for typical customer levels for each class of customer, **see Appendix 6**. For customers using less than 5MI per year, the bill impact is less than 1% for the majority of customers and for most customer classes. It is only measured Streamline Orange wastewater customers where the bill impact is materially greater than 1% (at 3.4%) and we acknowledge that we have not undertaken reasonable customer engagement to proceed with this level of increase. We recognise the extra protection that smaller business customers will need especially in the early years after market opening. We confirm, therefore, that for customers using less than 5MI per year we will limit increases in the retail element of customer bills to 1%. **Appendix 7**

shows a revised data table to reflect this. We will seek efficiencies to achieve this.

We also understand from Phil Griffiths (email dated 23 August 2016) that Ofwat has used the July submission data tables to identify bill increases, and calculated what appears to be significant bill increases of approximately 10%-15% for water customers using 10-25 MI (tariff band 6 in our submitted data tables).

In this case, there are 426 customers in the group. At the PR14 price review there were 446 customers in the group. There have been a number of customers who have entered and exited this group through changes in consumption and as a result the mix of customers within this group has affected the average consumption significantly, which was previously 12,611 MI and is now 15,083 MI. This increase in average consumption has a correspondingly significant increase in the quantum of wholesale volumetric charges, increasing them from £7,167k to £8,639k in the data tables. In isolation, this creates a high end-user bill impact for the average customer, as re-calculated. However, this will not create an incidence effect for a customer with constant consumption levels. The real bill impact should therefore be based on the retail incidence effect on these customers, which is a much more modest 3.5%.

Customer engagement

Draft Determination: "Based on the submission which represents a significant tariff rebalancing some groups of customers will face bill increases of more than 1% and there is no evidence that customers have been engaged on this issue."

We did not consult directly with customers on the change in structure proposed, relying on the resulting incidence effects as a guide to the requirement to do so rather than the change in tariff structure itself. We also acknowledge that our July submission did not accurately characterise the neutral position of the Customer Engagement Forum (CEF).

We outlined the PR16 cost proposals to both CC Water and the Chair of the CEF. The Chair of the CEF commented that the timeframe for the consultation did not appear to allow sufficient time for meaningful engagement with relevant customers, especially given the technical nature of the proposals.

In interpreting the requirement set out by Ofwat we used the 5% threshold set out in Ofwat's Charges Scheme Rules as the benchmark for "significant incidence effects" and relied upon our ongoing dialogue with CC Water as the principal form of engagement to test customer impact. We also outlined our proposals to the Chair of the CEF. The timetable for the PR16 process did not lend itself to the scale of customer engagement necessary to obtain an objective view on our proposals, and given the impact on customers from our proposals, was not considered necessary.

We calculated the incidence effect on each customer class by considering each tariff in isolation and ensuring there would be no under or over-recovery. Using the average consumption for each tariff we calculated the required fixed charge

and volumetric charge. The resulting bill impacts were then compared to the current year bill. This provided a view as to the retail incidence effect a customer class would experience. The highest retail incidence effect was 5% for customers who remained on standard payment terms, however for those paying by direct debit the highest increase was 3% with the majority of customers seeing increases c.1%. We expected the majority of customers to elect to pay by direct debit as a result, and were confident that our retail costs could be directly stepped down to reflect customers moving on to this direct debit tariff.

The proposed split of each currently combined tariff class into two – a standard terms class and a direct debit class – was deemed cost reflective, and gave each customer the option to switch to the lower direct debit tariff.

In reviewing the Draft Determination and preparing this representation we have consulted with CCWater and shared and discussed our proposals with the Chair of the Customer Engagement Forum. Both have provided comment and feedback that is reflected in this representation.

External assurance

Draft Determination: “NERA has provided assurance on Anglian’s cost modelling but not the tariff modelling which appears to have been used to prepare the data table submissions.”

PwC have checked the outputs from the Cost Allocation Models (where forecast expenditure is allocated based on activity based cost drivers) and performed procedures on the Tariff and Retail Margin Model which has been used to populate the Ofwat data tables submitted in July. The results of PwC’s agreed upon procedures work is included in **Appendix 1**.

If Ofwat has any questions on our representations we are more than happy to respond.

