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IN THE COMPETITION APPEAL TRIBUNAL

Victoria House, Bloomsbury Place, London WC1A 2EB Case No. 1046/2/4/04

31st May 2006

Before: SIR CHRISTOPHER BELLAMY (The President)

THE HONOURABLE ANTONY LEWIS PROFESSOR JOHN PICKERING

Sitting as a Tribunal in England and Wales

BETWEEN:

ALBION WATER LIMITED

Supported by

AQUAVITAE (UK) LIMITED

-v-

WATER SERVICES REGULATION AUTHORITY (Formerly The Director General of Water Services)

Respondent

Appellant

Intervener

Supported by

DWR CYMRU CYFYNGEDIG and UNITED UTILITIES WATER PLC

Interveners

Transcribed from the Shorthand notes of Beverley F. Nunnery & Co. Official Shorthand Writers and Tape Transcribers Quality House, Quality Court, Chancery Lane, London WC2A 1HP Tel: 020 7831 5627 Fax: 020 7831 7737

HEARING DAY TWO

APPEARANCES

Mr. Rhodri Thompson QC and Mr. John O'Flaherty, instructed by Albion Water Limited appeared on behalf of the Appellant.

Mr. Michael O'Reilly (instructed by McKinnells, Lincoln) appeared on behalf of Aquavitae (UK) Limited.

Mr. Rupert Anderson QC and Miss Valentina Sloane (instructed by the Head of Legal Services,

Water Services Regulation Authority) appeared on behalf of the Respondent.

Mr. Christopher Vajda QC and Mr. Meredith Pickford (instructed by Wilmer Cutler Pickering Hale and Dorr LLP) appeared on behalf of Dŵr Cymru Cyfyngedig.

Mr. Fergus Randolph (instructed by the Group Legal Manager, United Utilities) appeared on behalf of United Utilities.

1 THE PRESIDENT: Good morning, Mr. Vajda. Mr. Anderson, we are pleased to see you.

2 MR. ANDERSON: I am very pleased to be here.

3 THE PRESIDENT: If you need to ask for our latitude at any moment, please do so.

4 MR. ANDERSON: That is very kind of you, Sir.

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THE PRESIDENT: Mr. Vajda, can I just mention a couple of things, one on the housekeeping
front. I think we are quite anxious if we are able to, to get through the expert evidence, or at
least as much of it as we can by the end of tomorrow, because we are not sitting on Friday
and they are long days for the experts while we trudge through quite complicated stuff that
does not directly necessarily affect them, so if we could build that into our timetable that
would be very kind.

The other matter really is a request for information, which I think we have probably got in our papers, or could work it out, but it is much better that the parties do it and perhaps agree it. We are particularly anxious to understand the whole company cost accounting approach on which you are relying, and the whole system of price determination in this industry and, in particular how the price determination mechanism affects the prices to industrial customers. It might be convenient that the best way of doing that is for us to actually see the price determinations that were made in 1999 and 2004 if those are the right years, so tat we can understand how it works, but that is what we need to understand. That is the first and, I hope, relatively straightforward point.

20 The second point, which again I think arises or came to mind in the course of cross-21 examination yesterday, is this difficult question of MEA values and regulatory capital value 22 and rates of return and so forth. I think what would be very helpful to us, and we probably 23 could pull it out of the papers we have got, would be the following: if we could have a little 24 piece of paper that is set out respectively for MEA values and regulatory capital values 25 over, say, a recent five year period, the rates of return that we in fact earned on those figures 26 respectively, that will give us an average profit figure on that capital. If we then take – I am 27 not quite sure whether it is water input, or water delivered, it is probably best to do it on both bases, we can see what the return is across that period in terms of pence per m³ and 28 29 that would be quite an interesting figure as a background figure looking at it on a whole 30 company basis – I think we are talking about water services, I do not think we are talking 31 about sewerage, but you may tell me we are, but I am assuming we are talking about water 32 - and that would be some background information that we might find helpful or 33 informative, or not as the case may be, but it is some background information which I 34 would be quite glad to have pulled together if that is possible.

1	MR. VAJDA: Can I just clarify, in your last question, I assume the President is referring to
2	Welsh Water or the industry as a whole?
3	THE PRESIDENT: Welsh Water, yes.
4	MR. VAJDA: If I can make an observation, I am sure the Tribunal has this well in mind,
5	obviously when one is looking at rates of return on a stand-alone basis that is, of course, a
6	very different rate of return
7	THE PRESIDENT: Absolutely, yes.
8	MR. VAJDA: With your permission, Sir, if I can resume.
9	THE PRESIDENT: Yes, I am sorry to
10	MR. VAJDA: Not at all.
11	Dr. JEREMY BRYAN, Recalled
12	Cross-examination by Mr. VAJDA (continued)
13	Q Could I ask you, Dr. Bryan, to take up Annex B to your fourth witness statement that we
14	were looking at yesterday?
15	THE PRESIDENT: Are we on to potable/non-potable now?
16	MR. VAJDA: No, there are just one or two small points I just need to clarify in my own mind in
17	relation to the evidence right at the end of yesterday and then we are going to move on to
18	potable/non-potable. (To the witness) You know we finished yesterday looking at your
19	figure of 1.6 million? A. Yes.
20	Q And I was comparing that with the 9.7 that Mr. Jones had, and the 9.7 of Bechtell, do you
21	remember? A. Yes.
22	Q Just so I understood your evidence, I think you made three points. Your first point was that
23	your method of doing a stand-alone calculation was a mixture of doing pipe-in-pipe
24	insertion, plus laying pipe in virgin rural territory. Is that right? A. It was, in my view,
25	the most efficient and economic way of replicating the desired functionality.
26	Q So what you did in your stand-alone is to use for some length pipe-in-pipe, and if we just
27	look at that at the table at 82. You use pipe-in-pipe for, roughly speaking, say, around 4
28	kms, particularly for the bit in the urban areas is that right? A. That's true.
29	Q And the rest you use on the basis of laying it in rural areas? A. Correct.
30	Q Yes. So that is the first point. The second point I think you made to me yesterday – made
31	to the Tribunal – is that the pipe-in-pipe cost is the same as the cost of laying a pipe in a
32	rural location? A. They are not identical. They do vary, they vary with time.

 cheaper than the alternative. Where I have used pipe-in-pipe I have used it because the alternative would be hugely costly, and very difficult simply in terms of engineering. Q Yes, what we can see, if we look at the table at 82, 176 is where unit cost for laying it, or I say the OFWAT figure for that is, if you like, laying pipe in a rural area? A. Yes. Q And then when you come to pipe insertion you use a unit price of 227, and then you use a smaller unit price of 135 because you then reduce the size of the pipes – it goes under a river? A. That's correct, yes. Q Now, the third point that you made yesterday, and again I just want to know if I have understood it, that actually replicating the Ashgrove pipe system to Shotton has huge complications in terms of river crossings and contaminated land, that sort of thing? A. If one were to do it afresh? Q Yes. A. Yes. Q If I can just put a few questions to you on that basis, you accept that the Bechtell estimate of 9.7 million is a fair estimate for replicating the main system – replication in the sense of laying the pipes afresh? A. I believe that that was as a result of a detailed engineering study and is therefore a sounder basis than any other estimates I have seen. THE PRESIDENT: Just remind us when Bechtell was? MR. RANDOLPH: I believe it was around the year 2000, Sir. United Utilities commissioned it. THE PRESIDENT: Thank you. MR. VAJDA: (To the witness) It is common ground there is a huge difference between 1.6, the way that you do it and the way that Bechtell do it to reach 9.7? A. Absolutely right, yes. Q If you take your methodology, forgetting pipe-in-pipe for the moment, but just laying pipe across what I call virgin rural territory, you are, of course not replicating the Ashgrove system, are you, because you are not actually taking account of the problems of the rivers and the contaminated land, are you? You are not actually comparing like with like? A. I have not	1	Q	You said yesterday they were the same? A. They are broadly similar and certainly a lot
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sought to reflect in the way have approached this – that is, that there is the River Dee which has to be crossed, and that is an issue; and there is contaminated land which is an issue, and there are urban areas which are issues. I know, for example, that apparently someone has built houses over the route of the existing pipeline, which should not have been allowed, but it has. So, clearly, digging that up and replacing it would be slightly inconvenient.

- Q Yes. My point is simply that you have quite properly drawn the Tribunal's attention to the number of difficulties which would increase the cost of laying pipe afresh from Heronbridge to Shotton. All I am putting to you is that when you are looking at the 176 figure in Table 82, you are looking simply at a rural location without any of these difficulties. A. That is correct.
- Q Yes. Absolutely. The difficulties you have mentioned which is that somebody has built over the pipe and there is contaminated land, and crossing the River Dee ---- Those would be difficulties that would be faced by anybody who would wish to replicate the system, are they not? A. They are, yes.

Q Yes. Thank you.

- THE PRESIDENT: Mr. Vajda, can I just ask: in your mind, when you talk about replicating the system, are you talking about, in some sense, taking up the existing pipe and putting a new one in where the existing pipe is, or are you talking about building another pipe alongside, or ----- What are we talking about exactly?
- MR. VAJDA: We are talking about building ---- It is the latter. It is what it would cost somebody else to build this system without the existing system being there.

THE PRESIDENT: But the existing system is there.

MR. VAJDA: Yes, but what we have to do – and this is obviously where we will come on to submissions in law ----- We say we apply OFT414 which is the stand-alone cost of replicating the system. So, we have to start from scratch.

THE PRESIDENT: On the assumption that there is an existing system there or that there is no existing system there?

- MR. VAJDA: On the assumption that there is no existing system there. It is obviously a
 matter of law that we will address. That is effectively what we say the OFT test is. (To the
 witness): I have just got some tiny points on this table at 82 in fact, one last point and
 then we can move on to 89. The unit cost figure that you use at 176, that is for a pipe of 600
 millimetres, is it not, I think? A. It is.
- 33 Q The Ashgrove is 700, is it not? A. That's correct, yes.
- 34 Q Can I then ask you to turn over the page to the table at para. 89?

Although there are certainly points in relation to the various additional costs – river crossings, and so forth - which one must bear in mind, the essential difference between the warious tables, as I read them, is what you assume in the unit cost figure for which they start. MR. VAJDA: Ycs. THE PRESIDENT: You assume 465.40. I think that is explained in the evidence. Dr. Bryan has assumed 176 on the basis of 1999 costs, and 101 on what he says are the 2004 costs. Probably, at some point – not now – we shall need some help, or might need some help, on what is the right basis for this calculation to start. MR. VAJDA: I sce precisely where the President is going. On the question of replication, the issue is: is one going to be replicating in Flast Anglia where it is totally flat? I think that is, in a sense, the question the President is addressing. Why is there such a big difference between 465 and 176. THE PRESIDENT: Yes. I mean, it did look quite like East Anglia to us when we went up there -it was fairly flat. MR. VAJDA: The Tribunal has the advantage of me. THE PRESIDENT: You can read the contours on the map. It is just signalling a point that we will come to. MR. VAJDA: Mr. Jones deals with it in his evidence. THE PRESIDENT: You are going to 89? MR. VAJDA: Mr. Jones deals with the OFWAT benchmark; is that right	1	THE PRESIDENT: Just before we go there, Mr. Vajda, we have three tables in 81, 82 and 83.
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1		my experience that there is actually very little point in laying long lengths of small diameter
2		raw water mains. What would tend to happen is that small sources - and small diameter
3		mains are associated with small sources – would typically be treated at or near their source,
4		and put into supply. That is on the basis of my experience and I have seen no evidence that
5		would lead me to think otherwise.
6	Q	What do you say the length of the raw water duct system is for Dŵr Cymru? A. The raw
7		water aqueduct?
8	Q	Yes, what do you think the length is – could you tell the Tribunal? A. I have it in my
9		witness statement. I know the figures Mr. Jones relies on, they vary.
10	Q	Do you take the length as being 115-odd kms, or 542 kms, which do you take? Those are
11		the two figures that have been A. From memory, and I would need to check
12	Q	Certainly, well would you like A. 542 I think is the figure that has been quoted for
13		raw water aqueducts in the sense that OFWAT defines them, i.e. supplying water between
14		the source and the treatment works.
15	THE	E PRESIDENT: We have 583 in the table we are looking at? A. 583, yes.
16	MR.	VAJDA: Yes, I am grateful to the President . That is your sort of A. I believe I have
17		taken that from Mr. Jones's statement.
18	Q	So that is how you calculate the length, that is your figure for the length of the raw water
19		duct A. Yes.
20	Q	But just coming back to the 250 you do not know whether there are a great number of very
21		small pipes in that band or not, do you? A. No, I do not.
22	Q	Now, the reconciliation, as I take it is for 2004, is that right? A. Yes.
23	Q	Yes? A. Yes, I consider that the 1999 MEA values and the 1999 unit costs that Dŵr
24		Cymru have published are unreliable, and I have tried to give explanations of why that is in
25		my witness statement.
26	Q	Do you accept there has been a fluctuation in cost between 1999 and 2004? A. I do
27		accept that but not to the extent that is claimed by Dŵr Cymru.
28	Q	Thank you. Well we can now move on to one last point on stand-alone and then we get on
29		to non-potable/potable, and this is para.75 of the body of your witness statement. Perhaps I
30		could ask you and the Tribunal just to read para.75, and I just want to ask you a question
31		about the last sentence? A. (After a pause) Yes.
32	Q	The question is: What do you believe is missing from the information that Dŵr Cymru has
33		and has been disclosed to this Tribunal and you believe should be there? A.
34		Contemporaneous evidence that supports 95 per cent. of the costs on which Mr. Jones relies.

