Draft determination of price of the supply of non-potable water from United Utilities Water to Iggesund Paperboard (Workington) Limited under section 56 of the Water Industry Act 1991

October 2014

About this document

This is a consultation on Ofwat's draft determination of the relevant terms and conditions of the supply by United Utilities Water (**UUW**) to Iggesund Paperboard (Workington) Limited (**IP(W)L**) of non-potable water at Workington, under section 56 of the Water Industry Act 1991.

In reaching our draft determination we have applied our published three-step framework for resolving bulk pricing disputes. A bulk supply is the supply of water or sewerage (wastewater) services from one appointed water company to another appointed company or a large retail user. Companies can draw up a contract between them (a 'bulk supply agreement') that sets out the terms and conditions of a bulk supply, including the price. If companies fail to reach agreement, they can ask us to make a decision (a 'determination') on the terms of the bulk supply agreement.

Over the past year, we have taken steps to increase the transparency of our casework. In making decisions on strategic casework matters, we want to be as transparent as we can with all stakeholders about how we have reached our conclusions. This document describes our investigation in relation to the disputed terms between UWW and IP(W)L. It explains how we have reached our draft determination of the relevant terms and conditions of the supply in this case, which follows extensive communications with the parties.

We will consider carefully the responses we receive to this consultation before we publish our final determination.

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Executive Summary

Iggesund Paperboard (Workington) Limited (**IP(W)L**) operates a large paper mill at a site near Workington in the northwest of England. The site is located in United Utilities Water's (**UUW**) supply area.

The water used by the mill is extracted by UUW in a raw form from the River Derwent at Yearl, coarse screened and pumped to a raw water pumping station at Barepot. The water is then pumped to a raw water service reservoir near the village of Seaton. This is known as the **Barepot System**. All assets up to and including the service reservoir are used exclusively to provide non-potable water to IP(W)L and to two other industrial customers (though IP(W)L is by far the largest customer, accounting for some 95 per cent of the water supplied via the Barepot System).

The supply to the mill has been the subject of a number of agreements stretching back to the 1960s. The current dispute dates from 2006 when a previous agreement, signed in 1983, came to an end. While the parties signed a new 20 year agreement in October 2009 (which was back-dated to 1 April 2006) this had been the subject of significant disagreement between the parties and was only arrived at after a protracted period of negotiation. Furthermore, while IP(W)L finally signed the 2009 Agreement, they continued to express their dissatisfaction at the price terms which UUW has included.

On 21 September 2010, IP(W)L wrote to Ofwat requesting that we make a determination in relation to the following price terms which are contained in this agreement. These terms stipulate that IP(W)L (and the two other customers on the supply system) will pay to UUW

- **"14.9 pence per cubic meter for all non-potable water so supplied to that Company commencing 1st April 2006. ..." and that**
- **"the Charges paid by the Company for non-potable water shall be adjusted annually in line with RPI"**

IP(W)L contend that the price that UUW is charging is excessive given the fact that as IP(W)L has constructed its own water treatment plant (completed in June 2006), UUW now only supplies IP(W)L with coarse screened raw water rather than the treated non-potable water that it had done under earlier agreements. According to IP(W)L's estimates, this change in the nature of the service being provided by UUW should have resulted in a far more substantial reduction in the price charged by UUW than was reflected in the 2009 Agreement. Moreover, IP(W)L also argue that because of its ongoing concerns about the level of charges being imposed by UUW, it has been necessary to consider alternative water supply options. To this end, IP(W)L has secured its own abstraction license along with an old extraction point and pumping plant and has commissioned studies to examine the costs involved in bringing the plant into use to enable it to self-supply the mill and by-pass UUW's supply system completely.

This document describes our investigation in relation to the disputed terms of the agreement between UWW and IP(W)L. In reaching our draft determination we have applied our published three-step framework for resolving bulk pricing disputes. Using this framework, we have considered whether the price in dispute:

a. is appropriate given the geographic nature of supply;
b. would give rise to competition concerns; or
c. would give rise to efficiency concerns.

In order to inform our understanding, we have issued a number of requests for information to the parties. In addition, Ofwat has also commissioned studies from a number of external consultants, to provide an independent assessment of the assumptions underpinning the parties' cost models and to assist us in our analysis of the facts provided by them. These included:

- input in relation to the development of an analytical framework and initial modelling to assist in understanding the different approaches adopted by the parties. This was undertaken by Europe Economics.
- an assessment of the most appropriate cost of capital to be used in this and other price determination cases involving supply to large industrial customers. This was undertaken by Grant Thornton.
- an independent engineering review to verify the modelling assumptions and inputs used by the parties in their assessments of the costs of supply. This was undertaken by PA Consulting (PA) and included a detailed assessment of the capital maintenance and operating costs of the assets used by UUW to supply IP(W)L and other customers on the Barepot System and the assumptions underlying the model used by UUW in setting the disputed tariff. PA were also asked to review the information provided by IP(W)L in relation to the costs of self-supply.

On the basis of the information provided to Ofwat by the parties and the work undertaken by external consultants, and having applied our framework for resolving pricing disputes involving bulk supplies, **we provisionally determine that the price for the supply of non-potable water from UUW to IP(W)L should be 7.5 p/m3 at 2006/07 prices** to ensure consistency with the 2009 Agreement.

Moreover, **we consider that RPI is an appropriate indexation for the price of non-potable water in the present case**. The use of RPI aligns the price indexation of non-potable water bulk supply to other parts of the UUW's business, and we do not consider that there are sufficiently compelling reasons to deviate from RPI in this case.

Our draft determination in the matter is now open to public consultation.

Consultation questions

We welcome views from interested stakeholders on the issues set out in our draft determination and specifically on the questions below.

Q1 Do you have any comments on how we have applied our published framework for resolving bulk pricing disputes in this determination?

Q2 Do you have any views on the different factors (and materiality of those factors) which may affect the costs of providing bulk water to large users? Please provide clear evidence to support your response to this question.

Responding to this consultation

Written responses to this consultation may be submitted electronically or in hard copy by **7 November 2014** to:

Bulk Supply Price DD Consultation
Ofwat
Centre City Tower
7 Hill Street
Birmingham
B5 4UA.
Email: BulkpriceDDconsultation@ofwat.gsi.gov.uk

Information provided in response to this consultation, including personal information, may be published or disclosed in accordance with access to information legislation – primarily the Freedom of Information Act 2000 (FoIA), the Data Protection Act 1998 and the Environmental Information Regulations 2004.

If you would like the information that you provide to be treated as confidential, please be aware that, under the FoIA, there is a statutory 'Code of Practice' which deals, among other things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that we can maintain confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on Ofwat.

If appropriate, please also provide redacted copies. If we consider that disclosure of that information will facilitate the exercise of our functions, and we do not consider that the reasons provided amount to sufficient justification to withhold disclosure, we may decide to disclose the information to other parties in due course. We will not accept blanket requests for confidentiality, or requests not supported by specific and clear reasons.

Next steps

The consultation closes on **7 November, 2014**. Once we have considered responses received, we will make any changes we deem necessary before publishing our final determination.

1. Introduction

1.1 The Water Services Regulation Authority (**Ofwat**) has received applications from Iggesund Paperboard (Workington) Ltd (**IP(W)L**) and United Utilities Water (**UUW**) requesting that it determine the price and indexation of the supply of non-potable water from UUW to IP(W)L at Workington under section 56 of the Water Industry Act 1991 (the Act).

1.2 Ofwat has considered these applications and accepted them as it is clear that IP(W)L and UUW (together, the **parties**) are unable to reach agreement on the relevant terms and conditions.

1.3 Ofwat also considers that making this determination is an administrative priority, having regard to its current portfolio of work and the resources available (and has chosen not to exercise its discretion under section 56(3) of the Act to appoint an arbitrator in this case).

1.4 Since accepting the parties' applications, Ofwat has engaged in a detailed process to gather and assess the information necessary to make a draft determination.

1.5 Ofwat has now assessed the information received from the parties and other relevant information. This document sets out Ofwat's draft determination of the terms and conditions of the supply of non-potable water to be applied by the parties, and adopts the following structure –

- (i) the applicable legal framework (at **Section 2**);
- (ii) the factual background (at **Section 3**);
- (iii) the terms and conditions to be determined (at **Section 4**); and
- (iv) Ofwat's provisional determination of those terms and conditions (at **Section 5**).

1.6 **Appendix 1** highlights the terms and conditions which are the focus of the dispute between the parties and on which Ofwat has made a provisional determination[1].

[1] Section 55(7) of the Act provides: 'The duty of a water undertaker to supply water under this section at the request of any person, and any terms and conditions determined under section 56 below in

1.7 **Appendix 2** contains a list of documents received from the parties and correspondence with the parties since the matter was referred to Ofwat for determination in September 2010.

1.8 **Appendix 3** sets out the chronology of the requests for information (RFIs) which we have issued as part of our investigation and the responses to those RFIs that we have received from the parties.