Appendices

This representation includes the following appendices:

Appendix 1 - PwC report

Appendix 2 - Revised data tables

Appendix 3 – Reconciliation table

Appendix 4 – Maximum Daily Demand Charge: Background and Case Studies

Appendix 5 - Gross margin calculations

Appendix 6 – Bill incidence effects

Appendix 7 – Data tables with bill increases limited to 1%

Appendix 3 - Reconciliation table

Tariff	Number of customers	Wholesale charge	Cost to serve per customer	Average number of services	Total cost to serve	Net margin	Revenue
Unmeasured (potable water)	1,799	473,491	13.44	1.00	24,176	1.94%	507,532
Hartlepool Unmeasured (potable water)	378	50,178	13	1.00	4,841	2.79%	56,596
Streamline Green (potable water) - (0.0MI to 0.5MI)	57,468	23,145,641	45	1.00	2,569,809	4.64%	26,967,088
Streamline Orange (potable water) - (0.5MI to 5.0MI)	3,476	8,313,513	119	1.00	413,699	3.14%	9,010,017
Streamline Blue (potable water) - (5.0MI to 10.0MI)	597	3,756,557	413	1.00	246,703	3.01%	4,127,359
Profile (potable water) - (10.0MI to 25.0MI)	426	8,638,954	1,161	1.00	494,682	2.37%	9,355,797
Profile Plus (potable water) - (25.0MI +)	264	27,225,154	1,184	1.00	312,657	1.51%	27,958,837
Profile Interruptible (potable water) - (25.0MI +)	34	8,558,962	1,258	1.00	42,767	1.40%	8,723,946
Hartlepool Commercial (potable water) - (0.0MI to 50.0MI)	805	691,693	45	1.00	36,086	3.19%	751,780
Hartlepool Profile (potable water) - (50.0MI +)	6	1,080,275	1,158	1.00	6,949	1.40%	1,102,627
Streamline Orange (non-potable water) - (0.0MI to 5.0MI)	3	5,372	107	1.00	322	3.33%	5,889
Streamline Blue (non-potable water) - (5.0MI to 10.0MI)	1	33,263	390	1.00	390	1.96%	34,325
Profile (non-potable water) - (10.0MI to 25.0MI)	1	27,755	1,154	1.00	1,154	2.98%	29,796
Profile Plus (non-potable water) - (25.0MI to 400.0MI)	6	1,917,680	1,179	1.00	7,076	1.30%	1,950,029
Profile Industrial (non-potable water) - (400.0MI +)	3	8,611,598	1,874	1.00	5,621	1.23%	8,724,932
Special Agreements (potable water) - (0.0MI +)	3	496,188	293	1.00	879	0.95%	501,860
Special Agreements (non potable water) - (0.0MI +)	2	1,416,649	2,419	1.00	4,838	0.99%	1,435,685
Unmeasured (Sewerage)	3,577	1,123,806	14	1.00	49,066	1.64%	1,192,406
Streamline Green (Sewerage) - (0.0MI to 0.5MI)	60,360	30,245,875	15	2.97	2,742,300	4.30%	34,469,017
Streamline Orange (Sewerage) - (0.5MI to 5.0MI)	2,827	6,618,281	39	2.95	324,200	3.11%	7,165,497
Streamline Blue (Sewerage) - (5.0MI to 50.0MI)	792	8,811,262	136	2.93	315,241	2.27%	9,338,275
Profile (Sewerage) - (50.0MI +)	274	12,431,536	282	3.00	232,071	1.63%	12,873,738
Unmeasured (Trade Effluent)	36	9,902	15	1.00	529	1.79%	10,620
Streamline Green (Trade Effluent) - (0.0MI to 0.5MI)	1,859	1,966,320	118	1.00	219,771	4.75%	2,295,170
Streamline Orange (Trade Effluent) - (0.5MI to 5.0MI)	443	1,055,678	165	1.00	73,207	3.67%	1,171,948
Streamline Blue (Trade Effluent) - (5.0MI to 50.0MI)	317	2,320,159	366	1.00	115,997	3.59%	2,526,759
Profile (Trade Effluent) - (50.0MI +)	171	24,227,098	997	1.00	170,473	1.85%	24,856,188
Streamline Green (potable water) - (0.0MI to 0.5MI) - Direct Debit	42,771	18,965,268	38	1.00	1,631,985	2.39%	21,102,036
Streamline Orange (potable water) - (0.5MI to 5.0MI) - Direct Debit	1,806	4,319,086	84	1.00	152,449	1.43%	4,536,592
Streamline Blue (potable water) - (5.0MI to 10.0MI) - Direct Debit	211	1,327,429	326	1.00	68,698	1.76%	1,421,093
Profile (potable water) - (10.0MI to 25.0MI) - Direct Debit	63	1,277,201	1,102	1.00	69,410	1.81%	1,371,387
Profile Plus (potable water) - (25.0MI +) - Direct Debit	20	2,061,802	1,114	1.00	22,280	0.93%	2,103,644
Profile Interruptible (potable water) - (25.0MI +) - Direct Debit	5	1,258,613	1,167	1.00	5,836	0.80%	1,274,623
Hartlepool Commercial (potable water) - (0.0MI to 50.0MI) - Direct Debit	482	414,157	45	1.00	21,607	1.76%	443,593
Streamline Green (Sewerage) - (0.0MI to 0.5MI) - Direct Debit	42,767	23,285,977	10	3.00	1,228,212	1.56%	24,903,384
Streamline Orange (Sewerage) - (0.5MI to 5.0MI) - Direct Debit	1,806	4,232,118	27	3.00	143,660	1.27%	4,431,917
Streamline Blue (Sewerage) - (5.0MI to 50.0MI) - Direct Debit	211	2,349,460	100	3.00	63,450	1.15%	2,441,082
Profile (Sewerage) - (50.0MI +) - Direct Debit	20	909,181	256	3.00	15,335	0.99%	933,725
Streamline Green (Trade Effluent) - (0.0MI to 0.5MI) - Direct Debit	385	407,316	76	1.00	29,263	1.85%	444,812
Streamline Orange (Trade Effluent) - (0.5MI to 5.0MI) - Direct Debit	56	133,416	109	1.00	6,100	1.45%	141,575
Streamline Blue (Trade Effluent) - (5.0MI to 50.0MI) - Direct Debit	28	205,047	273	1.00	7,647	1.32%	215,539
Profile (Trade Effluent) - (50.0MI +) - Direct Debit	19	2,691,900	924	1.00	17,564	0.81%	2,731,612
		247,090,807			11,899,002	2.50%	265,640,327