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I think you are making a slightly different point on what the 75 – 75 you are saying the Ashgrove supply has consistently generated more than 2 million ----

THE PRESIDENT: It was the last sentence you were asking about?

MR. VAJDA: Yes, but it is then "I am of the opinion that this represents a significant commercial activity and warrants an appropriate level of accounting attention and accuracy." So what you are saying is because there is 2 million worth of revenue it warrants an appropriate level of accounting attention and accuracy, and the inference is that there was inappropriate accounting information and accuracy and I would like to ask you what should have been there that was not there? A. Well in answer to that, or to answer it as best I can, I draw your attention to the enclosure, I think, in Mr. Jones's second witness statement – it may have been his first – which gives us the accounts for the cost centre which is Ashgrove, and we have accepted those at face value, there are one or two anomalies in there but we have accepted those at face value. We have also accepted, following a meeting and discussions with Dŵr Cymru, the allocation of certain management costs in relation to the operation of the Bretton Control Centre, and the physical management of the Ashgrove treatment works. In total, and forgive me, I do not have the figures in my head entirely, but in total those amount to some £100,000, I think, maybe £200,000, so we are talking about 5 per cent. or less of the costs which Mr. Jones claims are appropriately allocated to that system. There is no evidence that I have yet seen, certainly no accounting evidence that is contemporaneous, that underpins any of that 90/95 per cent. cost. So that is what I am saying. We had hoped that the third party cost rules in OFWAT's regulatory accounting guidelines would have required Dŵr Cymru to account for those costs in a comprehensive and transparent fashion, but it appears from Mr. Jones' testimony that he did not think that that was worthwhile, and OFWAT in their skeletons appear to support that view, and so we are left with a very small fraction of the total costs being identified in accounting terms, and the rest being the subject of - in the absence of contemporaneous evidence – assertion of ----

Q What I would be very grateful for is if you could list one by one for the Tribunal the specific items that are missing? A. Well it is very difficult to make sure I get to them all.

- Q Can we start with capital? Is that one of the items that you are referring to? A. There is I think by Dŵr Cymru's own admission no record of capital other than the CCV value which is in SA11.
- 33 Q You see it is quite a serious attack on a company that it is not providing appropriate
 34 accounting attention and accuracy and so I am asking you, and I am asking you to tell the

1	Tribunal one by one what are the pieces of evidence that are missing? A. Well, you
2	started with capital
3	Q Well could please tell the Tribunal what other items? A. Well I think we have already
4	recognised that capital is the main one, management overheads, the allocation of rates, the
5	allocation of debts which hare primarily a function of domestic potable supplies, the
6	allocation of laboratory services which are not a feature of the non-potable system. I have
7	dealt with them as comprehensively as I can in the detailed costs' assessment for Ashgrove,
8	and so I am happy to go through those item by item, but each of those that I have mentioned
9	we have no contemporaneous evidence from Dŵr Cymru as to what those costs are and,
10	more importantly, how they should be appropriately allocated to non-potable systems in
11	general or the Ashgrove system in particular.
12	Q Yes, well perhaps what we can do, if I could ask you to take up Mr. Jones's witness
13	statement, this might help you.
14	THE PRESIDENT: Are we moving on to non-potable now? I think we should, Mr. Vajda.
15	MR. VAJDA: Fair enough, well I have made my point here.
16	THE PRESIDENT: You put the point to him and that is his answer.
17	MR. VAJDA: Yes.
18	THE PRESIDENT: That is his case. A. I am sorry, Mr. Vajda, did you want to ask me about
19	the fax that you sent through late last night
20	Q Can that be done behind the scenes, Dr. Bryan? A. Yes.
21	Q It is probably easier if it is done behind the scenes.
22	MR. VAJDA: Except I did not send you any fax, Dr. Bryan, last night.
23	THE PRESIDENT: Your clients did, I think, Mr. Vajda.
24	MR. VAJDA: We are now then going back to average costs, Sir, and what we are now looking at
25	is the differences between potable
26	THE PRESIDENT: Average accounting?
27	MR. VAJDA: Absolutely. (To the witness) What I would like to deal with first is what I call
28	your methodology 7, and if we could just take that up from your fourth witness statement at
29	para
30	THE PRESIDENT: This is non-potable raw, as compared with potable?
31	MR. VAJDA: Yes, what is said is that raw is 2p, non-potable is the same so it should be 2p,
32	absolutely, that is the point we are on. You set this out at paras.20 to 25 of your fourth
33	witness statement, and you say that this is a very striking omission. Can we then go to

 conclusion on this point, is this right? A. Yes, that is correct Q. What I would like you to just look at and read to yourself, and the Tribunal could look at as well, is para.12 on p.88? As I understand it what you are seeking to do here is to try and derive what is called the unit distribution cost? Is that correct? A. Yes. Q. What you do for raw water is that you find what the total cost is and then you divide it by how much is distributed? A. That is correct, yes. Q. Now, if we go back to your witness statement, paras. 22 onwards, as I understand it – and please correct me if I am wrong – you have failed to take account of the fact that over eight times the volume of raw water that is distributed by Dŵr Curun is non-potable? THE PRESIDENT: Sorry, say that again Mr. Vajda? MR. VAJDA: You have failed to take account of the fact that over eight times the volume of raw water is distributed as non-potable water. What perhaps I can do to help the witness is if he could be given our skeleton argument on this which sets out the point? A. I have your skeleton argument. Q. If I could just point out a small typo for the Tribunal and witness in the second line of para.15, there is a "with" missing. "Albion seeks to contrast the cost of distribution of potable with raw water." We apologise for that. THE PRESIDENT: Due concept of potable raw water would have thrown us somewhat out of MR. VAJDA: You they thank you. MR. VAJDA: To the witness) We then set out, and can you just confirm that you agree with the way that we have characterised what we call your method 7 at para.16? A. No, I do not. I mean I take issue with the fact that you have said it marks a shift from Albion Q. Well leave aside the shift point, that is a sort of pleading point that I do not want to trouble you with. If we can perhaps focus on para.17. It is 16.2, 16.3, "Raw water sha cost Dŵr Cymru approximately 2p to transport on a top down average	1	Annex F, because Annex F is, as I understand it, if you like the underlying analysis to your
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	34	can see that we have set them out for the Tribunal in the middle of para.17 that Dŵr Cymru

1	transported over 1000 megalitres a day of raw water, compared to only 123 megalitres a day
2	of potable water. If one actually then looks at volume, and as you pointed out – that is why
3	I took you to Annex F – one has to look at volume because it is a unit distribution cost,
4	using your calculation one gets to a figure of non-potable of 17p, does one not? A.
5	Well, yes, but I am afraid your methodology owes more to Alice in Wonderland than it does
6	to the water industry or, I suspect, any other industry. What you are assuming in this
7	calculation, for this calculation to hold true, is that the cost of raw water transportation in
8	total, which you rightly said, using my figures is approximately £7.5 million per annum
9	For your arguments to make any sort of sense those same costs in total - £7.5 million –
10	would also have to apply to the distribution of a much smaller volume of non-potable water
11	through a much smaller network of pipes. That is nonsense, if you don't mind me saying so.
12	Q What are the respective sizes of the network? A. From the figures we have a raw
13	water network that is approximately 583 km long, according to the information that we have
14	received, and we have a non-potable network which we now believe is in the region of
15	110km. There is over a five-fold difference in length. We know that some of the raw
16	water aqueducts are very large indeed – greater than 900 millimetres. We have heard
17	already that prices of mains laying increase geometrically with diameter rather than simply
18	arithmetically. I don't see that there is any inconsistency in the conclusions that I have
19	drawn.
20	THE PRESIDENT: I think we have struggled a little bit with this example, Mr. Vajda. You
21	need to explain it to us at some point.
22	MR. VAJDA: The answer that you have just given me: are you using 542km for raw water or
23	113km? A. You are comparing
24	Q 153. A. 153 is a figure that the Director relied on, and that Dwr Cymru relied on, and
25	it is a figure that is now demonstrated to be wholly inaccurate.
26	Q Can I just ask you to go to Annex A of your witness statement? Perhaps I could ask both
27	you and the Tribunal to read para. 16? (Pause whilst read): You have relied on the figure
28	of 153, Dr. Bryan, to produce an average length of raw water aqueducts at 15.3. If we can
29	just go back so that you and the Tribunal can see this Can I ask everybody to go back to
30	para. 28 of the witness statement at p.5? You have very helpfully set out a table of cost
31	drivers. There you have average length – raw: 15. Of course, that 15 comes from the
32	153km that you rely on at para. 16 of Annex A, does it not? A. Indeed, yes. Yes.
33	Q Yes. So, that is the figure we can forget about. A. I am sorry, Mr. Vajda, but you are
34	confusing two different things. What I am trying to do – and referring back to that para. 16

of Annex A, that, if you remember, is responding to the Tribunal's very sensible question of trying to understand what the difference, or similarities are between different sorts of system. What I am trying to do is to say that what we are dealing with here – fundamentally, and the Authority makes it clear in their statement – primarily systems of 600 millimetres and above.

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- 6 Q Yes A. Now, that has been a very difficult problem for us to grapple with, simply 7 because we have not known the breakdown, up until very recently, of either the non-potable 8 mains or the raw water aqueducts. So, the 153 figure that I have used to derive the average 9 length comparators in that table that you have referred me to at para. 28 of my first witness 10 statement ---- That figure relates to the large raw water aqueducts of 600 millimetres and 11 above. There is a direct comparator, in my mind, with the large non-potable pipes that we 12 are talking about. In the argument that you bring in in para. 17 of your own skeleton, you 13 are then talking about the totality of the raw water aqueduct system and the totality of the 14 non-potable system. Now, I don't mind dealing with that, but I do actually agree with 15 counsel for the Authority that it would be somewhat less confusing if we tried to stick, 16 wherever possible, to pipes of greater than 600 millimetres because those are the class of 17 assets serving the class of customer with which this case is concerned. But, there are times 18 when we cannot avoid looking at other pipes. I have tried to make sense of it all. 19 What you are telling me is that in terms of length you are focusing on 153, because that is Q 20 the like-for-like comparison. A. In trying to answer the Tribunal's questions as to 21 whether these systems, i.e. the systems of the sort that supply Ashgrove, be it Ashgrove in 22 isolation or Ashgrove and similar non-potable systems, it is appropriate – and indeed 23 required because the Authority makes great play of ensuring we have a like-for-like
- comparison to do just that, to look for a like-for-like comparison. If I based my
 arguments, or relied for my arguments on pipes that were 200 millimetres diameter, or less,
 you would very justifiably criticise me for doing so because they are not relevant to the
 Ashgrove system or to systems supplying other customers in that same class.
- 28 Q I think there is then common ground between us in the sense that what we have to focus on 29 on the comparison is just the large raw water aqueducts. A. Where we can do so. 30 Where we have the evidence. We are in a disadvantage here, and have been from the start in 31 that information has been reluctantly given up and very often that information does not 32 allow the breakdown the costs, the breakdown of capital values into those neat asset sizes. 33 Therefore, where that evidence is not so broken down, I have had to make certain 34 assumptions and make certain calculations, and wherever possible I have explained those so