1.9 The parties' views on key issues are summarised where appropriate in this draft determination (although please note that we do not seek to summarise or deal explicitly with each individual point raised by the parties during the course of the administrative process given the volume of documents and correspondence received).

default of agreement between the undertaker and that person, shall have effect as if contained in such an agreement.' See further paragraph 2.5 below.

2. Applicable legal framework

2.1 Under section 55 of the Act, water undertakers have a duty, where requested, to make supplies of water for "non-domestic" purposes (section 55(2) of the Act), provided that this does not involve incurring unreasonable expenditure or otherwise put at risk the ability of the water undertaker in question to meet any of its existing or probable future obligations to supply water for domestic or other purposes (section 55(3) of the Act).

2.2 Where the relevant parties are unable to agree the terms and conditions on which the supply of water for non-domestic purposes pursuant to section 55 of the Act will be effected, section 56(1)(b) of the Act obliges Ofwat, in default of such agreement, to determine any terms or conditions or other matter which falls to be determined for the purpose of such a supply. That determination is to be made according to what appears to Ofwat to be reasonable.

2.3 Further statutory provisions apply in relation to the charges (i.e. the price) for a supply provided in compliance with section 55 of the Act:

a. In particular, under section 56(5)(a) of the Act, Ofwat may only determine such charges in the context of a determination under section 56(1)(b) of the Act to the extent that, at the time of the request for the supply in question, "**no provision is in force by virtue of a charges scheme under section 143 of the Act in respect of supplies of the applicable description**." In other words, the existence of a charges scheme covering the supply requested under section 55 of the Act precludes Ofwat from determining the charges of that supply for the purposes of any determination under section 56(1)(b) of the Act. Where a charges scheme in respect of the supply in question is in place at the time of the request, then, pursuant to section 56(6) of the Act, it is that charges scheme which will govern the price of that supply.

b. Where there is no applicable charges scheme, then Ofwat is obliged to determine the charges for the supply (just as it is obliged to determine any other terms and conditions for the supply, in the absence of agreement between the relevant parties). In that regard, section 56(5)(b) of the Act provides that, when determining the charges in respect of such a supply, Ofwat must have regard to the desirability of the relevant water undertaker's –

    (i) recovering the expenses of complying with its obligations under section 55 of the Act; and

(ii) securing a reasonable return on its capital.

2.4 Section 55(7) of the Act provides that the terms and conditions ultimately determined by Ofwat in the context of a determination under section 56(1)(b) of the Act in default of agreement between the parties shall have effect as if they were contained in such an agreement.

2.5 More generally, section 2(2A) of the Act provides that when exercising its powers under the Act, Ofwat must do so in the manner which it considers is best calculated to further the consumer objective, to secure that the functions of water undertakers are properly carried out as respects every area of England and Wales, to secure that companies holding appointments under Chapter 1 of Part 2 of the Act are able (in particular, by securing reasonable returns on their capital) to finance the proper carrying out of those functions, and to secure that the activities authorised by the licence of a licensed water supplier any statutory functions imposed on it in consequence of the licence are properly carried out.

2.6 The “consumer objective” as defined in section 2(2B) of the Act is to “protect the interests of consumers, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the provision of water and sewerage services.”

2.7 Section 2(3) of the Act additionally provides that, subject to section 2(2A) of the Act, Ofwat shall exercise and perform its powers and duties under the Act in the manner which it considers is best calculated to (so far as is relevant to the present case) promote economy and efficiency on the part of companies holding an appointment under Chapter 1 of Part 2 of the Act in the carrying out of their functions, to secure that no undue preference is shown and to ensure that there is no undue discrimination in the fixing by such companies of water charges.

2.8 Strictly speaking, the Authority’s section 2 duties do not apply to section 56 determinations and so do not form part of the applicable legal framework in this case. However, generally the Authority has considered the principles which underpin its section 2 duties when it has considered what appears to the Authority to be reasonable when making its determination in this case under section 56 of the Act (provided this is compatible with the applicable legal framework). In some instances, the Authority has concluded that the principle which underpins a relevant section 2 duty should not be taken into account when the Authority makes its determination (for example, section

2(2A)(d) of the Act refers to the Authority acting in a manner which the Authority considers is best calculated to secure that "water supply licencees" are properly carried out – neither UUW nor IP(W)L are "water supply licencees)".

2.9 Ofwat can confirm, for the reasons set out in detail below, that it considers the terms and conditions which it has provisionally determined to be applicable to the supply of water by United Utilities Water to Iggesund Paperboard (Workington) Ltd site are reasonable in all the circumstances of this case, in the context of the applicable legal framework.

2.10 Consistent with section 55(7) of the Act, the terms and conditions ultimately determined by Ofwat shall have effect as if contained in the agreement between UUW and IP(W)L for the supply of non-potable water at Workington. That agreement commenced on 19 October 2009.

3. Factual background

The parties

3.1 United Utilities Water (**UUW**) is a water and sewerage undertaker appointed under the Act. It provides water and sewerage services in the north west of England.

3.2 Iggesund Paperboard (Workington) Ltd (**IP(W)L**) is part of the Holmen Group, one of Europe's leading manufacturers of virgin fibre paperboard which is used in packaging and graphics.

3.3 This determination relates to the supply of non-potable water provided by UUW to IP(W)L at Workington only.

The service

3.4 IP(W)L operates a large paper mill (the **Mill**) at a site near Workington in the northwest of England. The site is located in UUW's water supply area.

3.5 The water used by the Mill is extracted by UUW in a raw form from the River Derwent at Yearl, coarse screened and pumped to a raw water pumping station at Barepot[2]. This water is then pumped to a raw water service reservoir near the village of Seaton. This is known as the **Barepot System**. All assets up to and including the service reservoir are utilised only to provide non-potable water to IP(W)L and two other customers (Eastman Chemical Workington Ltd (**Eastman**) and Pentagon Chemicals (**Pentagon**)). Dedicated mains deliver the water to each customer's premises after the service reservoir.

3.6 IP(W)L is the largest customer on the Barepot System. Between 2007 and 2013, the Mill used an average of 7,881,161 m^3 of non-potable water per annum (or 21,592 m^3 per day)[3]. This represented 95% on average of the total volume of non-potable water supplied during this period.

[2] UUW currently has a licence to abstract 34 ml/day from the River Derwent.

[3] UUW response dated 9 April 2014.

Table 1: Volume of non-potable water supplied by UUW using the Barepot System

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
	m³	m³	m³	m³	m³	m³
IP(W)L	8,052,000	8,429,072	8,570,810	7,052,263	7,554,245	7,628,577
Total	8,512,525	8,850,099	8,974,591	7,493,186	7,999,446	8,089,933

Source: UUW RFI response, April 2014

3.7 According to UUW, while the raw water supply originates from the River Derwent at an abstraction point adjacent to Yearl weir, it is independent of UUW's potable water supply system and therefore does not form part of the West Cumbria Water Resource Zone.

Chronology of key events

3.8 The paper mill was constructed in 1966 under the ownership of Thames Board Ltd (**Thames**), IP(W)L's predecessor[4]. In 1966 Thames entered into a 40 year not-for-profit contract with Cumberland Water Board (the **1966 agreement**) for the supply of treated water from the Derwent River to the Mill. Cumberland Water Board built and operated the extraction point on the River Derwent at Yearl, the treatment works at Barepot and the reservoir at Seaton. Under the 1966 Agreement, the Mill would pay for the investment, periodic re-investment and running costs over a 40 year term. Pentagon and Eastman (through its predecessor Ectona Fibres Limited) were also parties to the agreement.

3.9 In 1983 the Mill was extended which increased its water needs. This resulted in a revised contract between Thames and North West Water (which had taken over the responsibilities of the Cumberland Water Board). The terms of this agreement (the **1983 agreement**) remained largely the same as the 1966 agreement. In 1989, following privatisation of the water industry in the UK, UUW inherited the agreement as a Special Agreement and continued to operate it until its expiry on 31 March 2006.

[4] Iggesund Paperboard took over ownership of the Mill in January 1990 – the date of the company name change.

3.10 Prior to the expiry of the 1983 agreement, IP(W)L met with UUW to renegotiate the terms of the ongoing supply of water to the paper mill. In 2005, IP(W)L also conducted a review of the quality of the water being supplied to it and determined that the treated water being supplied by UUW did not meet its required standards. UUW subsequently provided estimates of the investment that would be required to update the water treatment works at Barepot but IP(W)L considered that the costs were excessive when compared with the cost of constructing its own treatment plant. As a result, IP(W)L decided to build its own water treatment plant, which was completed in June 2006.

3.11 IP(W)L asked UUW to revise its earlier proposal to reflect the fact that the Mill now only required coarse filtered water to be supplied. UUW and IP(W)L then entered into a protracted period of negotiation over settlement of the old supply contract and the terms of a new agreement.