Appendix 5: Gross margin calculations

5-50MI Water Tariffs

Proportion of tariff in superbond	Tariff name	Customer numbers	Retail cost per customer £	Retail net margin %	Wholesale charge £m				Gross margin as % of wholesale charge
						Retail costs £m	Retail net margin £m	Retail gross margin £m	
From Tariff sheet	100.00% streamline blue potable water	808	390.47	2.46%	5.060	0.315	0.135	0.451	8.91%
	100.00% profile potable water	489	1154.19	1.93%	9.661	0.564	0.201	0.766	7.93%
	16.27% profile plus potable water	46	1185.83	1.41%	4.629	0.055	0.067	0.122	2.63%
	100.00% Streamline blue non-potable water	1	292.99	1.83%	0.032	0.000	0.001	0.001	2.78%
	100.00% Profile non-potable water	1	846.96	2.53%	0.027	0.001	0.001	0.002	5.85%
	1.36% Profile Plus non-potable water	0	872.76	1.25%	0.025	0.000	0.000	0.000	1.56%
	3.07% Hartlepool Streamline - Water	40	44.83	2.78%	0.034	0.002	0.001	0.003	8.21%
	3.82% profile interruptible potable water	1	1246.25	1.36%	0.365	0.002	0.005	0.007	1.89%
Total		1386	677.70	1.94%	19.834	0.940	0.412	1.351	6.81%