 That is why I have tried to be as clear as possible about how I have reached the conclusions that I have. Q It is just so that I understand – and I think I now understand – that the figure you are using to make the comparison, the 2p, is based on 113km of raw water pipes. A. No. Q 153. I beg your pardon. A. No. No. No. Not at all. Not at all. The figure of 2p is an average figure. The figure of 2p, which appears to be accepted by both Dwr Cymru and by the Authority, and is consistent with my top-down analysis. That figure of 2p is, if you will, the regional average cost of transporting raw water through the raw water aqueduct system, be that from small bore holes through small pipes to very large river sources and 	1		that they can be criticised if I have got it wrong. I don't mind admitting to make mistakes.
 Q It is just so that I understand – and I think I now understand – that the figure you are using to make the comparison, the 2p, is based on 113km of raw water pipes. A. No. Q 153. I beg your pardon. A. No. No. No. Not at all. Not at all. The figure of 2p is an average figure. The figure of 2p, which appears to be accepted by both Dwr Cymru and by the Authority, and is consistent with my top-down analysis. That figure of 2p is, if you will, the regional average cost of transporting raw water through the raw water aqueduct system, be that from small bore holes through small pipes to very large river sources and 	2		That is why I have tried to be as clear as possible about how I have reached the conclusions
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	9		will, the regional average cost of transporting raw water through the raw water aqueduct
	10		system, be that from small bore holes through small pipes to very large river sources and
reservoir sources through very large pipes. It is a regional average figure. My argument is	11		reservoir sources through very large pipes. It is a regional average figure. My argument is
12 that the regional average figure for non-potable systems is the same because there is no	12		that the regional average figure for non-potable systems is the same because there is no
13 difference, no significant difference between the two systems that I can detect.	13		difference, no significant difference between the two systems that I can detect.
14 Q But when you are saying it is on a regional average basis, is it on the 153 or the 542? A.	14	Q	But when you are saying it is on a regional average basis, is it on the 153 or the 542? A.
15 If it's on a regional average basis it's on the totality of the pipes and the totality of the	15		If it's on a regional average basis it's on the totality of the pipes and the totality of the
16 volume through.	16		volume through.
17 Q Can you just answer? Is it 542? Yes or no? A. Well, 542 583 Whatever the	17	Q	Can you just answer? Is it 542? Yes or no? A. Well, 542 583 Whatever the
18 figure is that Dwr Cymru admits to for the length of its raw water aqueducts.	18		figure is that Dwr Cymru admits to for the length of its raw water aqueducts.
19 Q So, that is the figure you are using to reach your conclusion that non-potable has the same	19	Q	So, that is the figure you are using to reach your conclusion that non-potable has the same
20 cost as raw water. A. That's correct.	20		cost as raw water. A. That's correct.
21 Q Thank you.	21	Q	Thank you.
22 THE PRESIDENT: Just help me, Dr. Bryan. On para. 17 of Dwr Cymru's skeleton, can you	22	THE	E PRESIDENT: Just help me, Dr. Bryan. On para. 17 of Dwr Cymru's skeleton, can you
23 just tell me again – because I am not sure I have completely got it yet – what is your	23		just tell me again – because I am not sure I have completely got it yet – what is your
24essential criticism of the approach in that paragraph?A.Certainly. I don't have any	24		essential criticism of the approach in that paragraph? A. Certainly. I don't have any
25 problems with the analyses down to where we see the footnote no. $11 - 2p$ multiplied by the	25		problems with the analyses down to where we see the footnote no. $11 - 2p$ multiplied by the
amount of water that comes through the pipes.	26		amount of water that comes through the pipes.
27 Q (indistinguishable) million. A. Indeed. The problem there is that then that is	27	Q	(indistinguishable) million. A. Indeed. The problem there is that then that is
28taken as a fixed sum that applies to any system.So, what Dwr Cymru has then done is	28		taken as a fixed sum that applies to any system. So, what Dwr Cymru has then done is
29 divided that fixed sum, which relates to a very large volume of water going through a much	29		divided that fixed sum, which relates to a very large volume of water going through a much
30 larger raw water aqueduct system, and applied that fixed sum to the very much smaller	30		larger raw water aqueduct system, and applied that fixed sum to the very much smaller
31 volume of water that goes through the non-potable system. There is no suggestion	31		volume of water that goes through the non-potable system. There is no suggestion
32 whatsoever that I have seen that the total costs of running the raw water aqueduct system,			
33 used in its correct terminology as supplying the treatment works that that total is exactly	33		used in its correct terminology as supplying the treatment works that that total is exactly

1		the same as the total of running the much smaller non-potable system supplying customers
2		such as Shotton Paper. But, that is the basis that Dwr Cymru use to create
3	PRC	FESSOR PICKERING: Your argument is that it is the average cost per cubic metre that is
4		the same for raw water and non-potable, and not the total cost. A. That is correct.
5	MR.	VAJDA: Can I just ask one last question? What assumptions did you make about the
6		volume of water that went through the bigger pipes – the 153km of raw water? Did you
7		make any assumption as to how much raw water went through those pipes and how much
8		went through the smaller pipes? A. Yes, I did - not for the purposes of this exercise,
9		but it is something that I have looked at.
10	Q	Is this in evidence? Can we find it in your A. I am not sure that it is, but I can help
11		you through that. But, I don't believe that it is in evidence.
12	Q	I can leave it on the basis that it is not in evidence. Obviously, if Mr. Thompson wants to
13		deal with it
14	THE	PRESIDENT: If there is a query about it, it can be sorted out behind the scenes.
15	MR.	VAJDA: We need to press on. (To the witness): Can I now put some questions to you in
16		terms of the big picture? You are saying that your retail activity entitles you to about a
17		margin of 5p per cubic metre, does it not? That is what Mr. Jeffery says. A. No. I
18		don't think we have talked about entitlement. I do not think Mr. Jeffery was responding to a
19		question of what it would cost the efficient retailer. A. The matter of entitlement is
20		something which has never informed our views on this case or indeed our original
21	Q	Well remove the word "entitlement", but what Mr. Jeffery is hoping for is a margin of 5p,
22		that is what his witness evidence is, is it not? A. His witness evidence was based on the
23		cost that we will incur in providing our services when we replied, and I think it is important
24		to recognise that we have no choice in the matter, we cannot look at non-potable in
25		isolation. We are required by the Authority to deal with potable and non-potable, so that
26		figure represents the requirement of our retailing functions for the customer across the range
27		of services that we provide for him.
28	Q	I am just doing this in terms of cross check A. Of course.
29	Q	because Dŵr Cymru in carrying out its activities, we have treatment activities and
30		distribution activities. A. Yes.
31	Q	You say it is effectively entitled to somewhere between 3 and 4p and you are saying for
32		distribution around 2p, but you agree that there is capital investment on the treatment side,
33		and that there is capital investment that is required for the pipes. A. I am sorry, I am not

sure when you talk about "is required" I am not sure in what sense you are introducing that?

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- Q I am introducing it, when we looked at the stand-alone cost, do you remember, you agreed with me that the largest stand-alone cost was capital both for the treatment works and the pipes? A. Yes.
- 6 Q And you disagreed with me as to the amounts, but what I want to put to you is how is it that 7 you can say that you should earn, or wish to earn 5p for a retail activity when Dŵr Cymru 8 for both a treatment and distribution activity should be earning between 3 and 4p. Do you 9 not accept that there is an incongruity between those two figures? A. I don't if one looks 10 at the facts in this case. The facts in this case were that our contractual agreement with 11 Shotton Paper which is before the Tribunal and is very clear in its terms, provides us with 12 our retail margin on the basis of the benefits that we provide to Shotton Paper primarily 13 through reducing the costs of their water to what we believe to be a more cost reflective 14 level. That is where we find that margin. We are not seeking to say to Dŵr Cymru "We 15 provide a much higher level of service to our customers than you do at much higher cost 16 and therefore we require you to pay us for that service. That is not the way we go about it at 17 all. We have an agreement with our customer and that agreement will provide for a 18 workable margin in the event that we achieve what we have striven to achieve for the last 11 19 years, which is a fairer price for the water supply to that customer.
- Q Well let us move on, because I think we have established the relevant battle grounds here.
 Can I now ask you some questions about your original cost drivers in terms of difference?
 Remember that one of the factors that you relied on was integrity of pipes, do you
 remember that? A. Indeed I do, yes.
- Q Now, you now accept I think that so far as integrity is concerned there is no difference
 between potable and non-potable, is that right? A. No, it is not right at all.
- Q Well then, can we just look at your evidence on that? Can we start off by looking at do
 you remember you had a meeting with Dŵr Cymru, I think this was very much at the
 Tribunal's suggestion, to try and agree where possible? A. I do indeed, yes.
- 29 Q And there was then an agreed, as it were, checklist? A. Yes.
 - QDr. Bryan, if you have this, called "Key documents"? What we are going to be looking at,
Sir, and I need some help here as to where the Tribunal will have this document.
 - THE PRESIDENT: I do not know if there are spare sets of that rather useful looking volume, you have in your hand, Mr. Vajda, at some point it might be helpful for us to have it. What is it you want us to look for?

1	MR. VAJDA: It is the checklist of points following the meeting of 24 th – and it is under cover of
2	a letter to the Tribunal of 28^{th} .
3	THE PRESIDENT: We have it.
4	MR. VAJDA: I am afraid, in order to understand this, we need to look at Mr. Jones's first witness
5	statement, because this refers to – first of all, perhaps if I can just get everybody looking at
6	the right page in the check list, it is p.5 of 12, the second check list?
7	THE PRESIDENT: Yes.
8	MR. VAJDA: (To the witness) And that I think, correct me if I am wrong, Dr. Bryan, that is your
9	handwriting, is it not? A. Bear with me I am not sure I have the right check list.
10	THE PRESIDENT: Will somebody pass him a copy of the check list?
11	MR. VAJDA: Thank you very much. The check list starts on p.1 of 12. The first witness
12	statement of Christopher Allan Jones.
13	MR. THOMPSON: I do not know if there are any spares. I had not anticipated this line of
14	questioning, I do not think I have actually got it.
15	THE PRESIDENT: Well let us go on for the moment, Mr. Thompson and see if we can find a
16	spare copy. A. I have a page of 5 of 12.
17	MR. VAJDA: Do you have 44 and there is a tick by that? A. 44 there is tick by that.
18	Q That, as I understand, is you agreeing to para.44? A. That is not my handwriting.
19	Q Oh, it is not. A. I think if you were to make your point, Mr. Vajda, I will do my best.
20	THE PRESIDENT: Why do you not put para.44 and see whether he agrees with it?
21	MR. VAJDA: Yes. (To the witness) This is in Mr. Jones' first witness statement. A. Indeed.
22	Q There is a tick by 44 and if we just go to the front of this checklist, it says "Checklist as
23	amended by Albion and forwarded to Dŵr Cymru on 27 th February 2006."
24	THE PRESIDENT: Where does it say that, Mr. Vajda?
25	MR. VAJDA: If one goes to the covering page, which is just before 1 of 12, of the second
26	checklist.
27	THE PRESIDENT: Sorry, have we got more than one checklist?
28	MR. VAJDA: Yes, we have. The first checklist is from meeting on 24 th February 2006. The
29	fault is entirely mine. Then there is another checklist which is further back, going on, which
30	is "Checklist as amended by Albion and forwarded to Dŵr Cymru", and that is the checklist
31	that I have been working off? A. I am now with you.
32	THE PRESIDENT: I have a checklist that was sent to us under cover of a letter of 28 th February.
33	MR. VAJDA: Yes, and in fact I think there are two effectively, that has two checklists. The first
34	is headed checklist for a meeting on 24 th February 2006, and that is 12 pages. Then behind