3.12 The parties decided to put an interim agreement in place while a longer term agreement was negotiated (**the 2006 interim agreement**). The term of the interim agreement was initially 1 April 2006 to June 2006 and provided that UUW would supply coarse screened water to IP(W)L for a price of 16.5p/m^3, as opposed to the treated non-potable water it had supplied under the previous arrangements. The interim agreement had the option of being extended on a monthly basis subject to agreement by all parties.

3.13 In addition, in March 2006 UUW sought comments from Ofwat on their proposal to charge the three customers on the Barepot System 16.5p/m3 under the new agreement that was being negotiated. While Ofwat did not comment on the specific tariff proposed by UUW, on 4 September 2006 we did provide guidance on the methodology that UUW could follow in setting its charges[5].

3.14 In subsequent years, the negotiations to put in place a new, longer term agreement continued but there were major sticking points and the parties were unable to reach agreement on a new tariff. By February 2009, the parties claim that negotiations had effectively reached stalemate. UUW then issued a letter terminating the interim agreement on 31 March 2009 and this was followed, on 27 May 2009, by a letter from UUW informing IP(W)L that, in

[5] Ofwat has published the latest guidance on its website:
http://www.ofwat.gov.uk/regulating/casework/investigation/pap_pos_bulksupplydispute

the absence of a special agreement, they would charge them their standard rate for the supply of non-potable water of 32.3p/m^3.

3.15 Following further negotiations, on 19 October 2009 the parties entered into a new 20 year agreement (the **2009 agreement**). This was backdated to 1 April 2006. Under the 2009 agreement, IP(W)L, Eastman and Pentagon are required to pay UUW **14.9p/m3** (as at 2006/07) for the supply of non-potable water. The agreement also contains a provision to increase the price annually in line with inflation, as measured by the Retail Price Index (**RPI**). While IP(W)L agreed to sign this agreement, they continued to express their dissatisfaction with the price terms imposed by UUW on them.

4. Scope of the dispute: the terms and conditions to be determined

4.1 On 21 September 2010 IP(W)L wrote to Ofwat requesting a determination under Section 56 of the WIA91 in relation to:

a) The price that UUW should charge IP(W)L for the supply of non-potable water; and
b) The method of annual indexation for the price of non-potable water.

4.2 Ofwat wrote to both of the parties on 26 January 2011 indicating that we were opening a section 56 determination case.

4.3 Using the numbering of the agreement, the following terms and conditions fall to Ofwat for determination under section 56 of the Act:

a) Clause 7.2.1 which provides that during the term of this agreement, each Company shall pay to UUW on demand the following charges (subject to determination by Ofwat) ..“**14.9 pence per cubic meter for all non-potable water so supplied to that Company commencing 1st April 2006….**”.
b) Clause 7.4.1 which provides that “**the Charges paid by the Company for non-potable water shall be adjusted annually in line with RPI**”.

5. Our (draft) determination of the disputed terms and conditions

5.1 This section sets out Ofwat's provisional determination of the price terms for the supply of non-potable water from UUW to IP(W)L, including the method of annual indexation for the price.

5.2 It is important to note that, in making this draft determination, Ofwat has considered these terms and conditions both separately and 'in the round' (i.e. in order to ensure that the price terms are appropriate to the service being provided).

5.3 Our draft determination in respect of clauses 7.2.1 and 7.4.1 of the agreement, which provide for the charges to be imposed for the supply, is set out below, in which we apply our framework for resolving pricing disputes involving bulk supplies.

The price of the supply

Views of the parties

Iggesund Paperboard (Workington) Ltd

5.4 In its letter to Ofwat of 21 September 2010[6], IP(W)L set out its position on what it believed a reasonable price should be and the factors that Ofwat should take into account in reaching its determination.

5.5 Whilst acknowledging Ofwat's responsibility to ensure that no customer is given an advantage to the detriment of others, IP(W)L argue that:

- as the Barepot System supplies water to only three industrial customers, it is completely closed. There is, therefore, no risk that any other customer would be disadvantaged if IP(W)L, Eastman and Pentagon have their water supplied at "a reasonable price"[7];

[6] Letter from IP(W)L to Ofwat dated 21 September 2010 formally seeking a determination of the price of supply for non-potable water to the Workington Mill.
[7] ibid

- the practice of relating a price to UUW's standard non-potable tariff would be an inappropriate response as the water is completely un-treated and volumes consumed are very large, giving rise to significant economies of scale; and
- as UUW inherited the plant at no cost to UUW (as the costs had been fully-funded under previous agreements), a bottom-up approach to setting the reasonable price should be used in this case.

5.6 IP(W)L contend, therefore, that the determined price should reflect the special characteristics of the Barepot System and that the reasonable costs of operating and maintaining the exclusive infrastructure used for providing this service should be the starting point for calculating this price. According to IP(W)L estimates, based on cost figures supplied by UUW under previous agreements, the real cost of supplying water to the three customers on the Barepot system is 4.41p/m^3 (based on 2005/06 prices).[8]

5.7 IP(W)L also point out in their letter to Ofwat that the "excessive charges for water" that it incurs is having a detrimental effect on their business and is adversely impacting its international competitiveness. As a result, they have felt it necessary to consider alternative water supply options. To this end, they secured their own abstraction license along with an old extraction point and pumping plant (the **Cloffocks System**). They also commissioned consultants (Anglian Water Optimiser) to examine the costs involved in bringing the plant into use to supply the Mill. Based on their initial examination, IP(W)L argued in their 2010 letter to Ofwat that if they chose to self-supply and operate their own plant in place of the UUW contract that "**over the remaining 16 years of the contract, this represents an average, annual saving to us of nearly £1 million. This is a significant saving to a company such as ours and there is little doubt that we will take this step if this attempt to determine a reasonable price and terms under the existing contract fails.**"

[8] IP(W)L based this estimate on UUW's declared costs for operating and maintaining the Barepot system during 2005/06. These costs reflected the plant running as a full WTP with a full-time operator, but once IP(W)L had commissioned their own WTP Barepot was modified to operate as a simple pumping station with a visiting operator and remote monitoring. IP(W)L's estimate of the cost of supply includes an adjustment to reflect this change. They also made adjustments to a number of the other cost elements, including a reduction in costs associated with maintenance and power. They also reduced the cost associated with the abstraction license – on the basis that the current licences costs (which are passed on to the customers by UUW) relate to a significantly higher abstraction volume than is actually used by the customers on the System.

United Utilities Water

5.8 In its first response to Ofwat[9], UUW outlined its position that the price for supplying non-potable water to IP(W)L would need to be at least 14.6p per m^3 at 2006/07 prices to ensure that reasonable costs can be recovered and to ensure that the company is able to finance its functions in respect of providing services to customers.

5.9 In determining the most appropriate price to apply for this supply, UUW indicated that they had considered a number of principles, including:

- Condition E of the Instrument of Appointment[10];
- customer satisfaction; and
- avoiding stranded assets.

5.10 UUW also noted that as part of this process, it had consulted with the Ofwat Tariff's Team to try to ensure that any potential issues (such as compliance with Condition E) were addressed prior to providing the customer with a price. Following discussion with Ofwat to facilitate the development of a pricing model, UUW had adopted a two tier approach to set the tariff which involved using both a top-down and a bottom-up assessment of costs.

5.11 Under the top-down approach, UUW's starting point was the cost data it had provided to Ofwat as part of its June Return for the period 2005/06[11]. These costs were allocated to the Barepot System on a category by category basis[12], using either actual or pro-rated costs. Categories of expenditure that would not apply to the Barepot supply were excluded to calculate the appropriate level of discount against the standard tariff. Under this top-down approach, the estimated tariff was 17.5p/m^3 (at 2006/07 prices).

9 UUW RFI response 27 May 2011.

10 Under Condition E, the Appointee is required, in fixing or agreeing charges, to ensure that no undue preference is shown to, and that there is no undue discrimination against, any class of customers or potential customers.

11 Appendix N, UUW RFI response, 27 May 2011.

12 The categories used included employment cost, power, hired and contracted services, materials and consumables, services charges, other direct costs, and general and support expenditure.

5.12 Under the bottom up approach, UUW estimated the tariff using forecasts for operating and capital expenditure associated with the Barepot System for the 20 year period starting with 2005/06.[13]

5.13 The estimates for operating expenditure included both direct and indirect costs. The direct cost estimates were based primarily on historical information while estimates for indirect costs were based on an average from the previous three years' June Return data.

5.14 In relation to capital expenditure, the expenditure over the first three years of the agreement reflected the changes to the Barepot System which UUW had undertaken as a result of the switch from the supply of treated to coarse screened untreated non-potable water. UUW noted that it had incurred a cost of £1,394,000 as a result of this change[14]. The estimates used were, according to UUW, based on the most up to date estimates of the cost of these changes at the time. A forecast was then included for anticipated maintenance spend across the 20 year period of the agreement. A rate of return of 7.3 per cent (pre-tax, as consistent with that determined by Ofwat for the period 2005-2010) was applied to a calculated "Regulatory Capital Value" of both the new and existing assets.