5-50MI Sewerage Tariffs

Proportion of tariff in superbond	Tariff name	Customer numbers	Retail cost per customer £	Retail net margin %	Wholesale charge £m				Gross margin as % of wholesale charge
						Retail costs £m	Retail net margin £m	Retail gross margin £m	
From Tariff sheet	100.00% Streamline Blue Sewerage	1003	377.56	1.84%	11.292	0.379	0.218	0.597	5.29%
	10.66% Profile Plus Sewerage	31	816.54	1.41%	1.426	0.026	0.021	0.046	3.25%
	100.00% Streamline Blue TE	345	358.39	3.02%	2.511	0.124	0.082	0.206	8.19%
	11.20% Profile Plus TE	21	989.67	1.76%	3.038	0.021	0.055	0.076	2.50%
Total		1401	391.96	1.96%	18.267	0.549	0.376	0.925	5.06%

50+MI Water Tariffs

Proportion of tariff in superbond	Tariff name	Customer numbers	Retail cost per customer £	Retail net margin %	Wholesale charge £m				Gross margin as % of wholesale charge
						Retail costs £m	Retail net margin £m	Retail gross margin £m	
From Tariff sheet	83.73% profile plus potable water	238	1185.83	1.41%	23.825	0.282	0.346	0.628	2.63%
	96.18% profile interruptible potable water	38	1246.25	1.36%	9.186	0.047	0.127	0.174	1.89%
	98.64% Profile Plus non-potable water	6	872.76	1.25%	1.791	0.005	0.023	0.028	1.56%
	100.00% Profile Industrial non-potable water	3	1873.54	1.23%	8.529	0.006	0.106	0.112	1.31%
	100.00% Hartlepool Profile - Water	6	1158.21	1.34%	1.070	0.007	0.015	0.022	2.02%
	100.00% Special Agreements AW	3	1905.77	1.07%	0.496	0.006	0.005	0.011	2.24%
	100.00% Special Agreements HW	3	762.31	0.94%	1.417	0.002	0.013	0.016	1.11%
Total		296	1196.63	1.34%	46.312	0.354	0.635	0.990	2.14%

50+MI Sewerage Tariffs

Proportion of tariff in superbond	Tariff name	Customer numbers	Retail cost per customer £	Retail net margin %	Wholesale charge £m				Gross margin as % of wholesale charge
						Retail costs £m	Retail net margin £m	Retail gross margin £m	
From Tariff sheet	89.34% profile plus Sewerage	263	816.54	1.41%	11.957	0.214	0.174	0.389	3.25%
	88.80% Profile Plus TE	169	989.67	1.76%	24.091	0.167	0.434	0.601	2.50%
Total		431	884.25	1.64%	36.047	0.381	0.609	0.990	2.75%

0 to SMI Non Households - Incidence Effects (Mixed Payment Terms)