1	that there should be "Checklist as amended by Albion and forwarded to Dŵr Cymru on 27 th
2	February 2006."
3	THE PRESIDENT: I am not sure we have the second one.
4	MR. VAJDA: I think it may help the Tribunal
5	THE PRESIDENT: Yes, but never mind, let us get on to the point. A. I do not have a problem.
6	If you want to take me to para.44 of Mr. Jones's first witness statement, I think we can
7	actually move on from that fairly easily.
8	MR. VAJDA: Right, because you agree with para.44? A. If we see what Mr. Jones says, he
9	says "There is no intrinsic physical difference between potable mains and 'raw water
10	aqueducts' or 'non-potable mains'." That is crudely referred to a pipe is a pipe is a pipe,
11	and we accept that, and we said so at the meeting. He then goes on to say "When a new
12	main, (for the transport of whichever type of water) is laid, pipe sections of appropriate size
13	are ordered from the same stock of mains." We can indeed agree with that. The problem
14	with that meeting was that we said "That is not the whole story".
15	Q No, I understand that. If we want the whole story, Dr. Bryan, we would be here for weeks
16	and weeks.
17	THE PRESIDENT: Well you are asking him about the integrity of the pipes.
18	MR. VAJDA: And it is para.44 which he says he agreed.
19	THE PRESIDENT: What you are seeking to infer from his agreement to para.44, that he accepts
20	that there is no difference as regards the integrity of the pipes, is that right? A. Paragraph
21	44 does not relate to integrity.
22	MR. VAJDA: Right, well perhaps you could tell the Tribunal now what features make a
23	difference in terms of cost drivers having regard to your agreement to para.44, simply
24	looking now at the physical characteristics of the pipe work. I will come on to matters of
25	location and so on in a moment. We are just looking at the actual, physical
26	THE PRESIDENT: What are we talking about when we get to "integrity", Dr. Bryan? A. We
27	are talking about how important it is that the main is robust, and remains robust; how
28	important it is that the quality of the water within that main remains as it was, or as it should
29	be. We are talking about the ability of the main to provide water at the necessary pressure,
30	for example, which has a direct bearing on it. We are talking about the complexity of the
31	system. It is well known to anyone with the slightest experience of home plumbing that a
32	single pipe is less troublesome than a complex central heating system.
33	MR. VAJDA: At the moment I am just focusing on the question of a pipe is a pipe. We will
34	come to complexity, I know you have a new point and I will come to that. We are just

1		looking at the physical characteristic of the pipe. You mentioned "pressure" which I am not
2		going to take you to, that is dealt with in evidence. What else, apart from pressure, are you
3		quibbling about in terms of the physical characteristics A. Complexity.
4	Q	No, not complexity, simply the physical differences. A. Is that not a physical difference?
5		If I have a single pipe between points A and B, and I am comparing that with a system
6		which is a very complex network of pipes I consider that to be a physical difference. It
7		would certainly have a profound effect on how I would manage that system.
8	Q	Can I put this to you, Dr. Bryan, you have been in this industry for, I think, 32 years, you
9		draft your own Notice of Appeal, and you mention – if we look at the Notice of Appeal – a
10		number of factors
11	THE	E PRESIDENT: Sorry, where are you in the Notice of Appeal?
12	MR.	VAJDA: Paragraph 179. (To the witness) 179, as I understand it, was effectively the main
13		cost drivers which led to a difference in the cost of distribution of potable and non-potable.
14		A. It is a very brief summary of the facts.
15	MR.	VAJDA: There is no reference there to complexity at all, is there? A. If I refer you earlier
16		in the Notice of Appeal, particularly to the diagram on p.13 of that Notice of Appeal, I think
17		you get some measure of the complexity point that I am making.
18	Q	Would you like to expand on that? A. In essence, that diagram – and I am trying to
19		make the Notice of Appeal as comprehensive as possible, and as coherent as possible –
20		shows that the Ashgrove system to the top right of that diagram is a very simple system, a
21		point-to-point system, which is comparable in my mind to the raw water elements of the
22		systems to its left. What you are asking me to do is to compare, if you like, the hatched box
23		that relates to the Ashgrove system with potable systems.
24	Q	No, I am not. What I am asking you is why, at 179 we were looking integrity, and you have
25		given me a number of answers now about complexity, and I know that in your latest witness
26		statement you deal with complexity, which I will come to But, there is no reference to
27		complexity here in terms of that being a feature that goes to integrity. That is the point I am
28		making. A. It certainly is a feature that goes to integrity because it is very much more
29		difficult to keep a complex system to maintain the integrity of a complex system.
30	Q	Well, let us try and deal with this as quickly as possible. So far as integrity is concerned,
31		your two points how are pressure and complexity; is that right? A. No. They are two
32		of my points.
33	Q	What are your other points on integrity? A. The other points on integrity are that the
34		quality of the water that goes through non-potable and raw water pipes is of no concern to

 There clearly are within potable systems. Q I am just looking at integrity at the moment. THE PRESIDENT: But you asked him what the other points were. A. This bears on integrity because the Drinking Water Inspectorate, as I think has been fully accepted, has required Dwr Cymru to spend a large amount of money replacing, relining, refurbishing potable mains because the quality of the water flowing through them was being degraded, and that was not acceptable. Now, that is all to do with integrity – the integrity of the system. That has required Dwr Cymru, as it fully accepts, to spend a lot of money replacing potable mains. That same costs driver is absolutely absent in both raw water and non-potable systems. MR. VAJDA: If we just examine that for a moment, you said a moment ago when we were looking at raw water, we needed to compare like with like. So, we had to compare large pipes with large pipes; is that right? A. Yes. Q. Yes. Now, in relation to this investment in drinking water – potable – was that in large potable or small potable pipes? A. Tve no idea. Q. You have no idea. A. No. I would imagine that the majority of it was in the smaller pipes. Q. Yes. Well, that is in fact the evidence of Mr. Jones, is it not? We are trying to compare like with like. It is somewhat misleading, is it not, Dr. Bryan, particularly for somebody who has got thirty-two years' experience in the industry, to suggest that there is all this investment in relation to the small diameter which is not comparable to the non-potable system that we are looking at because we are looking at bulk distribution and not local distribution? A. You asked me about cost drivers. Q. I did. A. I made no comment – and I have made no observation – on the quantum of the cost driver relating to quality and potable systems. I have simply responded – and rightly so – to the Tribunal's desire to find out whether there is any difference in costs drivers. It is, without a shred of doubt,	1	I	the Drinking Water Inspectorate. There are no quality requirements on them by and large.
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34 because of the quality of the water flowing through them. That is the case with potable.	34		because of the quality of the water flowing through them. That is the case with potable.

- Q I think we see what you are saying on that. Let us move on to location. I think this was 2 another point you made. I think your position here is that potable are mainly in the urban 3 areas, and non-potable are in the rural areas. Therefore, potable is more expensive. Is that a 4 fair way of putting your case? A. It is a simplification, but I think it is reasonably fair, 5 yes.
 - If I could just ask you to take up Annex A of your last witness statement, which is your Q fourth witness statement ---- If I could just ask you and the Tribunal to read paras. 65 and 66? (Pause whilst read): Now, you will recall that Mr. Jones, in his first witness statement, produced some maps on this location point which you criticised at paras. 65 to 66. A. Yes. I have not criticised the maps.
 - A. Yes. You have criticised the conclusions that he makes. Q

12 Q Can I ask you now to take out the map which is exhibited to Mr. Jones' third witness 13 statement ---- The map I would like to take the witness to is CAJ11. It looks like this. 14 (Indicated) Exhibit 1. A. These are the two maps of North Wales and South Wales. If you look at the South Wales one ... What Mr. Jones says in his third witness statement 15 0 16 is that if we take, for example, Swansea and Cardiff ---- Perhaps I should just explain to the 17 Tribunal and the witness how this has been done. Yellow is basically rural; grey is urban. 18 For the keys, A is source; B is a treatment works; S are non-potable customers; W are 19 potable customers. That is, if you like, the key to the map. It is not obvious from that, is it -20 --- If you look, there is a huge amount of potable distribution in Swansea and Cardiff, as one 21 would expect, because they are large cities. But, it is not obvious from that, is it, that that is 22 actually there for large potable customers in those areas? A. I am sorry. The point you 23 are making is?

Q Well, how can you tell from this map that potable customers ---- potable pipes that we are looking at for large potable customers ----

THE PRESIDENT: Can you just remind us: what is 'large' on this map? What sort of volumes are we talking about?

28 MR. VAJDA: Ten for customers.

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29 THE PRESIDENT: The ten largest you mean?

30 MR. VAJDA: The ten largest, yes. A. But, on a like-for-like basis these are very small 31 customers compared with non-potable customers.

32 Why we are going to this is because a major part of your case is that one of the fundamental 0 33 distinctions between non-potable and potable is that basically non-potable is in the 34 countryside and therefore cheaper, and potable in the urban areas. All I am saying is that

when one looks at this map, one cannot actually deduce that from this map, can one? A. Can I respond as best I can?

- Q Yes. Certainly. Can I say first of all that I have significant trouble with this map, because it shows, for example, that Herefordshire is very heavily populated with rural areas. If one looks closer to home and closer to this particular case ---- So, if one takes the North Wales map, I have some doubts in my mind about the definition of 'urban'. I think that what you have done is that you have used ordnance survey digital information which relates to settlements of any size. To give an example of that, if one looks on the North Wales map at the Ashgrove system, which is helpfully shown in green, running from A10 to S10, we have along the length, approximately half-way along the length of that green line, a little grey area to the north-east of that pipeline. That is Sealand. It is the hamlet of Sealand. I thought you might ask me this question, and I did a Google (wonderful what technology does!) aerial photograph of the hamlet of Sealand. As far as I can make out, it comprises a couple of houses and perhaps a pub along one side of the road. It does not constitute, in my mind, an urban area. Therefore, I am not sure that this is a satisfactory basis for ----
 - Q Dr. Bryan, we are looking here at regional averages. This is not stand-alone. Your case is that looking at this across DC's network as a whole it is much more expensive to distribute potable than non-potable water. Your case is based on ---- A. Well, no, that is your case.

Q No. No. A. It is Welsh's case that potable is much more expensive to distribute that raw water ----

- Q No. This is a challenge to the decision of the Director who concluded that the cost of distributing potable and non-potable was the same. You are challenging that, and one of the bases of your challenge is that you are saying that in fact the cost of distributing potable water is significantly higher than non-potable. A. That is correct.
- Q One of the bases of that is that you say that actually, looked at ---- We are looking at
 regional average pricing that potable pipes are generally to be found in urban areas and nonpotable in rural areas. So, one has to look at it across the board, does one not? A. One
 does, yes. I think that that is demonstrably apparent from the maps even though I question
 the basis on which they have been -----
- Q I do not think I need to explore that further. If I can give you, sir, the reference because
 there has been a quibble about the basis on which the map has been produced ---- The
 Tribunal does need to take it up. It is at footnote 5 to Jones 3, where he explains that it was
 done on data supplied by the Ordnance Survey.

1	THE	E PRESIDENT: On a point of information, Mr. Vajda, which may not get us anywhere, but
2		just out of curiosity, I think we have been told that there is now one potable customer over
3		1,000 megalitres daily. If you could just identify which one that is on the map, that would
4		be helpful – not necessarily now, but at some time.
5	MR.	VAJDA: Yes. I am sure those behind me will be able to assist. I have been told it is W1.
6	THE	E PRESIDENT: That sounds logical.
7	MR.	. VAJDA: Can I then come to the next difference in cost driver, which I think you say is
8		length, and if I can just take you to para.28 of your witness statement. We looked at this
9		before because this is one where I asked you some questions about how you got to the 15
10		kms for raw? A. Yes, indeed, yes.
11	Q	What you are saying here, as I understand it, is the length for potable customers is more
12		than twice as long as the length for non-potable. That is your case here is it not? A. That
13		is my estimation, yes.
14	Q	And that is something which you relied on in your Notice of Appeal. A. Yes.
15	Q	Now, can we just go to Annex A to see how this is done? When you look at non-potable, if
16		I could just ask Dr. Bryan and the Tribunal to read para.6 on p.15 of Annex A, the first
17		page.
18	THE	E PRESIDENT: Yes.
19	MR.	VAJDA: As I understand it for non-potable you say "Well, actually, we have, say, the
20		Ashgrove system, it serves two customers. If the length is, say, 16 kms, look at it, average
21		length by customer, two customers, so it is 8 kms." That is how you do it for A.
22		That was how I reached the figures, yes, over the generality of customers, yes.
23	Q	Yes. Then if we go over the page you tell us how you do it in relation to potable customers,
24		and if I could just ask you, Dr. Bryan, and the Tribunal to read para.11.
25	THE	E PRESIDENT: Yes.
26	MR.	VAJDA: Here you are looking at – you are not doing it on a per customer basis any more –
27		you are taking the average distance between the 10 large customers and their closest water
28		treatment works? A. Yes.
29	Q	So you are not actually comparing like with like, are you? A. No, the systems are quite
30		different and therefore like for like ceases to have any bearing in reality, I think.
31	Q	Do you know how many potable customers Welsh has? A. More than 1000 megalitres a
32		year?
33	Q	No, if one is simply looking at - you are looking here as I understand it, are you looking at
34		large potable customers, or all potable customers? Just large? A. The devisor that I used