5.15 Using the forecast operating expenditure spend and the capital allocation for each of the twenty years of the agreement, UUW then calculated the tariff that would be necessary to recover all identified costs. Under this approach, the estimated tariff was 14.6p/m^3 at 2006/07 prices.

[13] Appendix O, UUW RFI response, 27 May 2011.

[14] UUW RFI response, 27 May 2011. The cost incurred by UUW was associated with the following work:

- Yearl Intake Pump House building and electrical equipment refurbishment
- New raw water abstraction flow meters
- Refurbishment of existing clarifiers for use as break-pressure tanks
- High-lift pump house building and electrical equipment refurbishment
- New surge suppression vessels on high-lift mains
- Security and telemetry improvements at Seaton Service Reservoir
- Repair to air valves and chambers on distribution mains to customers
- New supply meters at customers' boundaries.

5.16 In their response to Ofwat, UUW point out that as the gap between the results generated using both approaches was relatively small[15], this provided them with reassurance that the methodologies adopted gave a fair price for the service being provided, and was also broadly consistent with the way that other customers paid for their water. **It was, therefore, on this basis that UUW had determined the tariff of 14.9p/m3 which was included within the 2009 Agreement.**

5.17 While both parties agree that the tariff should enable UUW to recover the costs incurred in supplying customers on the Barepot System, and although the model used by UUW to calculate the tariff does reflect the bottom-up costs of providing the specific service to customers on the System, IP(W)L nevertheless, disputes the nature and extent of the costs that UUW has included in its model.

5.18 UUW subsequently provided Ofwat with updated estimates of the tariff using both the top-down and bottom up models[16]. UUW noted that they had updated the top-down model using data from the June 2010/11 Return and had also changed the methodology since the previous model was developed due to the changes in the June Return information. Using this updated approach, UUW produced a top-down tariff estimate of 34.7p/m^3 at 2010/11 prices. UUW also updated its bottom-up model. This resulted in a bottom-up tariff of 13.9 p/m^3 at 2010/11 prices.

Our framework for resolving pricing disputes involving bulk supplies

5.19 The present case involves a request to determine the charges to be applied to the supply of non-potable water to IP(W)L at Workington, i.e. the price of the supply.

5.20 In order to ensure consistency in our approach to resolving pricing disputes involving bulk supplies, and to minimise any potential inconsistencies with respect to future charging rules being developed for the water sector, we have published a framework for dealing with such disputes, including price determinations under section 56 of the Act ("**the framework**")[17]. This sets out

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[15] UUW's RFI response to Ofwat dated 27 May 2011.

[16] UUW;s RFI response to Ofwat dated 20 April 2012.

[17] http://www.ofwat.gov.uk/regulating/casework/investigation/pap_pos_bulksupplydispute

the ordinary approach we will take to assessing costs in relation to pricing disputes, and when we will depart from that approach.

5.21 In the framework, we explain that Ofwat considers that the best approach for resolving current bulk supply pricing disputes is to use the price being disputed as a starting point for our determination. We term this the "business-as-usual" approach. This would normally involve setting charges on the basis of a top-down approach using average accounting costs (AAC) as this approach generally provides a practical and proportionate mean of reflecting the cost of provision, and is consistent with what has been, to date, the mode of cost assessment in the water sector.

5.22 In this case, the price being disputed or the "business as usual" price has been derived using a bottom-up approach to reflect the specific local costs of the Barepot System. The framework also allows for this situation however, as it recognises that there may be circumstances where it is appropriate to depart from the "business as usual" price, because failure to do so could give rise to material adverse effects.

5.23 In applying the framework we, therefore, consider whether the price being disputed:

a. is appropriate given the geographic nature of the supply;
b. would give rise to competition concerns; or
c. would give rise to efficiency concerns.

These are referred to as the "three tests".

5.24 The application of the framework provides Ofwat with a means of addressing and balancing the key tests, within the context of the applicable legal framework. For example the geographic test allows us to have regard to the serving undertaker's ability to recover the expenses of complying with its obligations under section 55 of the Act and securing a reasonable return on its capital. We do this by testing whether the disputed price appropriately reflects the way in which the relevant services are provided and thus, as far as possible, reflects the costs incurred by the company providing the relevant services.

5.25 The competition test allows us to consider the desirability of facilitating effective competition within the water and sewerage industry. We do so by testing whether the disputed price raises any competition concerns that might restrict or prevent the development of effective competition in the industry.

Where this is the case we would look to deviate from the disputed price to one which does not raise such concerns.

5.26 The efficiency test allows us to consider the benefits of securing the efficient use of resources or the efficient supply of water. We do so by testing that the disputed price does not result in an inefficient outcome such as a price that does not encourage the efficient use of water.

5.27 It is also important to note that while we are currently determining pricing disputes, there is also work being undertaken in relation to developing guidance and rules applicable to future charges. The Water Act (2014) provides for Defra and Welsh Ministers to issue guidance on charging, and for Ofwat to issue charging rules (having regard to this guidance) for charges imposed by companies – including some bulk supplies, connection charges and charges schemes.[18]

5.28 This might result in a situation where charging terms for current determinations are set on a different basis from those set for customers following the finalisation of the guidance and rules on charging. Accordingly, it is important that the framework we use to make determinations to resolve pricing disputes now is clear and consistent, but also flexible to future price changes.

5.29 In that regard, the framework envisages that we should make provision for the ability to revisit price determinations in the future should that become necessary. To facilitate this, a "trigger" mechanism will be included in the supply agreement to allow the parties to renegotiate the price in the event of a material change in Ofwat's charging policy after the date of the determination, and to refer the matter back to Ofwat if no agreement could be reached. We consider this issue at section (iv) below.

5.30 Together with the framework, in the interests of consistency, we have also considered "Bulk supply pricing – a statement of our policy principles (Ofwat, 28 February 2011)[19] to guide us in making our provisional determination in

[18] The Act received Royal Assent on 14 May 2014
http://www.legislation.gov.uk/ukpga/2014/21/contents/enacted

[19] http://www.ofwat.gov.uk/competition/inset/pap_pos110228navbulksupply.pdf - this document applies to bulk supply determinations made under sections 40 and 40A of the Act.

this case, in the context of the applicable legal framework. This means that we have sought to determine a price which:

- reflects the costs reasonably associated with the provision of the relevant services;
- facilitates the efficient use of resources and effective competition within the water supply industry, where appropriate; and
- is consistent with the discharge of the relevant duties and obligations of the relevant supplier.

Applying the framework to the present case

5.31 This section sets out how we have applied the framework to assess the costs of the supply to IP(W)L at Workington, and to consider whether there are any material adverse effects that would justify deviating from our preferred approach to determine the cost of provision to IP(W)L, by reference to the "three tests" set out in the framework. Having determined a price for the supply that we regard as reasonable, we then set out how we have ensured that there is a mechanism to minimise any potential inconsistencies with our future approach to charging.

5.32 In applying the framework, we have considered the arguments and evidence put forward by the parties in the context of their requests for a determination under section 56 of the Act. The chronology of our requests for information (RFIs) from the parties is set out in Appendix 3.

5.33 We also commissioned studies from a number of external consultants to help to inform our deliberations; to provide an independent assessment of the assumptions made by the parties; and to assist us in our analysis of the facts provided by them. This included:

- input in relation to the development of an analytical framework and initial modelling to assist in understanding the different approaches adopted by the parties. This was undertaken by Europe Economics; and
- an assessment of the most appropriate cost of capital to be used in this and other price determination cases involving supply to large industrial customers. This was undertaken by Grant Thornton. an independent engineering review to verify the modelling assumptions and inputs used by the parties as part of their assessment of the costs of supply. This was undertaken by PA Consulting and included a detailed assessment of the capital maintenance and operating costs of the assets used by UUW to

supply customers on the Barepot System and the assumptions underlying the model used by UUW in setting the tariff. PA Consulting also reviewed the information provided by IP(W)L in relation to the costs of self-supply using the Clockoffs System.

Test 1: Geographic nature of supply

5.34 As set out above, in applying the framework the price being disputed or the "business as usual" price is taken as the starting point for our determination. In most cases this would have been derived using average accounting costs, but our framework also recognises that in some circumstances it is more appropriate to use local accounting costs (LAC) as these more closely reflect the specific geographic nature of the supply, such as a discrete network to supply only a specific customer, and the relevant costs that underlie the price being disputed.[20]

5.35 In this case, the Barepot System is a discrete system used to supply non-potable water to three non-domestic customers only. In its submissions to Ofwat, UUW has confirmed that all assets of the Barepot System, up to and including the service reservoir, are utilised exclusively to provide these customers. Dedicated mains are then used to deliver the water to each customer premises after the service reservoir.