Line description	WHOLESALE				RETAIL				END USER				2017/18 R + 2016/17 W	% Change
	2016/17	2017/18	£ Change	% Change	2016/17	2017/18	£ Change	% Change	2016/17	2017/18	£ Change	% Change		
ANGLIAN - NON HOUSEHOLD CUSTOMERS (WATER)														
Measured - streamline green														
25 m3 pa	£39	£40	£0	0.9%	£42	£43	£1	1.7%	£81	£83	£1	1.3%	£82	0.9%
50 m3 pa	£72	£72	£0	1.0%	£43	£44	£1	2.3%	£115	£117	£2	1.5%	£116	0.9%
150 m3 pa	£201	£203	£2	1.1%	£48	£50	£2	4.6%	£249	£253	£4	1.7%	£251	0.9%
300 m3 pa	£395	£399	£4	1.1%	£55	£59	£4	7.2%	£450	£458	£8	1.8%	£454	0.9%
450 m3 pa	£589	£595	£6	1.1%	£62	£68	£6	9.3%	£651	£663	£12	1.9%	£657	0.9%
Measured - streamline orange														
500 m3 pa	£635	£660	£25	4.0%	£84	£92	£8	9.2%	£719	£752	£33	4.6%	£727	1.1%
750 m3 pa	£927	£951	£25	2.6%	£96	£107	£11	11.5%	£1,022	£1,058	£36	3.5%	£1,033	1.1%
1,000 m3 pa	£1,219	£1,243	£24	1.9%	£107	£121	£14	13.3%	£1,326	£1,363	£38	2.9%	£1,340	1.1%
2,000 m3 pa	£2,387	£2,407	£20	0.9%	£151	£179	£27	18.0%	£2,538	£2,586	£48	1.9%	£2,565	1.1%
4,000 m3 pa	£4,722	£4,736	£14	0.3%	£241	£294	£53	22.1%	£4,963	£5,030	£67	1.3%	£5,016	1.1%
Unmeasured														
75 rv	£218	£226	£8	3.5%	£25	£18	-£7	-28.1%	£243	£244	£1	0.3%	£236	-2.9%
100 rv	£221	£229	£8	3.5%	£25	£18	-£7	-28.4%	£246	£247	£1	0.3%	£239	-2.9%
180 rv	£233	£241	£8	3.5%	£25	£18	-£7	-29.3%	£258	£259	£1	0.3%	£250	-2.8%
300 rv	£249	£258	£9	3.5%	£25	£17	-£8	-30.6%	£274	£276	£1	0.4%	£267	-2.8%
500 rv	£277	£287	£10	3.6%	£25	£17	-£8	-32.9%	£302	£304	£2	0.5%	£294	-2.7%
ANGLIAN - NON HOUSEHOLD CUSTOMERS (SEWERAGE INC. SWD)														
Measured - streamline green														
25 m3 pa	£113	£113	£0	0.0%	£42	£43	£1	2.8%	£155	£156	£1	0.7%	£156	0.7%
50 m3 pa	£148	£149	£1	0.6%	£43	£44	£1	3.3%	£190	£193	£2	1.2%	£192	0.7%
150 m3 pa	£285	£290	£5	1.7%	£47	£49	£2	5.2%	£331	£339	£7	2.2%	£334	0.7%
300 m3 pa	£490	£501	£11	2.1%	£52	£56	£4	7.5%	£543	£557	£14	2.7%	£547	0.7%
450 m3 pa	£696	£713	£16	2.3%	£58	£63	£5	9.4%	£754	£776	£22	2.9%	£759	0.7%
Measured - streamline orange														
500 m3 pa	£765	£795	£31	4.0%	£70	£98	£28	40.0%	£835	£894	£59	7.0%	£863	3.4%