1	in creating the 8 kms length was large and very large non-potable customers. There are
2	very few very large potable customers.
3	Q Yes. Fine, well that is all I want to ask you then on length, and I now move on to
4	complexity, which you have already touched on and this is the point that you now make, as
5	I understand it, if we can go – still in Annex A
6	THE PRESIDENT: We sometimes take a break, Mr. Vajda, mid-morning, I do not know whether
7	it might be convenient just for five minutes to do so.
8	MR. VAJDA: Yes.
9	THE PRESIDENT: Right, five minutes.
10	(<u>Short break</u>)
11	MR. VAJDA: Sir, I have had a reflection in the break about this cross-examination and it occurs
12	to me, subject to the view of the Tribunal, because I am very conscious of time and the need
13	to move on, that I propose now not to put any other point on cost drivers. With all these
14	points we could be here for a very long time.
15	THE PRESIDENT: Yes.
16	MR. VAJDA: These points are made in the evidence, we have made a lot of these in our skeleton
17	and given the indication that you gave last time otherwise we would be here for a week -
18	
19	THE PRESIDENT: Well it is very much up to you, Mr. Vajda, if you want to ask the questions I
20	am not going to stop you.
21	MR. VAJDA: No, but I am conscious of the time, and I have some more questions on cost
22	differences, these are points, some of which we have already effectively put in our skeleton.
23	T here is dispute on the evidence between Mr. Jones and this witness, and I would
24	THE PRESIDENT: It is entirely up to you. We are at your disposition and so is Dr. Bryan, I
25	think.
26	MR. VAJDA: Yes, yes. I think what I will then do is to just deal with one last area which is
27	activities at Shotton.
28	THE PRESIDENT: Yes, very well.
29	MR. VAJDA: (To the witness) So we are now moving, and this is the last area I am covering
30	with you, I am now focusing on what you are actually doing at Shotton. A. Yes.
31	Q Can you tell me, or tell the Tribunal, what you are doing that avoids Dŵr Cymru incurring
32	any cost that it used to incur? A. I can tell you what we are doing
33	Q Maybe the easiest thing for the Tribunal and myself, if you could number them – start with
34	point 1, and just go through one by one the things

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MR. VAJDA: Yes. A. Well we are providing a comprehensive water supply service to Shotton Paper, comprising both a potable supply, the terms of which are not subject to this Appeal, and a non-potable supply the terms of which certainly are. Within that we then work with Shotton Paper as it has been evidenced, in partnership to ensure that their use of the water that we supply them with is as efficient as possible. We see that as an important responsibility of a water undertaker responding both to the statutory obligation all water companies are under to promote efficient use of water conservation and we also see it as an essential component for any water undertaker that is seeking to compete in an extremely difficult market.

11 THE PRESIDENT: What does that physically mean, Dr. Bryan, can you just paint the picture for 12 us, day by day or week by week? A. Physically day by day it means that we have a 13 manager who is pretty well dedicated to Shotton. That is largely a factor related to the fact 14 that he is based in Chester. He would also have time to manage the supply to Corus were we 15 able to supply them, so I am not saying that his time needs to be fully committed, but at the 16 moment that is our sole business in that area. His job is to understand an extremely complex 17 plant, extremely complex processes within that plant and the dynamics of it, and to 18 understand how water is used in that and where water might be used effectively. It is also 19 his statutory role to ensure that the potable water, and as I have said before we are allowed 20 to distinguish potable from non-potable in terms of our statutory responsibilities to that 21 customer. It is also his duty to ensure that that customer continues to protect the quality of 22 potable water within a very complex system and that that water is not compromised or 23 contaminated by coming into contact with a much larger volume of non-potable water. The 24 network within that particular paper mill is as complex as with a much larger geographical 25 network that will be used, for example, to supply domestic customers. I know we are not 26 comparing like with like ----

27 THE PRESIDENT: This is the water distribution network within the ---- A. Water distribution 28 within the Mill. Everything from the water needed on the actual paper machines, the water 29 needed to disintegrate the recycled newspaper that is used as the feed stock for that, down to 30 things like the safety showers and for the operation of the canteen. Albion has a 31 responsibility for ensuring that water quality is maintained within that system. We are at a 32 disadvantage as any inset appointee is, is that no matter how big or, indeed, how small our 33 customer base is the Drinking Water Inspectorate classifies that area as a water distribution 34 zone and, as such, that triggers a very significant amount of water quality analyses that have

¹ THE PRESIDENT: Let us see what they are doing first.

1		to be undertaken again on the potable side. But those activities in the round have enabled us
2		in partnership with Shotton Paper to reduce their water consumption from 16 m ³ per dry
3		tonne of paper produced back in 1999 - it was actually significantly higher than that when
4		we first became involved – down to a level of 13 cubic metres per tonne of paper. We are
5		currently working with them to achieve 12 cubic metres per tonne. They, of course, are
6		benchmarked against UPM's international operations. Their ambition is to achieve world
7		class which would be 9 cubic metres per tonne. We cannot do that for them. They cannot do
8		it without our assistance. It is, in that sense, a genuine partnership. But, I think their
9		behaviour and their support for us over the last eleven years has amply demonstrated.
10	Q	Just remind me: we did not exactly meet your manager when we went up to Shotton, but I
11		seem to remember that someone was there. A. Yes, indeed. A representative of the
12		plant was at the Sealand end, and accompanied us, I think, round the
13	Q	This is the gentleman you have referred to? A. No, it is not. The gentleman I have
14		referred to there There has been a change of personnel, but the gentleman I have
15		referred to now is the senior representative at the site who is responsible for water amongst
16		a whole range of production issues.
17	PRC	DFESSOR PICKERING: Can I just ask: of that saving from 16 to 13, what proportion of
18		that is represented by potable and what by non-potable? A. It is all non-potable.
19	Q	That is all non-potable. A. That is all non-potable.
20	Q	Right. What had been the trend? I do not know whether you happen to have any figures
21		about the trend in water consumption and efficiency on non-potable before you took over?
22		A. Not so much a trend, Professor Pickering, as stability. What was happening – and still
23		happens to a much lesser extent – is that the machine the plant the paper-making
24		plant operates best operates at its most efficient when these very large machines run
25		twenty-four hours a day, 365 days a year, or for long periods of time. What was happening
26		was that those machines would be forced to shut down. In many cases, the cause of those
27		shutdowns was related to water?
28	THE	E PRESIDENT: In what way? A. Well, some of those problems were mill-related, and,
29		for example, they were using the raw water – the non-potable water – to seal various
30		devices, particularly pumps. That sealing water would become contaminated with oils. The
31		oils would then get into the system because the water is re-circulated and recycled as far as
32		it is possible to do, and we would then get a build-up of oil and very fine part fibres of
33		wood/paper that would block the filters that supply the water to the paper machines. The
34		paper machine stops, and you then have a If you ever see it, it is spectacular. It is
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something like a 10metre wide sheet of paper travelling at 60mph and when that breaks, not only does all hell break loose, but you then have a sea of pulp that then needs to be cleaned up. So, it was those incidents that influenced the smooth-running of the machines that were the major cause of excessive water use. What we have done, together with Shotton Paper, is identify the causes of those problems, and try and prevent them. But, some of the problems occur outside the plant because of the low and variable quality of that non-potable water. Indeed, the week after ----

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8 THE PRESIDENT: What do you mean by that? A. Well, the Ashgrove treatment works is 9 not of a particularly high quality – and there is no requirement on the supply to be of high 10 quality – and it is variable. So, there are times when rather more particulate matter is taken 11 over into supply than at other times. That causes problems. There was an incident 12 immediately after the last hearing when a large amount of weed was dislodged from 13 Ashgrove and found its way into the mill and caused a shutdown there. Now, to be fair, 14 although we have challenged Welsh on this, Welsh still claim that the weed was not their responsibility. So, that is not a settled matter. But, there is no doubt that those external 15 16 influences have a profound impact on the plant. We are in discussion with Shotton - as, 17 indeed, we have been for a large number of years – about what we would like to do if we 18 had the necessary commercial basis on which to do it – which would be to take that low 19 quality water and treat it at the Shotton Paper end to a standard that would obviate these 20 problems and use the same process for supplying Corus' requirements if they still required 21 us to be their supplier. So, that is, in broad brush, a picture of what we do and what we 22 aspire to do.

23 PROFESSOR PICKERING: So, that is technical advice and consultancy, is it not, in significant 24 measure? A. It is certainly technical advice. But, I do not see that as something that 25 is outwith our definition of the service that we provide to a very large customer. I do not 26 believe that I can go into the commercial competitive market and say, "We will sell you a 27 very large volume of water, currently at a very high price, and, by the way, if you want to 28 know how to use it better we will then charge you again". I believe that the water industry 29 - not just at the industrial level, but also at the domestic level - needs to be very much more 30 aware of water resource issues that this country faces; of the need for conservation. If we 31 simply see it as an added extra which we only provide if we are paid for it, then the current 32 situation is going to get markedly worse. So, I make no excuses about our belief that the service we provide is a very hands-on service – obviously consistent with the value of the 33

 only a specialist water company can provide. MR. VAJDA: Following on from the question that Professor Pickering asked, he said that were essentially technical consultancy services Is there anything that you do whic regulated activity in what you have described – a regulated water activity? A. 	h is a at is a ious at
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5 regulated activity in what you have described – a regulated water activity? A.	is a ious at
	is a ious at
6 Everything we do that have just described is encapsulated in the regulatory returns th	ious at
7 Albion makes to the Authority. So, in that sense, yes, it is. I am not aware that there	
8 detailed handbook of what comprises a regulated and non-regulated service. It is obv	'e done
9 the extremes, but nothing we do is inconsistent with what other water undertakers have	-
10 as part of their regulated business when the circumstances arose.	
11 Q I am just asking you, just as a question of fact: the point that Professor Pickering mad	e is
12 that you are providing essentially a consultancy service. What I would like to know,	simply
13 as a question of fact, is: are you providing anything other than the consultancy and tee	chnical
14 services that Professor Pickering referred to, and specifically are you providing any	
15 regulated services? A. I have just told you, all those services we consider to be	
16 regulated.	
17 Q Could I ask the Tribunal to turn up a letter that you wrote on 24 April, 2006? (Hand	ed)
18 THE PRESIDENT: I do not know that we have been copied in on this.	
19 MR. ANDERSON: It was a series of letters passing between the Authority and Albion,	
20 requesting certain financial information about these consultancy services provided to	
21 Shotton.	
22 THE PRESIDENT: We have got a letter from OFWAT to Dr. Bryan of 21 April, and a re	ply of
23 24^{th} .	
24 MR. VAJDA: That is the relevant correspondence that Mr. Anderson referred to. I think	the
25 letter of 21 st was a request for	
26 THE PRESIDENT: It is a letter seeking disclosure.	
27 MR. VAJDA: Then we have the response of Dr. Bryan to that request for disclosure. He	
28 effectively declines the request, but says, "In a spirit of co-operation, I offer the follow	ving
29 observations on each item in your schedule". Then we see at (2): "We currently provi	de no
30 non-regulated services for Shotton Paper although Envirologic did provide some prior	r to
31 2003". So, that is the position, is it not? A. Yes, it is, yes. That is what I have s	aid.
32 Q Well, it is not quite what you said, with respect. You said it was put in your regulatory	
33 terms It certainly gave me the impression – or perhaps I was mistaken – that you	were

2 not? 3 THE PRESIDENT: Let us just be clear. 1 understood the witness to be saying that he regarded the services that he has just described as regulated services. 5 MR. VAJDA: That is what I understood. 6 THE PRESIDENT: He said in para. 2 that he provides no non-regulated services. 7 MR. VAJDA: Yes. 8 THE PRESIDENT: He views these services as regulated services. 9 MR. VAJDA: Yes. But, my next question is this: do you need to be a regulated water 10 undertaking to provide these services? A. What do you mean by 'these services'? 11 Q. The services that you have described to Professor Pickering and the Tribunal – the technical 12 and consultancy services that Professor Pickering asked you about a moment ago. A. 13 It would technically be possible to hire an independent consultant to advise on a range of 14 those issues. 15 Q. Yes. So, the answer is that you do not need to be a regulated water undertaking to provide 16 the services	1	suggesting that this was a regulated But, the position is as set out in your letter, is it
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34 replaced Dwr Cymru in providing as a retailer to Shotton Paper? A. The answer, as far	34	replaced Dwr Cymru in providing as a retailer to Shotton Paper? A. The answer, as far