5.36 UUW has also confirmed that although the supply is geographically located within the West Cumbria area, the River Derwent abstraction is independent of UUW's potable water supply system and therefore does not form part of the West Cumbria Water Resource Zone. In addition, there is no transfer of water between the West Cumbria Zone and any other zone or any other water company.

5.37 In light of this, and given the discrete nature of the supply to IP(W)L and the other customers on the Barepot System, Ofwat considers that a LAC approach reflects more closely the relevant costs of water provision to IP(W)L and therefore it is appropriate for UUW to adopt a LAC approach to estimate the tariff in this case.

[20] The circumstances in which the different approaches to cost assessment might apply are discussed in Bulk supply pricing – a statement of our policy principles: http://www.ofwat.gov.uk/competition/inset/pap_pos110228navbulksupply.pdf

Calculating the Tariff using UUW's Bottom-up Model

5.38 UUW has provided Ofwat with a detailed model[21] setting out the assumptions that it had included to determine the tariff to be charged under the 2009 agreement. This model, and subsequent revisions and updates provided by UUW, were reviewed from an engineering perspective by PA Consulting Group (PA). PA's remit was to assess the capital and operating expenditure associated with the Barepot System with a view to either validating the costs which UUW had included or providing alterative cost estimates where PA found that UUW's cost estimates could not be supported or sustained.

5.39 PA's analysis highlighted a number of issues with the UUW model. In particular, they challenged a number of UUW's assumptions surrounding planned maintenance and also the scale of some of the costs allocated to the Barepot System.

5.40 PA also challenged the approach that UUW had adopted in relation to cost recovery and developed a number of alternative scenarios to illustrate the impact of varying UUW's assumptions. PA noted, for example, that the UUW model assumed that all asset expenditure is recovered during the contract period, irrespective of the life of the asset. They noted that this may be a financially prudent strategy for UUW as it helps to minimise the risk of UUW being left with unrecovered cost should it find itself with stranded assets if IP(W)L failed to renew the contract. However, they also noted that this approach to cost recovery can have an impact on the cost of supply to customers. The implications of this to our price determination are discussed below[22].

5.41 In addition, PA also considered the impact on UUW's model of using a revised weighted average cost of capital (WACC). The revised estimate was produced by Grant Thornton (GT) as part of a parallel piece of work which Ofwat commissioned. Specifically, GT considered whether UUW's company-wide cost of capital would appropriately compensate UUW for the additional

[21] UUW RFI response, April 2011. Appendix O, Cost allocation – bottom-up,

[22] In general, however, Ofwat is of the view that it is reasonable for UUW to recover the costs of the infrastructure used for the supply over the life of the contract rather than the life of the assets, as this is consistent with the use of local accounting costs to determine the price and also, given the discrete nature of the Barepot System, would ensure that only those customers that are benefiting from the investment in the infrastructure, are exposed to any risk should the assets become stranded.

"non-diversifiable[23]" risks incurred from supplying water to a large user such as IP(W)L, so that an activity-specific cost of capital would be more appropriate in this price determination case.

5.42 In particular, GT note that demand from large users such as IP(W)L is generally more variable in response to fluctuations in general economic conditions when compared to demand for potable water from households. In an industry characterised by the presence of substantial fixed costs, greater demand volatility reduces a suppliers' certainty of cost recovery. Given that UUW's major source of revenue derives from supplying potable water to households, which has a more stable and predictable pattern of demand, UUW's regulated cost of capital might not sufficiently compensate for the additional "non-diversifiable" risks that UUW incurs in supplying IP(W)L via the Barepot System.

5.43 In their report, GT conclude that the differences in "non-diversifiable" risks are sufficiently material that it would be appropriate to deviate from UUW's company-wide cost of capital. GT go beyond this observation and estimate an activity-specific cost of capital for the specific activity of supplying water to large industrial customers. In terms of methodology, GT uplift the 3.85% company-wide cost of capital figure calculated by Ofwat's for the forthcoming PR14 price control[24] and derive an activity-specific cost of capital that better reflects the "non-diversifiable" risks incurred by UUW in supplying large users such as IP(W)L.

5.44 We note that GT's activity-specific cost of capital estimation is forward looking. The starting point of their analysis, the PR14 price control cost of capital, is based on Ofwat's best current view of the future impact on the sector's cost of capital of the new forthcoming regulatory regime. This approach not only ensures that the cost of capital is appraised consistently across the sector, but that it is also related to Ofwat's best current views on the cost of equity, the cost of debt and gearing levels for an incumbent company like UUW going forward into the next price control period.

5.45 Therefore, in this determination, we use GT's activity-specific cost of capital estimation (based on a central case figure of 4.81%) as it is the best current

[23] Investors should only be rewarded for risks that cannot be "diversified" away. They are also called "systematic" risks.
[24] See "Setting price controls for 2015-20 – risk and reward guidance", Ofwat, January 2014.

estimation available to Ofwat reflecting the impact of the additional "non-diversifiable" risks incurred by UUW in supplying IP(W)L via the Barepot System. Further, this approach ensures consistency in the appraisal of the cost of capital across the sector and under the new regulatory regime.

5.46 Using these alternative assumptions, PA re-calculated the cost of supply using UUW's bottom-up model. In addition, they also incorporated updated figures provided by UUW on the volumes of water supplied to customers on the Barepot System to produce updated estimates of the price per cubic metre needed to cover these costs. Their findings, which are reported in 2011/12 prices, are summarised in the following table.

Table 2: Calculating the cost of supply using UUW's bottom-up model

Scenario	Original Volume p/m^3	Original Volume with WACC p/m^3	Revised volume with WACC p/m^3
UUW Base model	13.9	13.5	11.3
UUW Base model with revised Biogas capex	13.2	12.8	10.7
Adjust all capital maintenance to recoup over full asset life	12.3	11.8	9.9
Review each capital maintenance item and apply a likelihood factor	12.5	12.0	10.0
Adjust all capital maintenance to recoup over full asset life and apply the likelihood factor above	12.1	11.6	9.7
Retain major asset refurbishment only; apply full asset life. For all other maintenance provide a standard maintenance allowance of £20,000 with periodic capital refresh	12.3	11.9	9.9
Retain major asset refurbishment only; **apply full asset life**. For all other maintenance provide a standard maintenance allowance of £20,000 with periodic capital refresh; enhance maintenance to elongate asset life to contract end.	12.3	11.9	9.9

Scenario	Original Volume p/m^3	Original Volume with WACC p/m^3	Revised volume with WACC p/m^3
Retain major asset refurbishment only; **apply contract period**. For all other maintenance provide a standard maintenance allowance of £20,000 with periodic capital refresh; enhance maintenance to elongate asset life to contract end.	12.7	12.3	10.3

Source: PA Consulting

5.47 The engineering review undertaken by PA has raised questions about a number of the assumptions which were included in UUW's original bottom-up model. While UUW subsequently provided Ofwat with a revised model and a revised tariff estimate (UUW's base model in PA's report) PA have also highlighted a number of other issues that should be taken into account in assessing the cost of supply and in determining the tariff to be charged to customers. These include:

- the need to update the model to reflect the revised figures provided by UUW on the volume of water consumed by customers on the Barepot System;
- the need to use a revised WACC to reflect the specific risk profile of supply to large industrial customers. This is also consistent with the approach adopted by Ofwat in other price determination cases; and
- the appropriateness of the capital maintenance and asset refurbishment expenditure included by UUW and the way in which this is recovered over the life of the contract rather than the life of the asset concerned.

5.48 Having considered the information provided by UUW in response to our RFI's and the results which have emerged as a result of PA's independent engineering review, **we consider that a price of 10.3 p/m3 at 2011/12 prices would be needed to enable UUW to cover the cost of supply for customers on the Barepot System**.

Test 2 - Competition issues

5.49 The second test set out in our pricing principles is whether we should consider alternative pricing methodologies due to 'material competition issues'. Our policy framework for price determinations states that:

> **"Having carried out the geographic cost reflectivity test, we may want to depart from the decision arrived at in that test, if we had reason to believe that using that approach would raise material competition issues. This would involve identifying where competition issues may arise from use of the appropriate approach determined by the geographic cost reflectivity test. Where these issues are material, a revised charge would be set on an alternative basis consistent with competition law."**

5.50 The aim of this test is to consider whether setting prices based on the approach determined in test 1 above (i.e. LAC) results in a distortion of competition. While the focus of this test will often be on issues that distort competition downstream, these particular competition concerns do not seem to be present in this price determination. However, we also need to consider whether setting prices based on UUW's LAC would prevent efficient entry at this level of the value chain.

5.51 We would not want to restrict competition by setting a price that prevented the most efficient company from providing the service. The most efficient outcome would be for the company with the lowest forward looking costs to provide the service. That is, efficiency will be maximised when the service is provided by whichever company can do so by incurring the lowest costs in the future (given any assets or infrastructure that each company already has in place).