750 m3 pa	£1,088	£1,131	£43	4.0%	£73	£112	£39	53.3%	£1,161	£1,243	£82	7.1%	£1,200	3.4%
1,000 m3 pa	£1,411	£1,467	£55	3.9%	£76	£126	£50	65.5%	£1,488	£1,593	£105	7.1%	£1,538	3.4%
2,000 m3 pa	£2,705	£2,809	£105	3.9%	£88	£182	£94	106.1%	£2,793	£2,992	£198	7.1%	£2,887	3.4%
4,000 m3 pa	£5,292	£5,495	£203	3.8%	£113	£295	£182	160.7%	£5,405	£5,789	£385	7.1%	£5,586	3.4%
Unmeasured														
75 rv	£251	£260	£9	3.5%	£28	£20	-£8	-27.0%	£279	£280	£1	0.4%	£272	-2.7%
100 rv	£255	£264	£9	3.5%	£28	£20	-£8	-27.8%	£283	£284	£1	0.4%	£275	-2.8%
180 rv	£266	£276	£9	3.6%	£28	£20	-£8	-30.2%	£294	£295	£1	0.3%	£286	-2.9%
300 rv	£283	£294	£10	3.6%	£28	£19	-£9	-33.9%	£311	£312	£1	0.2%	£302	-3.1%
500 rv	£312	£324	£12	3.7%	£28	£17	-£11	-40.1%	£340	£341	£0	0.1%	£329	-3.3%
ANGLIAN - NON HOUSEHOLD CUSTOMERS (WATER & SEWERAGE INC. SWD)														
Measured - streamline green														
25 m3 pa	£153	£153	£0	0.2%	£84	£86	£2	2.2%	£237	£239	£2	0.9%	£239	0.8%
50 m3 pa	£219	£221	£2	0.7%	£86	£89	£2	2.8%	£305	£309	£4	1.3%	£308	0.8%
150 m3 pa	£486	£493	£7	1.4%	£95	£99	£5	4.9%	£580	£592	£12	2.0%	£585	0.8%
300 m3 pa	£885	£900	£15	1.7%	£107	£115	£8	7.4%	£993	£1,015	£23	2.3%	£1,000	0.8%
450 m3 pa	£1,285	£1,308	£23	1.8%	£120	£131	£11	9.3%	£1,405	£1,439	£34	2.4%	£1,416	0.8%
Measured - streamline orange														
500 m3 pa	£1,400	£1,456	£56	4.0%	£154	£190	£36	23.2%	£1,554	£1,646	£92	5.9%	£1,590	2.3%
750 m3 pa	£2,015	£2,082	£68	3.4%	£169	£219	£50	29.6%	£2,184	£2,301	£117	5.4%	£2,234	2.3%
1,000 m3 pa	£2,630	£2,709	£79	3.0%	£183	£247	£64	35.1%	£2,813	£2,956	£143	5.1%	£2,877	2.3%
2,000 m3 pa	£5,091	£5,216	£125	2.5%	£240	£361	£121	50.5%	£5,331	£5,577	£246	4.6%	£5,452	2.3%
4,000 m3 pa	£10,014	£10,231	£217	2.2%	£354	£588	£235	66.3%	£10,368	£10,819	£452	4.4%	£10,602	2.3%
Unmeasured														
75 rv	£469	£486	£16	3.5%	£53	£38	-£15	-27.5%	£522	£524	£2	0.4%	£508	-2.8%
100 rv	£476	£493	£17	3.5%	£53	£38	-£15	-28.1%	£529	£531	£2	0.3%	£514	-2.8%
180 rv	£499	£516	£18	3.5%	£53	£37	-£16	-29.8%	£552	£554	£2	0.3%	£536	-2.9%
300 rv	£533	£552	£19	3.6%	£53	£36	-£17							