1		as we can tell, is 'No'. We offer to do the billing, the meter reading on their behalf, and
2		allow them access to audit those figures. We even offer to buy the system from them –
3		although that was while we were still in joint venture with Pennon. But, no, Dwr Cymru
4		have consistently declined to rely on our meter readings, and so they still send their own
5		meter reader who tends to meet our local manager. No, I think it is true to say that Dwr
6		Cymru have not chosen to discontinue any of the activities.
7	MR.	VAJDA: In relation to these consultancy activities, you have indicated to us, I think, that
8		you have had considerable success in reducing the amount of water that Shotton uses. You
9		use the term 'consultancy' as a A. Well, it is Professor Pickering's term
10	Q	Yes, I know, but you are using it as a way of A. I am using it (overspeaking)
11		for those activities. We provide the technical assistance as part of what we do for Shotton.
12		As part and parcel of that, the effect of those services is that we have helped them to
13		improve their water use efficiency very substantially.
14	Q	Yes. So, the position is this: that the beneficiary of these services is Shotton; is that right?
15		A. Yes.
16	Q	They have, as a result of these services, saved money. A. Yes.
17	Q	So, presumably, and perhaps you can tell us, are you rewarded for these services by some
18		form of cost sharing – that if you manage to reduce the costs by so much, you get a
19		percentage of the saving? A. Not in those cases because
20	Q	How are you remunerated? How do you share in the success of reducing the water
21		consumption of Shotton? A. That is part of our job. We see it as part of our job. Our
22		payment for that would be in the form of a margin on sales, were we to achieve a cost
23		reflective bulk supply price or common carriage charge. The difficulty in doing what you
24		propose is that within our Customer Service Agreement with Shotton Paper there is an
25		explicit formula that allows for the sharing of benefits. Now, that is fine. When, as I hope,
26		we will be able to come back to Shotton Paper and say, "We have a fairer price for water",
27		those benefits will be (a) readily measured, and (b) clearly attributable to Albion. The
28		difficulty with sharing the benefits of improvements such as I have described - which have
29		happened over a seven year period – is that it is a partnership effort, and for us to claim all
30		the credit is not a very good basis on which to conduct a partnership. So, we view from a
31		practical as well as a commercial point of view we view the ongoing incremental
32		efficiency benefits that we help Shotton Paper to achieve as part of the service, and we do
33		not seek to recover anything additional by way of payment for those - rather, we see it as

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something which helps cement the relationship, and we hope that we can rely on when we come to re-negotiate that contract in the fullness of time.

PROFESSOR PICKERING: This is the 70:30 formula, is it not? A. Yes.

- Q Shotton gets 70 and you get 30 percent of the savings ---- A. Of a defined benefit.
- Q Are you saying that you could claim that at the moment but are choosing not to do so, or are you saying that it only kicks in when you have, as you hope, obtained a lower price on which you can deliver generally? A. We are saying that it only kicks in when we have a defined benefit when we can agree with Shotton what the starting point is. We can agree with Shotton what the end point is and therefore where the benefit is. We can ascribe that benefit to our activities, and ongoing benefits, which run across the whole scope of an extremely complex manufacturing operation and which happen over a period of seven years, and which fluctuate over that period. It may be 13 m³ per tonne today, it may be 12.8 tomorrow and 12.9 the following day.
- Our experience over more than 15 years now is that trying to put those sort of incremental gains into a benefit sharing exercise is incredibly difficult and usually leads to bad feeling and therefore in practice if we are going to have a share of benefits we define specific projects, where we can have a start point, we can have an end point, we can have a defined gain and there is no dispute about Albion's contribution.
- 19 Have you had any of those at the moment? A. Right at the outset – I cannot remember Q 20 whether it was in Dŵr Cymru or the Authority's skeleton, they pointed out the fact that the 21 original retail price was 27.8p and the determination of the Authority (Director as he was 22 then) was that it should have been 26p. What happened at that point was that Dŵr Cymru 23 immediately reduced their retail price to 26p. That resulted in the defined benefit. That was 24 well before the inset appointment was made and the resultant benefit was shared on a 50:50 25 basis at that stage over a period of 12 months, and I think from memory resulted in revenues 26 to Albion of some £50,000.
- MR. VAJDA: If I could just follow up the question Professor Pickering asked, just so that we are
 all on the same wavelength, because Professor Pickering had in mind exactly the point I had
 in mind in relation to the cost sharing. Could we look at the agreement between Albion and
 Shotton which is, I am told, is Annex 12 to Albion's Notice of Appeal.
- 31 THE PRESIDENT: Actually Annex 12 is the application for an inset appointment.
- 32 MR. VAJDA: Yes, that is right, it is in that Annex. If one goes to p.49 one has an agreement
 33 which is dated March 1999 between Albion and Shotton, and Professor Pickering I think

1	was referring and I want this to be confirmed with the witness, if we go to p.53, 7.4 of the
2	Agreement.
3	THE PRESIDENT: Yes, that is right.
4	MR. VAJDA: The saving and the cost of supply net shall be shared between the customer and
5	Albion 70:30. A. I seem to have removed it from my copy but I remember it, so I can
6	manage. What is your point, Mr. Vajda?
7	MR. VAJDA: It is not a point, it is just so we all know what is happening here and this is the
8	source of the 70:30. It is really in a sense confirmation.
9	THE PRESIDENT: Yes, we know this, Mr. Vajda.
10	MR. VAJDA: Yes.
11	THE PRESIDENT: How are we getting on?
12	MR. VAJDA: We are getting on – well, I have finished.
13	THE PRESIDENT: You have finished? (Laughter)
14	MR. VAJDA: I was going to leave you a little surprise. Subject to anything the Tribunal says but
15	I am very happy, more than happy, to sit down.
16	THE PRESIDENT: You are happy to sit down, very well. Just stay there a moment, Dr. Brown,
17	because your counsel may have some questions in re-examination. I am assuming nobody
18	else wants to cross-examine? No.
19	Re-examined by Mr. THOMPSON:
20	Q Just very few questions, Dr. Bryan. The first, you may recall – it may seem a long time ago
21	- you were asked about the relationship between CCV and MEA, and I think Mr. Vajda said
22	he would take you to it, but I am not sure he ever did. If we could look at your witness
23	statement, your fourth witness statement, para.98. In the middle there is a sentence
24	starting "In the context of this case"? A. That is correct, yes.
25	Q "In the context of this case I believe that it is reasonable to equate CCV with gross MEA."
26	So that was your position as at 6 th April when this statement was made. Is that right? A.
27	That is correct, yes.
28	Q Then subsequently I think Mr. Jones swore a third statement, dated 10 th May, some months
29	later, and in the last sentence of para.9 he explains that the CCV represents "the
30	accumulated capital expenditure on the asset in question adjusted for inflation." So it
31	represents the costs in real terms incurred in relation to the asset at the date of the analysis,
32	and then he looks at the assumption you made. So that was the position in the light of Mr.
33	Jones's evidence.

1 that right? CJ41 think you referred to? A. The Asset Register entry? 3 Q Yes. It all went rather quickly, I just thought it might be helpful to clarify where that all came from. Am I right in thinking that p.2 of CJ4, table C11A, it has a left hand column "Gross MEA" is that right? 6 Q And under category B, Group 2, there are water treatment works, is that right? A. That's correct. 7 correct. Q I think you gave a figure of some 476 million. Is that the total of those treatment works? 9 A. 476.31 stand to be corrected on that, is I think the total for lines 3 to 10 of that table. 10 Q So the total figure for group water treatment works? 11 Q are given by Dŵr Cymu's figures? A. Yes. 12 Q so was your point that you could derive some idea of the MEA 13 MR. VAJDA: Do not lead the witness, please. 14 MR. THOMPSON: I am not seeking to lead the witness, I am seeking to clarify. 15 THE PRESIDENT: Just to put it slightly more neutrally, what inference do you draw from this table in terms of calculating the MEA? 16 tazgerient categories of works. It may be of help to the Tribunal if 1 explain that "SW" as a prefix relates to surface water sources, and "GW" relates to ground water or borehole sources. The numbers following describe broadly speaking how complex the treatment process is at a par	1	Then, I think you gave evidence by reference to an Annex to Mr. Jones's first statement, is
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dictator of the apportionment of these MEA values one would have expected it to be 119 million. So it was on the low side, but it was not as low as Mr. Jones' evidence suggests it should have been, because Mr. Jones is saying the CCV for Ashgrove is 1.447 million, he accepts that. He is saying that the MEA value for Ashgrove is three and a quarter million, (well over twice) and indeed he should add in the cost of the sludge main, which is part of the treatment plant, but clearly not part of the water distribution system, and that would bring it up to three and a half million.

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So what I did, and the reason why I took that view that CCV was the only value that we have relating to Ashgrove, the reason why I was reasonably confident that that was a reasonable proxy for MEA was because of that analysis. I fully accept that it is likely to be slightly low given the analysis that I have just described. My belief is that that would result – were one to apply a correction factor – that would result in a revised MEA true, if you like, MEA for Ashgrove of £1.815 million – some £300,000/£400,000 more than my estimate but some considerably lower than Mr. Jones.

15 Q Can I now ask you something about the stand-alone MEA question. You were given 16 various analogies of Mr. Vajda buying a car for, I think, £20,000. I would like you to 17 imagine that if Mr. Vajda needed a car to drive himself to the station and for nothing else -18 so, for example, a second hand Honda which might cost, say, £8,000, but he spent, say, 19 perhaps £20,000 on a smarter car, or perhaps splashed out and paid £40,000 for a Range 20 Rover because he thought it would look smarter, which would be the correct MEA value for 21 these purposes? Would it be £8,000, £20,000 or £40,000? A. My understanding is that 22 to fulfil the necessary functionality of taking Mr. Vajda from his home to the station the 23 banger would do, would suffice, that would be the most efficient way of ensuring that 24 functionality. But I have a more profound misgiving about that approach, which is that 25 OFWAT would not allow that approach in tariff setting. It could not possibly allow that 26 approach because we would end up with tariffs that reflected a hypothetical new water 27 industry rather than the reality which is that we have a water industry that is still heavily 28 dependent on the investment of our Victorian forebears, let alone pipelines like this that 29 were put in in the 50s. So, notwithstanding the OFT reference that we have been pointed to 30 and I claim no expertise in that area, that is not the way that tariffs are set or justified within 31 the water industry.

THE PRESIDENT: You do not justify the tariff on the basis of new build costs? A. There is
an element within any tariff setting proposal that reflects the forward looking capital
programme, in other words, what that particular water company has to do to fulfil its

obligations through the next five year period or whatever it is that OFWAT chooses as the timescale for the tariff setting. But absolutely no way is it based on an assumption that all assets will be replaced willy-nilly.

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- MR. THOMPSON: The third and final area I wanted to just touch on is the different in pipeline costs. You will recall that the President asked a question about how it was that such a large difference arose. Could you open the second witness statement of Mr. Jones? It is Annex 2 para.6. A. Yes.
- Q Can you explain how Mr. Jones appears to have reached his total MEA value for the pipeline? A. Well he has used a table which is familiar from my witness statement, where Mr. Vajda took me through how I would approach it.
- THE PRESIDENT: You reproduce it. A. And I took that from this very table for consistency's 11 12 sake. Mr. Jones has used the length that has taken from what he says was a desk top survey, 13 16.5 kms, and then he has applied unit costs that reflect Dŵr Cymru's unit cost provided for 14 the 1999 periodic review, which I have challenged as excessive, to create a basic cost of 15 £6.745 million, and he has then added to that the additional costs that would be incurred for 16 different circumstances and those he split into pipes going through rural and suburban 17 areas, a rather long length going through urban areas which I disagree with but which I have 18 used in my worked example to be consistent, and then the river crossing and railway 19 crossing where he has assigned additional unit costs, additional that is to the £408 per metre, 20 and he has added those together to create his total of something a little short of £8 million. 21 He has then indexed that, he has inflated that by a factor of 13.9 per cent. to give an outturn 22 cost of something over £9 million.
- MR. THOMPSON: Yes, and if we then take your analysis, which I think is Annex B to your
 statement, paras. 81 and 82, while keeping Mr. Jones's open, the figures are not the same in
 your 81, that is because you have done the 13.9 per cent. inflation? A. I have done two
 things there, Mr. Thompson. I have added in the 13.9 per cent. to the table in Mr. Jones's
 statement that you have referred to, and I have added in, as you will see the sludge main,
 which I believe to be ----- In fact, Mr. Jones also comes to the sludge main a little bit later
 on in his own statement.
- Q Looking at your 82, quite markedly different figures are produced. Then, in 83, somewhat
 lower. I think it is in your statement, but could you explain in general terms why you think
 the basic figure Mr. Jones has used is much too high?
 - THE PRESIDENT:I think, if I may just make a supplementary to that before you answer, Dr.Bryan, one question is why you have preferred 176 as your basic cost to 465, which is Dwr

Cymru's basic cost? A. Yes. Well, that 465 is, I believe – and, again, I stand to be corrected – Mr. Jones' extrapolation of the cost of a 700 millimetre main based on Dwr Cymru's unit costs for the 1999 periodic review. I say in my witness statement that those costs appear to be excessive as they stand. They are significantly higher than the OFWAT benchmark unit costs. Therefore, I have preferred to use the OFWAT benchmark unit costs as a more reliable measure, and a measure that is, indeed, more consistent with figures that come after it. I have also assumed a 600 millimetre plastic pipe. So, I have not needed to extrapolate those figures to 700 millimetres. Hence I end up with a figure of 176. The workings for that should be within the body of that witness statement.