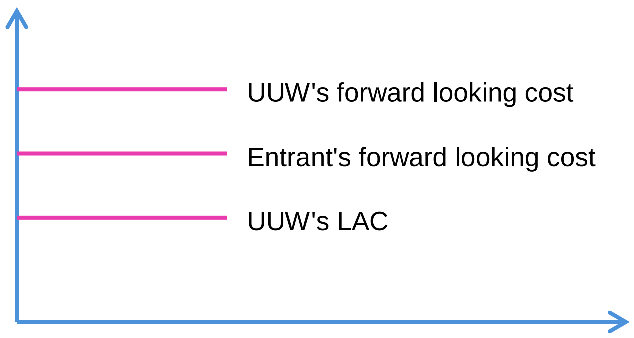
5.52 For any company, forward looking costs are the impact on a company's future costs of undertaking versus not undertaking a certain activity. For a company already providing a service (such as UUW providing water through the Barepot System), this will reflect the costs it would avoid from ceasing to provide the service (termed long run avoidable costs). For a company that is not already supplying a service (i.e. a potential new entrant), its forward looking costs will reflect the additional costs it will incur from starting to provide the service in question (termed long run incremental costs).

5.53 Test 1 above set out that using UUW's LAC is likely to be an appropriate cost measure. However, setting prices equal to LAC could also have the potential to restrict competition. For example, if a new entrant's forward looking cost is lower than that of UUW[25], it would be more efficient for it to supply water to these customers. In this case, we would want to set prices that encourage this firm to enter the market.

5.54 However, if we set a price equal to UUW's LAC of the Barepot System, and this price is below the potential entrant's forward looking costs (i.e. long run incremental cost), it could prevent efficient entry. The new entrant would be unable to compete with a price equal to LAC, and would be unable to enter the market profitably, despite being more efficient than UUW in this case.

5.55 Figure 1 below demonstrates this example by showing the levels of cost at which such a competition concern could arise from setting prices based on UUW's LAC.

Figure 1



5.56 In the diagram, a price based on UUW's LAC undercuts the entrant's costs, making it unprofitable to enter. This is despite the entrant being more efficient than UUW, due to its lower forward looking costs. In this example, taking an LAC-based approach to setting prices can result in a more efficient company being excluded from the market.

5.57 If we thought that setting prices equal to LAC would prevent efficient entry in this case, we would consider moving away from an LAC-based methodology. However, in this price determination, we do not believe that setting prices based on LAC would restrict competition from a more efficient company, because based on an analysis of the cost information provided by UUW it's LAC is higher than its forward looking cost.

[25] As evidenced by its long run incremental costs being lower than UUW's long run avoidable costs.

5.58 The outcome of test 2 is that there are no material competition issues that would warrant moving away from setting prices equal to LAC.

Test 3 - Efficiency issues

5.59 The final test considers whether there are additional efficiency issues that would warrant considering an alternative methodology. Our policy framework for price determinations states that:

"Having considered the materiality of any competition issues, there could be further justification for departing from the costing methodologies arrived at following the first two tests. If, for example, the preferred pricing option from the first two steps would result in an inefficient outcome, it may be preferable to consider other pricing methodologies."

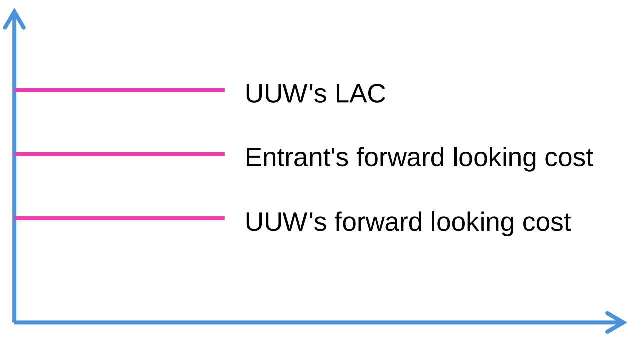
5.60 The aim of this test is to determine whether using the pricing methodology preferred after applying tests 1 and 2 could result in an inefficient outcome, which **enables inefficient firms to enter** the market profitably. We note that this test is different to test 2 of competition issues, which concerns a price **preventing efficient firms from entering** the market.

5.61 As discussed above, the most efficient outcome is for the company with the lowest forward looking costs to provide the service, no matter whether it is a new entrant or an existing supplier. Tests 1 and 2 concluded that LAC is the most appropriate pricing methodology. However, setting an LAC-based price could potentially result in inefficient entry, and also result in a duplication of assets as a second firm of inefficient outcome.

5.62 The following example sets out how setting price equal to LAC could result in inefficient entry: if an entrant's forward looking costs are higher than UUW's forward looking costs, new entry would be inefficient (as UUW could continue to supply water through the Barepot System at lower cost). However, if the same entrant's costs are lower than the LAC based price, inefficient entry could occur. That is, firms may be able to enter the market profitably, despite being less efficient than UUW.

5.63 Figure 2 below demonstrates this example by showing the cost levels that could result in this inefficient outcome.

Figure 2



5.64 In this example, an entrant can undercut the LAC-based price, making it profitable to enter. This is despite the entrant being less efficient than UUW, due to its higher forward looking costs. As a result, setting prices based on LAC can potentially result in inefficient entry.

5.65 In this case, IP(W)L is actively considering the option of by-passing the Barepot System and using its own infrastructure (the Cloffocks System) to supply non-potable water to the Mill. We, therefore, consider the efficiency implications of IP(W)L supplying itself in the same way as we would consider any other form of entry.

5.66 As part of its independent engineering review, PA Consulting were also asked to examine the information which IP(W)L had provided to Ofwat on the cost of supplying water using the Cloffocks System. As with the review of UUW's cost assumptions, PA were asked to review the assumptions which IP(W)L had included in their model of the cost of self-supply; to validate those costs where appropriate; and to recommend alternative cost estimates where PA considered that those costs were either over or underestimated.

5.67 As with the UUW model, PA challenged a number of the assumptions which underpin the IP(W)L model and have recommended the use of alternative cost estimates to reflect revised capital build, upgrade and operational expenditure. They also re-calculated the IP(W)L model using the revised water consumption volumes provided by UUW and also to take account of the recommendation contained in the Grant Thornton report that a specific self-supply cost of capital of 4.81% (central case) should be used.

5.68 In their report, GT do not find any material differences between the "non-diversifiable" risks incurred by UUW in supplying IP(W)L via the Barepot System, and the "non-diversifiable" risks incurred by IP(W)L in self-supplying.

Under both options, the relevant “non-diversifiable” risks were considered to be similar as both activities are characterised by the presence of substantial fixed costs and subject to virtually the same volatility. While it is true that under a self-supply option IP(W)L might incur an additional risk because it relies on a single abstraction point and does not own an upstream water distribution network, this risk can be equally managed under both options by securing secondary supplies. As a result, it was felt that the activity-specific cost of capital for IP(W)L’s self-supply option was unlikely to be materially different with respect to the activity-specific cost of capital for UUW. Further, it was noted that the self-supply option should be appraised using an activity-specific cost of capital capturing the risks involved in supplying water to large users. Therefore, it would also be incorrect to appraise the self-supply option using IP(W)L’s company-wide cost of capital, a company whom mainly operates in the paperboard market.

5.69 The following table summarises the resulting estimates of the notional price per cubic metre that would be needed to cover the costs of self-supply. All figures are reported in 2011/12 prices.

Table 3: Estimates of notional price needed to cover costs of self-supply

Scenario	Original Volume p/m³	Revised volume p/m³
IP(W)L Base model	12.2	10.2
IP(W)L Base model uninflated	10.5	8.8
IP(W)L Base model uninflated, amended to contract period	11.3	9.5
Revised capital build and upgrade (uninflated/contract period)	12.5	10.5
Revised capital build, upgrade and operational expenditure (uninflated/contract period)	12.6	10.6
Revised capital build, upgrade and operational expenditure, with 4.81% interest (uninflated/contract period)	10.6	8.9

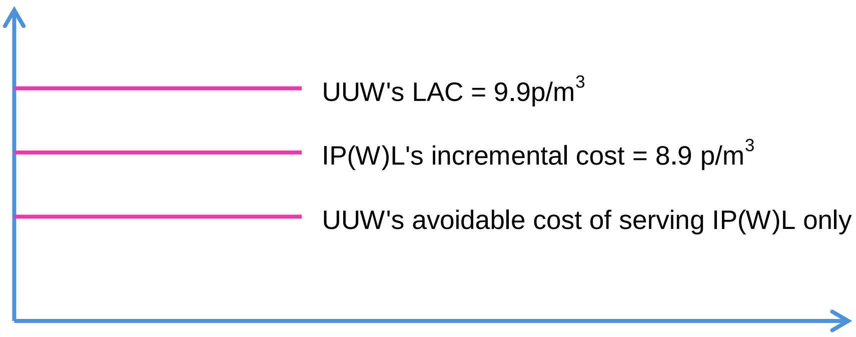
Source: PA Consulting

5.70 Having considered the information provided by IP(W)L in response to our RFI's and the findings which have emerged as a result of PA's independent engineering review of the cost that IP(W)L is likely to incur in order to self-supply, **we consider that a notional price of 8.9 p/m3 at 2011/12 prices would be needed to enable IP(W)L to cover its self-supply costs**.