>0MI Non Households - Incidence Effects (Mixed Payment Terms)

Line description	TRADE EFFLUENT			WHOLESALE				RETAIL				END USER				2017/18 R + 2016/17 W	% Change
	Volume m3	COD mg/l	SS mg/l	2016/17	2017/18	£ Change	% Change	2016/17	2017/18	£ Change	% Change	2016/17	2017/18	£ Change	% Change		
ANGLIAN - NON HOUSEHOLD (TRADE EFFLUENT 0MI to 5MI)																	
Measured - streamline green																	
Customer 1	75	1,000	250	£120	£125	£5	4.1%	£125	£105	-£20	-16.0%	£245	£230	-£15	-6.1%	£225	-8.2%
Customer 2	125	725	200	£166	£173	£7	4.3%	£133	£108	-£25	-18.8%	£299	£281	-£18	-6.0%	£274	-8.4%
Customer 3	175	400	250	£193	£202	£9	4.6%	£139	£110	-£29	-20.8%	£332	£312	-£20	-6.0%	£303	-8.7%
Customer 4	225	500	400	£284	£297	£13	4.6%	£151	£114	-£37	-24.3%	£435	£411	-£24	-5.4%	£398	-8.4%
Customer 5	300	600	200	£360	£376	£16	4.5%	£162	£118	-£44	-27.2%	£522	£494	-£28	-5.3%	£478	-8.5%
Measured - streamline orange																	
Customer 1	750	500	250	£859	£883	£23	2.7%	£187	£180	-£7	-3.6%	£1,046	£1,063	£16	1.6%	£1,040	-0.7%
Customer 2	1,800	700	200	£2,242	£2,303	£61	2.7%	£251	£235	-£16	-6.3%	£2,493	£2,538	£45	1.8%	£2,477	-0.6%
Customer 3	2,250	600	200	£2,641	£2,713	£71	2.7%	£273	£254	-£19	-6.9%	£2,915	£2,967	£53	1.8%	£2,896	-0.6%
Customer 4	3,000	1,000	500	£4,918	£5,059	£142	2.9%	£358	£327	-£31	-8.8%	£5,276	£5,386	£110	2.1%	£5,245	-0.6%
Customer 5	4,000	500	200	£4,405	£4,525	£119	2.7%	£365	£333	-£31	-8.6%	£4,770	£4,858	£88	1.8%	£4,739	-0.7%
ANGLIAN - NON HOUSEHOLD (TRADE EFFLUENT >5MI)																	
Measured - streamline blue																	
Customer 1	7,500	350	150	£7,080	£7,273	£193	2.7%	£460	£607	£148	32.1%	£7,540	£7,880	£340	4.5%	£7,687	2.0%
Customer 2	10,000	500	100	£10,132	£10,407	£275	2.7%	£483	£684	£201	41.6%	£10,615	£11,091	£476	4.5%	£10,816	1.9%
Customer 3	15,000	300	250	£14,488	£14,897	£409	2.8%	£521	£812	£291	55.8%	£15,009	£15,709	£700	4.7%	£15,300	1.9%
Customer 4	20,000	750	200	£24,759	£25,467	£708	2.9%	£587	£1,031	£443	75.5%	£25,347	£26,498	£1,151	4.5%	£25,790	1.7%
Customer 5	25,000	900	200	£33,458	£34,421	£963	2.9%	£646	£1,225	£579	89.6%	£34,104	£35,647	£1,542	4.5%	£34,684	1.7%
Measured - profile plus																	
Customer 1	35,000	1,000	250	£43,289	£45,194	£1,905	4.4%	£1,494	£2,188	£694	46.4%	£44,783	£47,381	£2,598	5.8%	£45,476	1.5%
Customer 2	50,000	1,500	350	£78,685	£82,021	£3,337	4.2%	£1,524	£2,619	£1,095	71.8%	£80,209	£84,640	£4,431	5.5%	£81,303	1.4%
Customer 3	100,000	800	300	£114,517	£119,686	£5,169	4.5%	£1,569	£3,417	£1,848	117.8%	£116,086	£123,103	£7,017	6.0%	£117,934	1.6%
Customer 4	150,000	1,250	300	£210,459	£219,545	£9,087	4.3%	£1,656	£4,717	£3,062	185.0%	£212,114	£224,263	£12,149	5.7%	£215,176	1.4%
Customer 5	400,000	1,000	200	£483,239	£504,523	£21,284	4.4%	£1,948	£9,604	£7,656	392.9%	£485,187	£514,127	£28,940	6.0%	£492,843	1.6%