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10 Q Why do you assume 600 millimetres as distinct from what we understand the present pipe to 11 be, which is 700 millimetres? A. Because 600 millimetres is a more effective way of 12 achieving the same functionality fundamentally. A. What we have in the Ashgrove 13 system at the moment is a 700 millimetre steel pipeline that was put in in the mid-1950s. It 14 is exactly the same sort of pipeline that was put in to supply Bretton Works. We know that 15 that pipeline delivers the requisite volume. What I have done is assessed, as best I can, 16 whether it would be possible to achieve the same functionality with a smaller pipe. I have a 17 vested interest in doing so – it reduces costs and clearly pipe insertion is not possible. 18 Technically it might be, but for the simple issue here, it is not possible to put a 700 19 millimetre pipe through a 700 millimetre pipe without bursting the pipe, which is an altogether different technology. So, what I did was that I assessed whether a 600 20 21 millimetre polyethylene pipe (a plastic pipe) would give us the same ---- the required 22 functionality as the current 700 millimetre pipe does. I have concluded that it would, and 23 hence I have used that as the basis for my calculation.

24 MR. THOMPSON: Those are the only questions I have by way of re-examination of Dr. Bryan. 25 PROFESSOR PICKERING: Dr. Bryan, could I just ask you about technical progress in this 26 industry? I just wonder whether, in terms of the production, treatment and distribution of 27 water, you feel there is sufficient technical progress, or are we still operating on the 28 technologies of, say, twenty years ago? I think you have just referred to 'new materials' or 'different materials'. Setting aside the question of price movements in the same materials, 29 30 are there significant elements of technical progress? A. There is some, sir, at the 31 margins, but this is an industry which has gone in phases. If you do not mind me taking a 32 couple of minutes ----? The water industry responds to major challenges – or has done in 33 the past. The first major challenge was the cholera outbreaks that hit London, in particular, 34 in the 1840s and 1850s. Those gave rise to the water networks, the water distribution

systems that we have today in large measure in our urban areas. Hence, Thames Water
complaining that many of its pipes are 150 years old. The next major change was the
introduction of chlorination as a disinfection agent which took place in the early 1900s.
Again, that was a profound change. At the same sort of time, for those of you who know
London, the Metropolitan Water Board was making huge investments in the reservoirs that
one sees in the Thames Valley, near Heathrow, and, to a lesser extent, in the Lee Valley to
the north. The same was happening with Birmingham, and with other major conurbations
looking to supply water supplies.

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Since then, yes, there have been changes at the margins. Yes, we can point to reverse osmosis, for example, which is what Albion introduced at Hammersmith Hospital and what Thames are proposing for their desalination plant. One can look at ozone that in some respects can replace chlorine. One can look at certain improvements in treatment technologies. But, those are at the margins. It is a generalisation, but no less true for that, that the water industry has rested on its laurels not for the last twenty years, but really for the last fifty to sixty years. Much of what one sees in the systems as one goes around would be immediately familiar to our Edwardian forebears – and, indeed, in many cases, to our Victorian ones.

There has been very little pressure on the industry to innovate. The regulatory regime that we have had since privatisation has been about improving what we currently have – incremental benefits; incremental efficiency improvements on the existing model. There is very little incentive within that structure to innovate; to break out and to do something completely different.

- Q Would competition create significant innovation, and, if so, in what ways? A. In my
 mind it would create very significant and desperately needed innovation. It would create
 innovation in a number of ways. As the Tribunal though not this panel is aware, we
 have been involved in an attempt to introduce competition into the domestic sector. It is the
 domestic sector where innovation is going to have the most profound effect.
- THE PRESIDENT: What sort of innovation are we talking about? A. We are talking about
 recognising that ---- If one accepts the figures that are currently published, the average man,
 woman and child in this country uses 160 litres of water a day. Some would say 150. The
 reality is that that figure is a guess. That figure is what remains after we make certain
 assumptions about leakage. The studies on which that figure is based are poor at best. Our
 own view is that not only is that 160 litres unnecessary, but it is clear to everyone who has
 turned on a tap that most of that water does not need to be potable. So, I think when one

THE PRESIDENT: I have just one question, Dr. Bryan, if I can take you back more to the technicalities of this particular case for a moment. It is our old friend the potable/non-potable comparison. In parts of the argument as it is now being developed, it is said that what one should really look at is the bulk part of the potable system and compare that with bulk non-potable. A. Yes.

We know, however, that the bulk part of the potable system is actually part of a larger Q whole which delivers everything to all sorts of customers. I am just wondering if you have got any comment on that approach - and, in particular, whether in your view that approach compares like with like? A. I think to answer that, one has to go back to Dwr Cymru's justification for the large industrial tariff that we have considered indeed at the previous hearing. I do not find any particular problem with the way that they have dealt with generating that large industrial tariff. One could quibble about some of the cost allocations at the detailed level, but, in essence, what Dwr Cymru said to the Authority, and what the Authority accepted, was that there are different costs associated with different components of the distribution system, and, if you like, a hierarchy approach where the very large mains were at the top, and the very small mains were at the bottom. What Dwr Cymru argued – and I take no issue with that – is that the largest customers use only the top tier of assets whereas the domestic customers use all tiers of assets. If one can attribute costs to those various tiers, then depending which tiers the customer in question – or, one should say, the class of customer currently in question uses – then one can create a tariff structure which is

1	broadly cost reflective. I have no issue with that at all. I have no issue with Dwr Cymru's
2	recognition that that top tier is 16p, give or take. So, that I am quite happy with.
3	Where I remain entirely unconvinced is that that top tier is at all suitable as a proxy by way
4	of physical description or indeed cost to the non-potable systems that we no have more
5	details on.
6	Q I think that completes your evidence, sir.
7	(The witness withdrew)
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9	MR. ANDERSON: Sir, our witness, Mr. Paul Hope - I understand that both Mr. O'Reilly and
10	Mr. Thompson wish to ask questions – is unavailable tomorrow because he has a hospital
11	appointment.
12	THE PRESIDENT: You still have an opening statement to make, which you ought to make at
13	some point – if you wish to.
14	MR. ANDERSON: I was not planning to now, since we have started the evidence. I have put in
15	such full written submissions, that I was planning just to have one go. I do have some
16	questions for Mr. Jeffery, but, again, that will be quite short because it covers ground that
17	Mr. Vajda covered with Dr. Bryan on the retail services, and so on. So, I was not planning
18	to be very long on Mr. Jeffery. I was not planning to spend any time with Mr. Jones.
19	THE PRESIDENT: So, if we say, in terms of order of witnesses now, Mr. Jeffery, and then
20	perhaps interpose Mr. Hope, and then get on to Mr. Jones Is that a sensible way of
21	doing it? Is that satisfactory?
22	MR. VAJDA: Mr. Jones is a busy man. He would like to get away today.
23	THE PRESIDENT: Let us see how we get on, Mr. Vajda. You have taken quite a lot of time
24	now, and we will just have to do the best we can.
25	(Short adjournment)
26	MR. THOMPSON: As I understand it, it is now Mr. Jeffery.
27	Mr. MALCOLM JEFFERY, Called
28	Examined by Mr. THOMPSON:
29	Q Mr. Jeffery, do you have the Albion Reply bundle? I will put it another way, do you have a
30	statement sworn by you in November 2004? A. I do.
31	Q I think it appears in the papers as tab 3 to the Reply bundle. Can you state your full name
32	and address and your role in this matter? A. Certainly. My name is Malcolm Jeffery. I
33	live at 57 Antrim Road, Woodley in Berkshire, and I am the Director of Albion Water and
34	of its parent company, Water Level Limited.

 referred to, which is a statement of some four pages and signed by you, I think, on 7th November 2004. Is that correct? A. I have 9th on my copy. Q I am sorry, I mis-read that. Then more recently, do you have the bundle which includes also Dr. Bryan's statement, or do you have it loose-leaf – in my version it is tab 9 – which also has Dr. Bryan's statement, but it is a statement dated 19th April 2006. Is that right? A. I have it as loose-leaf., and I confess that my copy is undated, but it is headed "Second witness statement of Malcolm Jeffery". Q Yes, and it goes through to 13 pages, the last page being the statement of truth? A. That is correct, with a number of attachments. Q Is this your evidence in this matter? A. It is. Q I is this your evidence in this matter? A. It is. Q I believe that Mr. Anderson has some questions for you. A. So I understand. <u>Cross-examined by Mr. ANDERSON</u>: Q Good afternoon. A. Good afternoon, Mr. Anderson. Q Could I ask you to turn to the first of your two witness statements, please, Mr. Jeffery. MR. THOMPSON: Sir, I do not want to delay things but Mr. Anderson was not here yesterday and I did make the point that this is now a year after a hearing at which Mr. Anderson was perfectly entitled to cross-examine, and I simply register the fact that it seems curious that he THE PRESIDENT: Well let us see how we get on. MR. ANDERSON: I am not going to be very long. (To the witness) If you could turn to the last page of that witness statement there is a little table which summarises where you get to at the end of the figures and calculations that proceed that. You conclude that you believe that analysis supports the view that a reasonably efficient retailer will require a margin between wholesale and retail prices of 5p per m³, which his about £340,000 per annum.? A. Yes, that is correct. Q If I could ask you to look at Dr. Bryan's witness statement of 7th April, Ann	1	Q	I believe you have sworn two statements in this matter, and the first is the one I have just
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33 customer service costs for both Shotton and Corus and he concludes: "I therefore consider	33		customer service costs for both Shotton and Corus and he concludes: "I therefore consider

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that the customer service costs for the Ashgrove system should be no more than £20,000 per year." A. Yes.

3 Q Or £10,000 per customer that would be. How do you explain the difference between the 4 figure of £340,000 that you have identified as retail margin and that figure of £10,000 per 5 annum for customer service costs? A. I did not prepare Dr. Bryan's witness statement, but my understanding is that his figure of $\pounds 20,000$ represents an apportionment of the costs 6 7 he believes that Dŵr Cymru allocate. Or as my figure is perhaps under described as 8 "retailer" and it comprises the cost of all of the activities that are carried out on behalf of 9 Shotton Paper which, as Dr. Bryan explained before lunch, comprise a comprehensive range 10 of services including the carrying out of statutory responsibilities under the Water Industry Act, the provision of a retail function and not the least the carrying out of a number of 12 activities which have been described variously as technical advice, consulting, but which do 13 embrace an element of our responsibilities under the Water Industry Act for conservation of 14 water.

- Q The technical consultancy activities that Dr. Bryan was explaining in answer to Professor Pickering and Mr. Vajda. Is that right? A. Yes I would describe them as water use efficiency, or water conservation issues, and I think it is arguable whether they are wholly technical advice, wholly consultancy, or wholly Water Industry Act responsibilities, and I think one could argue that these activities have a foot in each camp, as it were.
- Q Who was providing them in 2001 – Albion or Envirologic? A. Albion was responsible for the provision of regulated services to Shotton Paper. Albion at that time, and it is still the case, has no direct employees and the services are provided from personnel employed in the parent company.