5.71 Applying the logic set out in the example above, if IP(W)L can supply itself for less than the LAC-based price set by UUW, it is likely choose to do so. As shown in Figure 3 below, IP(W)L's self-supply cost (8.9 p/m^3) is lower than the LAC of the Barepot System.[26] This is the case no matter whether UUW recovers the capital maintenance cost it incurs in operating the system over the full life of the assets (9.9 p/m^3) or over the contract period (10.3 p/m^3), as shown in Test 1. As a result, IP(W)L would be likely to choose to self-supply if Ofwat were to set prices equal to UUW's LAC.

5.72 As explained already, however, in applying our framework we also need to avoid setting prices that result in inefficient entry. That is, we want to encourage companies to enter only where they face lower forward looking costs than UUW. As in the above example, if IP(W)L's forward looking costs are greater than UUW's forward looking costs, entry would be inefficient in this case. Therefore, to avoid an inefficient outcome, we would need to set prices at a level which are no higher than IP(W)L's cost of self-supply.

Fig 3



5.73 On the basis of the information provided to Ofwat by the parties and the work undertaken by PA Consulting and Grant Thornton, and having applied our

[26] Europe Economics' initial modelling shows that UUW's avoidable cost of serving IP(W)L is well below both UUW's LAC and IP(W)L's incremental cost.

framework for resolving pricing disputes involving bulk supplied, **we provisionally determine that the price for the supply of non-potable water from UUW to IP(W)L should be 8.9 p/m3 at 2011/12 prices. When re-based to 2006/07 prices to ensure consistency with the 2009 Agreement, this equates to a price of 7.5 p/m3**.

Provision for revisiting the price of the supply

5.74 The Water Act 2014 provides for Ofwat to issue rules about certain types of charges that water and sewerage undertakers make. It also provides for the Secretary of State and the Welsh Ministers to issue guidance on charges to which Ofwat must have regard when making rules.

5.75 Although such rules will not directly apply to the determination of charges under section 56 of the Act, our approach to assessing relevant costs and determining reasonable charges may be different in the future following the finalisation of ministerial guidance and charging rules. Any inconsistency of approach between current and future determinations could potentially result in harm being caused to customers. We also do not want to make long-term determinations that are inconsistent with the key principles underlying our relevant statutory duties or any future approach under new charging rules.

5.76 Our published framework for resolving pricing disputes involving bulk supplies therefore sets out our policy to make provision for the ability for us to revisit our price determinations in the future as necessary. Depending on the nature of the determination, we said that this could be achieved by either:

- limiting the duration of the agreement; or
- including a ‘trigger’ mechanism in the agreement that would allow the parties to renegotiate the price, or refer it to Ofwat in the absence of agreement, if, for example, Ofwat’s policy materially changed following the date of the determination.

5.77 In this case, we do not consider that it is reasonable to limit the duration of the agreement by setting a fixed term.

5.78 We therefore propose to include a ‘reopener’ provision in the agreement to allow the parties to renegotiate the determined price if there is a material change in Ofwat’s charging policy after the date of our determination or, in the absence of agreement, for either or both to refer it to Ofwat for re-determination. This is reflected (along with the price that we have determined to be reasonable for the supply and the relevant provisions on indexation) in

Clause 7.2.1 of the agreement between the parties at Appendix 1 of this draft determination.

Annual Price Inflation

5.79 In addition to its concern about the level of the tariff, IP(W)L also argue that the application of the full RPI to the price year-on-year is “wholly unsatisfactory”. They argue that the only reasonable approach to price inflation is to use a realistic indicator and apply it only to those aspects of the price breakdown that are subject to inflation. In their view, the selection of RPI by UUW does not appear logical and contend that the Consumer Price Index (CPI) would provide a more realistic characterisation of consumer behaviour as it excludes mortgage interest and is a more comparable measure of inflation internationally. Hence, they argue, the CPI should be used in this type of price formula and not the RPI.

5.80 IP(W)L also argue that as the principle of indexation is intended to compensate the supplier for unavoidable increases in cost throughout the life of the contract, and as the capital repayment element of the price is not subject to inflation, it should not attract any annual indexation. As this element, they argue, represents around half of the total, then “it follows that an appropriate indexation for the contract should be 0.5 x annual CPI”.

5.81 In relation to the most appropriate mechanism to index the price, UUW in their response to Ofwat, argue that RPI inflation represents the closest match to the company’s costs, both operating and capital expenditure, and is also consistent with Ofwat’s assessment of the cost of capital. They also pointed out that as site specific costs have been assessed it makes sense for the base price to be indexed by RPI for the duration of the contract, rather than additionally reflecting “K factors” which take account of movements in average costs throughout UUW. In order to maintain consistency with indexation applied in other parts of UUW’s charges, they proposed that prior year-on-year November RPI be the basis of indexation.

5.82 Noting the caveats identified by the IP(W)L, we consider RPI as an appropriate indexation for the price of non-potable water in the present case. RPI inflation reflects uncertain and uncontrollable input price risks faced by the company, especially after site specific costs are accounted for in the price models. In the PR14[27], RPI indexation is applied to the allowed revenue and the cost of capital for wholesale controls, which reduce companies' exposure to the risk of input price increases (including the costs of index linked debt, allowing continued choice over financing options). The use of RPI aligns the price indexation of non-potable water bulk supply to other parts of the UUW's business, and we do consider IP(W)L's argument is sufficiently compelling to deviate from RPI in this case..

Water Services Regulation Authority
October 2014

[27] http://www.ofwat.gov.uk/pricereview/pr14/pap_pos201307finalapproach.pdf

Appendix 1: Determined Terms and Conditions

Using the numbering of the agreement, the following terms and conditions fall to Ofwat for determination under section 56 of the Act:

a) Clause 7.2.1 which provides that during the term of this agreement, each Company shall pay to UUW on demand the following charges (subject to determination by Ofwat) ..“**14.9 pence per cubic meter for all non-potable water so supplied to that Company commencing 1st April 2006. …**”
b) Clause 7.4.1 which provides that “**the Charges paid by the Company for non-potable water shall be adjusted annually in line with RPI**”

For the reasons set out in this document, we have provisionally determined that Clause 7.2.1 should be altered to refer to “**7.5 pence per cubic meter for all non-potable water so supplied to that Company commencing 1st April 2006**.

We do not propose to change Clause 7.4.1.

We also propose to include the following provision in the agreement to enable the parties to re-open negotiations in the event of a material change in Ofwat’s charging policy.

Our proposed wording is as follows:

> **“In the event of a Material Change, UUW and IP(W(L may renegotiate the charge in clause 7.2.1 of this agreement and, if no such agreement is reached within 6 calendar months of the designation of a Material Change, either or both may refer the matter to the Water Services Regulation Authority (the ‘Authority’) for redetermination.**
>
> **‘Material Change’ means a change in the Authority’s charging policy after the date of the Authority’s determination under section 56 of the Act, which the Authority considers to be material and relevant to a possible change to the charge in clause 7.2.1, as designated in writing as such by the Authority and sent to UUW and IP(W)L for the purposes of this Agreement.**
>
> **A new charge resulting from either the renegotiation or redetermination mentioned in above shall take effect form the point at which the Material Change was designated by the Authority.”**

Appendix 2: List of documents and correspondence considered in making this determination

Ofwat guidance

Ofwat framework for resolving pricing disputes involving bulk supplies

Bulk supply pricing – a statement of our policy principles (February 2011) -

Ensuring consistency in our approach to resolving pricing disputes (August 2013)

Correspondence with Iggesund Paperboard (Workington) Ltd

Table A2.1: Correspondence with IP(W)L

Ref	Date	Type	From	To	Description
1	21/09/10	Letter and attachments	IP(W)L	Ofwat	Request for determination
2	26/01/11	Letter	Ofwat	IP(W)L	Letter confirming scope of section 56 determination and request for further documentation
3	20/04/11	Letter and Annex	Ofwat	IP(W)L	Request for further information
4	10/06/11	Letter and attachments	IP(W)L	Ofwat	Response
5	14/03/12	Letter and Annex	Ofwat	IP(W)L	Request for further information
6	17/04/12	Letter and attachments	IP(W)L	Ofwat	Response
7	10/08/12	Letter and Annex	Ofwat	IP(W)L	Request for further information
8	16/08/12	Letter and attachments	IP(W)L	Ofwat	Response. Copy of feasibility study for Cloffocks system.