>0.5MI Non Potable Non Households - Incidence Effects (Mixed Payment Terms)

Line description	WHOLESALE				RETAIL				END USER				2017/18 R + 2016/17 W	% Change
	2016/17	2017/18	£ Change	% Change	2016/17	2017/18	£ Change	% Change	2016/17	2017/18	£ Change	% Change		
ANGLIAN - NON HOUSEHOLD CUSTOMERS (NON POTABLE WATER)														
Measured - streamline orange														
500 m3 pa	£577	£601	£24	4.1%	£70	£86	£16	22.9%	£648	£688	£40	6.2%	£664	2.5%
750 m3 pa	£840	£863	£22	2.7%	£81	£103	£23	28.5%	£921	£966	£45	4.9%	£944	2.5%
1,000 m3 pa	£1,104	£1,125	£21	1.9%	£91	£120	£30	32.8%	£1,194	£1,245	£51	4.2%	£1,224	2.5%
2,000 m3 pa	£2,156	£2,171	£15	0.7%	£131	£188	£57	43.4%	£2,288	£2,359	£72	3.1%	£2,345	2.5%
4,000 m3 pa	£4,261	£4,264	£3	0.1%	£213	£324	£112	52.5%	£4,474	£4,588	£114	2.6%	£4,586	2.5%
Measured - streamline blue														
5,000 m3 pa	£5,183	£5,258	£75	1.4%	£390	£360	-£29	-7.6%	£5,572	£5,618	£46	0.8%	£5,543	-0.5%
6,000 m3 pa	£6,182	£6,261	£78	1.3%	£403	£380	-£23	-5.8%	£6,586	£6,641	£55	0.8%	£6,562	-0.4%
7,500 m3 pa	£7,682	£7,765	£83	1.1%	£424	£410	-£14	-3.3%	£8,107	£8,175	£69	0.8%	£8,092	-0.2%
8,000 m3 pa	£8,182	£8,267	£85	1.0%	£431	£420	-£11	-2.6%	£8,613	£8,687	£73	0.9%	£8,602	-0.1%
10,000 m3 pa	£10,182	£10,273	£91	0.9%	£459	£460	£1	0.2%	£10,641	£10,733	£92	0.9%	£10,642	0.0%
Measured - profile														
10,000 m3 pa	£10,947	£11,015	£68	0.6%	£693	£995	£302	43.6%	£11,640	£12,010	£370	3.2%	£11,942	2.6%
12,500 m3 pa	£13,609	£13,690	£81	0.6%	£739	£1,110	£371	50.3%	£14,347	£14,800	£452	3.2%	£14,719	2.6%
15,000 m3 pa	£16,270	£16,365	£94	0.6%	£785	£1,225	£440	56.1%	£17,055	£17,590	£535	3.1%	£17,495	2.6%
20,000 m3 pa	£21,594	£21,714	£121	0.6%	£876	£1,455	£579	66.1%	£22,470	£23,169	£700	3.1%	£23,049	2.6%
25,000 m3 pa	£26,917	£27,064	£147	0.5%	£968	£1,685	£717	74.2%	£27,885	£28,749	£865	3.1%	£28,602	2.6%
Measured - profile plus														
25,000 m3 pa	£24,686	£24,800	£114	0.5%	£1,213	£1,395	£182	15.0%	£25,899	£26,195	£296	1.1%	£26,081	0.7%
50,000 m3 pa	£48,842	£49,114	£272	0.6%	£1,440	£1,796	£356	24.7%	£50,282	£50,910	£628	1.2%	£50,638	0.7%
100,000 m3 pa	£97,153	£97,743	£590	0.6%	£1,895	£2,598	£703	37.1%	£99,048	£100,340	£1,292	1.3%	£99,751	0.7%
150,000 m3 pa	£145,464	£146,371	£907	0.6%	£2,350	£3,399	£1,049	44.7%	£147,814	£149,770	£1,956	1.3%	£148,863	0.7%
200,000 m3 pa	£193,775	£194,999	£1,224	0.6%	£2,805	£4,201	£1,396	49.8%	£196,580	£199,200	£2,621	1.3%	£197,976	0.7%
Measured - profile industrial														
1,000,000 m3 pa	£714,478	£740,478	£26,000	3.6%	£14,100	£19,899	£5,799	41.1%	£728,578	£760,377	£31,799	4.4%	£734,377	0.8%
2,000,000 m3 pa	£1,370,456	£1,410,732	£40,276	2.9%	£14,500	£25,523	£11,023	76.0%	£1,384,956	£1,436,254	£51,298	3.7%	£1,395,979	0.8%
3,000,000 m3 pa	£2,026,434	£2,080,985	£54,551	2.7%	£14,900	£31,146	£16,246	109.0%	£2,041,334	£2,112,132	£70,797	3.5%	£2,057,581	0.8%
4,000,000 m3 pa	£2,682,412	£2,751,239	£68,826	2.6%	£15,300	£36,770	£21,470	140.3%	£2,697,712	£2,788,009	£90,296	3.3%	£2,719,182	0.8%
5,000,000 m3 pa	£3,338,390	£3,421,492	£83,102	2.5%	£15,700	£42,394	£26,694	170.0%	£3,354,090	£3,463,886	£109,796	3.3%	£3,380,784	0.8%

Appendix 7: Data tables with bill increases limited to 1%

U	Tariff Band 20	Streamline Orange (Sewerage) - (0.5M to 5.0M)				Streamline Orange (Sewerage) - (0.5M to 5.0M)			
137	Tariff name								
138	Tariff categorisation	Wastewater - metered / assessed				Wastewater - metered / assessed			
139	Number of customers	CR620M01_R006	number	0	4,093	4,093	4,633	4,633	4,633
140	Net margin	R5E00020_A001	%	2	1.54%	1.55%	2.53%	2.53%	2.53%
141	Retail cost per customer	CR620C01_R006	£	2	48.59	49.04	46.57	46.57	46.57
142	Allocated wholesale charge at FD (Nominal price base)	Calculation	£m	3	10.123	10.389	10.722	11.002	11.311
143	Allocated wholesale charge at PR16 (Nominal price base)	Calculation / Input	£m	3	10.123	10.389	10.901	11.282	11.655