Correspondence with United Utilities

Table A2.2: Correspondence with UUW

Ref	Date	Type	From	To	Description
1	26/01/11	Letter	Ofwat	UUW	Letter confirming scope of section 56 determination
2	20/04/11	Letter and Annex	Ofwat	UUW	Request for further information
3	27/05/11	Letter and attachments	UUW	Ofwat	Response
4	14/03/12	Letter and Annex	Ofwat	UUW	Request for further information
5	20/04/12	Letter and attachments	UUW	Ofwat	Response
6	10/08/12	Letter and Annex	Ofwat	UUW	Request for further information
7	07/09/12	Letter and attachments	UUW	Ofwat	Response
8	27/02/14	Letter and Annex	Ofwat	UUW	Request for further information
9	06/03/14	Letter and attachments	UUW	Ofwat	Response
10	27/03/13	Email	Ofwat	UUW	Request for further information
11	09/04/14	Email and attachments	UUW	Ofwat	Response

Appendix 3: Chronology of requests for information

Ofwat received a request for determination from IP(W)L on **21 September 2010**. On **11 November 2010**, we wrote to them to request additional documentation and information to enable us to evaluate the issues raised. This included copies of the agreements signed between the parties and an explanation of the facts that IP(W)L had taken into account in signing the October 2009 agreement. IP(W)L provided copies of these documents in its response of 17 November 2010.

Following internal review, on **26 January 2011** we wrote to IP(W)L to inform them that we were satisfied that our determination powers under section 56 of the Water Industry Act 1991 provided the most efficient route to address the issues raised. We also wrote to UUW on the same date to inform them that IP(W)L had referred the dispute to us and that we would deal with it as a determination under section 56 of the Act.

On **20 April 2011** Ofwat sent a formal request for information (**RFI**) to UUW and IP(W)L in which we requested further information on the determination application. In our letter to UUW we also provided them with an opportunity to comment regarding Ofwat's jurisdiction in this case. UUW responded to our RFI on 27 May 2011 and IP(W)L responded on 10 June 2011.

On **14 March 2012** we sent a second RFI to UUW and IP(W)L requesting information on the services provided and volumes of water delivered, the costs of operating the Barepot System and the costs of operating the pumping plant acquired by IP(W)L (the Cloffocks system). We also confirmed that we were satisfied that we had jurisdiction under section 56 of the Act to make a determination.

On **10 August 2012** Ofwat wrote to both IP(W)L and UUW asking for clarification of some of the information provided in their responses to the 14 March 2012 information request. At the same time Ofwat also wrote to the other two customers served by the Barepot System: Eastman Chemicals Ltd and Pentagon Chemical advising them about the determination request and the potential for Ofwat's decision to impact on their supply price.

In **February and March 2014**, we issued further information requests to UUW seeking clarification and an update of information previously provided.

Ofwat's first information request

We issued a request for information (RFI) to the Parties **on 20 April 2011** to inform our determination. In our RFI to UUW we requested information on the following.

- The 1983 agreement, the 2006 interim agreement and the 2009 agreement
- The relevant services provided by UUW under these agreements.
- Details of the assets used to provide relevant services to IP(W)L and other customers on the Barepot system.
- The costs associated with providing the relevant services to IP(W)L and the costs that would be avoided if UUW ceased to supply IP(W)L.
- UUW's view of what it considered the relevant price for the supply of non-potable water services should be in this case.

In addition to the information already provided by IP(W)L as part of its submission to Ofwat to support its request for a determination, we requested further information on the following.

- The 1983 agreement, the 2006 interim agreement and the 2009 agreement.
- The relevant services provided by UUW under these agreements and how these services had changed since IP(W)L constructed its own water treatment plant.
- The relevant costs that IP(W)L believes that UUW had recovered under the various Agreements.
- The relevant costs that IP(W)L had incurred in securing its own abstraction licence, the abstraction point and pumping station and details of the expected costs that would be incurred to bring its own plant into use and operate in place of a supply contract with UUW.
- IP(W)L's view of what it considered the relevant price for the supply of non-potable water services should be in this case and a detailed breakdown of all the services that it would expect to be provided by UUW for that price.

UUW provided a response **on 27 May 2011** in which it provided copies of the various supply agreements and information on the volumes of water billed and the level of charges levied on customers on the Barepot System. In addition, it also provided details of the services provided to customers, the assets used by UUW to provide these services and information on the direct operational costs and capital maintenance expenditure incurred by UUW.

IP(W)L responded on **10 June 2011**. In their response they confirmed that the application for determination was made on behalf of IP(W)L only. They also confirmed the scope of the relevant services provided by UUW and the way in which these had changed following the construction of their own Water Treatment Plant in 2006. In addition, IP(W)L provided details on its water consumption; an annual summary which UUW provided IP(W)L showing the costs recovered by UUW; the costs incurred by IP(W)L in acquiring the abstraction license and existing infrastructure for the Cloffocks system. It also provided calculation of the estimated costs of operating the Barepot System – based on UUW's declared costs for operating and maintain the plant during the year 2005/6 – when it was operating as a full WTP facility – compared with the estimated cost for the plant operating as a pumping station only.

Ofwat's second information request

On **14 March 2012** we sent a second RFI to UUW and IP(W)L requesting further information on the services provided by UUW under the agreements; the volumes of water delivered to IP(W)L; the costs of operating the Barepot System; and the costs of operating the pumping plant acquired by IP(W)L (the Cloffocks system).

In our letters of March 2012, we also confirmed that as neither party had commented on our view of our jurisdiction to act in this matter, we were satisfied that we had jurisdiction under section 56 of the Act to make a determination.

In their response of 17 April, 2012, IP(W)L confirmed that the agreement with UUW covers only the supply of non-potable water and that the entire cost of the service reservoir is included in the non-potable supply. They also provided additional information to confirm the volume of water being delivered to the Mill by UUW.

In this response IP(W)L also set out in more detail the basis for the assumptions they had made in their assessment of the costs of operating the Barepot system and updated estimates for the costs of operating the Clockoffs system.

UUW responded to our RFI on 20 April 2012. In their response, they confirmed that the price charged under the agreement has been calculated based on the cost of supply all three customers on the Barepot system with forecast volumes of non-potable water. The also confirmed that the price does not include potable water or any sewerage services which are all charged at standard tariffs as per the UUW Charges Schemes.

UUW also provided further information on volumes of water delivered to reconcile with figures reported by IP(W)L.

In relation to queries relating to the cost of supply, UUW provided further information on the relevant capital maintenance costs of the assets used at various stages on the supply chain on the Barepot system; estimates of the MEAV of these assets; the expected physical life of the assets and information on installation and overhaul dates. In addition, UUW also provided a more detailed explanation of operating expenditure associated with each stage of the supply chain and a breakdown of these costs into a number of different categories, including general, operating expenditure, power, chemicals, abstraction charges and employee costs including overheads.

UUW also provided information on the expected impact on UUW asset usage and the impact on both capital and operating expenditure if the supply to IP(W)L ceased or if the supply to all three customers on the Barepot system ceased.

Finally, as part of this response, UUW provided updated versions of their top-down and bottom-up pricing models, an explanation of how the models work and the data sources used.

Ofwat's third information request

On **10 August 2012** Ofwat wrote to both IP(W)L and UUW asking for clarification in relation to certain aspects of the information provided in their responses to our 14 March 2012 requests.

The IP(W)L RFI was primarily focused on seeking clarification of the assumptions made by IP(W)L in relation to the Clockoffs system, the costs involved in bringing it into use and operating and capital costs that IP(W)L is expecting to incur. IP(W)L addressed these issues in their response, dated 16 August 2012. In addition, IP(W)L also provided a copy of a report and feasibility study prepared by Anglian Water Services Ltd into the costs associated with bringing the Cloffocks system (covering the abstraction and pumping systems) into use. These figures had been used by IP(W)L to inform its position on the most appropriate price for the supply of non-potable water services to be charged in this case.

In our RFI to UUW, Ofwat requested further detail on the assumptions that UUW had made in relation to asset lives, estimates of MEAVs for the assets used to supply customers on the Barepot system and in relation to the capital maintenance and operating costs allocated to these assets. UUW responded on 7 September 2012. As part of this response, they also set out in more detail how these capital maintenance costs and operating expenditure were treated in their calculation of the relevant price, using both the top-down and bottom-up models.

Ofwat's fourth information request

On **27 February 2014** we issued a further RFI to UUW seeking clarification and further explanation of the costs they had previously provided as well as the latest consumption figures for the supply of non-potable water for each of the customers on the Barepot system. UUW responded on 6 March 2014.

Ofwat sent a further email request on **27 March 2014** querying certain aspects of the planned capital expenditure figures that UUW had provided and seeking confirmation in relation to certain aspects of the infrastructure as part of the Barepot system. In addition, we also requested an update of the revenue and volumetric charges associated with the supply to IP(W)L for the most recent year available. UUW responded on 9 April 2014.