Right, so when Albion wrote the letter of 24th April that I hope is somewhere before vou. 24 Q 25 Dr. Bryan was looking at it earlier. The Authority asked you to supply further documents 26 and you, your company, replied that you did not think that it was appropriate but in a spirit 27 of co-operation? A. Yes, that is correct. The reason for our puzzlement, I think, was that 28 we thought this width of margin squeeze, and I think we thought that had been dealt with in 29 the interim Judgment at para.413, which was that the services that we provide as a licensed 30 undertaker and as a retailer were a given, and that there should be margin attaching to those. 31 Q I understand your case, Mr. Jeffery, that is not what I am asking you. I am just asking, you 32 are familiar with this letter, and you are obviously from your description involved in the preparation of it. You say in para.2: "We currently provide no non-regulated services for 33 34 Shotton Paper, although Envirologic did provide some consultancy services prior to May

 A. I believe those were the services to which Dr. Bryan referred this morning. Q. So provided by Envirologic? A. Yes. Q. And Envirologic is not, and never has been, a regulated water undertaker? A. That is correct. Q. And so in a sense the person, the company that provided this technical consultancy could not have provided regulated water undertaking activities, because it was Envirologic? A. In the case of the services that Dr. Bryan referred to this morning, that is the case, yes. Q. Which he described as "the most significant services" being provided? A. I think we may be talking about two different things. I am talking about the consultancy services provided prior to May 2003, and I look to Dr. Bryan to correct me if I have misinterpreted, but I think what he was saying, the services he was referring to there, were the services that arose from a share of savings agreement that Envirologic had with Shotton Paper. Q. A 50:50 split? A. – and it related to the reduction in the bulk supply price, so the 50:50, yes. THE PRESIDENT: As a separate agreement with Envirologic, as distinct with the supply agreement we have with Albion? MR. THOMPSON: Sir, I hesitate to get up, but the fact is Dr. Bryan is here and he knows about all this THE PRESIDENT: It is a bit difficult, it is a pity that in some ways the author of the letter is not being asked about this, Mr. Anderson. MR. ANDERSON: Well it was simply because Mr. Jeffery had described these activities in his first witness statement, and annexed all the letters to it. But I wonder, could you help me with the 2001 accounts, then? Are you familiar with those? THE PRESIDENT: Are we leaving this point and going to another point? MR. ANDERSON: Well it us see how we get on, Mr. Anderson. A. I will help you as much as 1 can, but I was not finance director for cither Water Level or Albion Water at the time, and I was not responsible for the production of the acco	1	2003. I am interested in what those consultancy services that Envirologic provided were?
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33 MR. ANDERSON: Well see how far you can get.	31	and I was not responsible for the production of the accounts, but I will help you as much as
	32	I can.
34 THE PRESIDENT: Where do we find these, Mr. Anderson?	33	MR. ANDERSON: Well see how far you can get.
	34	THE PRESIDENT: Where do we find these, Mr. Anderson?

1	MR. ANDERSON: Well I am not sure where they are in the voluminous papers, but they are
2	THE PRESIDENT: Perhaps you could help us a little, or somebody in your team could help us as
-3	to where we could find them.
4	MR. ANDERSON: I have two copies here, but that is the only number of copies that I have been
5	able to find today.
6	THE PRESIDENT: Are they in our papers?
7	MR. ANDERSON: I am not sure if they are in your papers.
8	MR. THOMPSON: I am afraid I have no idea what Mr. Anderson is talking about?
9	THE PRESIDENT: Apparently it is the 2001 accounts. We would like the documents available
10	for the Tribunal if the witness is going to be asked about them.
11	MR. THOMPSON: Certainly. Would the Tribunal bear with me on an undertaking to provide
12	further copies – one copy for the Tribunal and one copy for the witness at this stage.
13	THE PRESIDENT: Right, well let us see how we get on. (Document handed to the Tribunal and
14	the witness)
15	MR. THOMPSON: As I understand it these accounts were signed by Dr. Bryan, and Mr. Jeffery
16	does not know anything about it. A. They are actually signed by Mr. Woodyear, who
17	was Company Secretary for Envirologic at the time.
18	THE PRESIDENT: They are also signed, there is a signature from Dr. Bryan on the document,
19	right. You may again, Mr. Anderson, not be directing your fire for the right witness, but let
20	us see how we get on.
21	MR. ANDERSON: I may not be, but if I could ask you to turn first to the Envirologic
22	consolidation Profit & Loss account at p.4, 2001, turnover, costs of sales, gross profit and
23	administrative expenses. Again if you cannot help me, you cannot help me, but would that
24	figure of £730,000 include the cost of these consultancy services? A. Which consultancy
25	services do you mean?
26	Q The ones that we have just been talking about that led to the 50:50 split? A. No. No, they
27	would not.
28	Q Why is that? Where would we find them? A. They pre-date They were several
29	years ahead of this. In fact, they pre-dated the inset appointment.
30	Q Right. Well, would we then expect to find in the consolidated profit and loss account of
31	Albion the costs of the technical consultancy services that he was describing in the witness
32	box that post-dated that? He described as part that he regarded as being regulate activities.
33	A. Yes. They would be included in the profit and loss account for Albion Water.

1 Q So, let us turn to the profit and loss account of Albion Water which is next in the field. At 2 p.4 – administrative expenses. £30,000 in that case. Presumably that £30,000 is the cost of 3 providing these technical consultancy services. A. Amongst other things, yes. 4 Q So, the £30,000 includes more, does it? A. The activities that Albion was carrying out 5 at that time were the range of activities which I have previously described. 6 Q As a regulated undertaker, they have to include in their accounts the cost of providing those 7 services. Is there anywhere on that page, other than the £30,000, that we will find those 8 costs? A. Nowhere else on that page. 9 Q Anywhere else anywhere else in the document? 10 MR. THOMPSON: I think this is terribly unfair. I have not seen any of these documents. Mr. 11 Jeffery was not the author of any of these documents. He is simply being asked to speculate 12 about some accounts - and there is a witness here who the Director did not choose to cross-13 examine on this issue. These are events going back five or six years, and in relation to a 14 witness statement that was sworn eighteen months ago, and which any of these points could 15 have been taken at the last hearing. I have to say, I cannot imagine why this has not been 16 raised in advance. 17 THE PRESIDENT: I think you will have to put these points ----18 MR. ANDERSON: It has been raised in advance. We wrote two letters seeking clarification of 19 these points, and got the letters back ----20 THE PRESIDENT: You will have to put these points to Dr. Bryan, Mr. Anderson. You can 21 continue putting them to Mr. Jeffery, but insofar as he is not able to help because he was not 22 responsible for these documents, I think you have to put them to the person who signed the 23 document. 24 MR. ANDERSON: I have a few more questions for Mr. Jeffery. If the Tribunal would permit 25 me to recall Dr. Bryan. He has heard this. It maybe he can shed light on this. (To the 26 witness): Going back, this includes the 339,000. We looked at para. 8 which describes how 27 the figures are made up – paras. 8 and 9. What precisely is included in the water 28 management and provision of detailed water data in para. 9? A. That is understanding 29 the daily/monthly/yearly, and perhaps many years into the future, water needs of the 30 customer, including what I would regard as commercially sensitive information about both 31 volume of production and water use. Reflecting that in advice to Shotton Paper 32 Management on what is possible and what is not; what the implications are for water supply 33 to their premises; and what the cost implications of that might be if it disturbs the present 34 arrangements; looking at the sorts of things that Dr. Bryan was talking about before lunch,

1		which are the micro-management of water as opposed to the macro-management of water as
2		a water undertaker. But, it will also include, for example, in the same way that our
3		employees go through an induction programme to be trained to be safe on site at Shotton
4		Paper, their management and their new employees assigned to that site have some, what I
5		would call, induction training from us about the water supply system.
6	Q	These are Shotton employees getting induction training from you. A. When necessary,
7		we explain to them how the water supply system works; what it means; what it means for
8		them on site. Where they express an interest in up-stream facilities, we actually describe
9		what those facilities are and how they work.
10	Q	Does that also involve advising on the system within the Shotton site? A. It does.
11	Q	And the distribution of water throughout the Shotton site for their industrial process? A.
12		Yes, although that is partly covered under (b)
13	Q	Advice on water use efficiency. A. Yes.
14	Q	'Drinking water quality compliance' is obviously potable water. A. Yes.
15	Q	'Leakage studies' are not carried out. 'Compliance with statutory responsibilities' you then
16		set out in Annex 1. I am not proposing to ask the witness each of those because we dealt
17		with that in some detail in Annex 3 to our reply. (After a pause): I wonder if you could
18		explain two sentences in the latest skeleton argument from Albion.
19	THE	E PRESIDENT: Do you mean the very last submissions we have just had – 26 May?
20	MR.	ANDERSON: I do, sir. (To the witness): It is just the apparent difference between
21		paras. 39 and 42. It is the second sentence of para. 39. "Secondly, and of specific
22		importance in this case, by following the way in which Albion discharges those
23		responsibilities [the sorts of responsibilities you have been talking about] makes the service
24		distinct from that previously provided by Dwr Cymru to Shotton Paper and from that
25		currently provided by Dwr Cymru to other large users eligible for additional services."
26		Then, in para. 42 A. I am not sure I am in the same place as you, Mr. Anderson,
27		but I do recall the paragraph.
28	Q	I am para. 39. The second sentence. A. I have that.
29	Q	Then, in para. 40(2), "This level of performance [which I think is now talking about
30		Albion] is achieved by fully understanding the customer's business practices and processes
31		by building the customer's trust over an extended period and by acting in partnership. To
32		the best of our knowledge this level of service has not been replicated anywhere else in Dwr
33		Cymru's area". A. Yes.

 would go further, firstly by confirming that the nature of the service it provides to th customer are similar, if not identical, to those provided by all statutory undertakers" 	. So, ich is
	ich is
4 what is the difference between the level of service you are describing in para. 39 wh	
5 similar, if not identical, to those provided by all statutory undertakers and the level of	of
6 service described in para. 42 which seems to suggest it is a unique level of service, r	not
7 replicated anywhere else in Welsh's statutory area? A. I think it is because in t	he first
8 sentence of para. 39 I used the word 'nature' rather than 'level'. I think the things w	ve do
9 are governed by statute, by our license, and by our customer agreement. The way w	ve do
10 them is remarkably different from other people, as the Tribunal has heard this morning	ng.
11 Q In what way specifically? A. Well, I don't know of another water company that	t acts in
12 partnership with a customer, and whose attention to customer relations matches ours	5.
13 Q So, it is this partnership with Shotton where you have a dedicated person who goes it	n on
14 site and, as I understand it, only operates for the benefit of Shotton, for the benefit o	f this
15 partnership, and understands the business and advises on ways to save water consum	nption.
16 A. Yes. I think for this size It is an opinion, but I think for this size customer a	and this
17 volume of water use, that reflects what we believe to be our responsibilities in terms	of
18 water conservation, but it also reflects the way we think we ought to deal with such	a large
19 customer.	
20 Q I see. Are you familiar with the agreement between your company and Shotton?	A.
21 Yes.	
22 Q You are. Perhaps we could just have a very brief look at that finally? You will find	it at the
23 back of the original Notice of Appeal – at about p.53, I think. It starts at p.49. I ju	st
24 wanted to ask you one or two points of clarification on the terms of this.	
25 THE PRESIDENT: Is it not better to put these to Dr. Bryan, Mr. Anderson, who made the	ne
26 agreement?	
27 MR. ANDERSON: Yes, sir. As I say, the only reason I am asking is because it was Mr.	Jeffery
28 who put in the witness statement describing in detail the nature of the services that w	vere
29 said to be provided. We did seek clarification and did not get it. Perhaps I should h	ave
30 asked them to Dr. Bryan.	
31 THE PRESIDENT: Let us see what Mr. Jeffery said. (To the witness): When did you	join the
32 company, Mr. Jeffery? Were you around in 1999? A. Yes, I was, sir.	
33 MR. ANDERSON: Clause 7 – "Albion Water is a water undertaker licensed by OFWAT	
34 legal obligations and legal responsibilities under the Water Industry Act. Its response	sibilities

1	include those imposed by the statutory system of economic regulation and administration in
2	England and Wales." In para.7.4 there is a description of using Albion's reasonable
3	endeavours to provide the customer with the most cost effective source of water. That is not
4	the sort of statutory obligation you are referring to in 7.1 is it, or the agreement is referring
5	to? That is an additional service, yes? A. Bear with me for a moment, Mr. Anderson?
6	Q Of course. A. Yes, I would say one could operate this inset appointment on the basis of
7	7.1 alone, but it is unlikely that one will be able to do that without a margin for very long,
8	so 7.4 is an optional extra, if you like.
9	Q 7.4 is an optional extra and the way in which it is envisaged that you will be remunerated
10	for that is by the 70:30 split? A. That is correct.
11	Q How do you plan to be remunerated for the activities identified in 7.5? A. I think it says
12	clearly that they will be provided as part of Albion Water's remit, it is an obligation to the
13	customer that we would have to meet.
14	Q So those fall into a slightly different category to the 7.4 obligations? A. Yes.
15	Q I see. Those are all my questions for Mr. Jeffery. I am very grateful to you.
16	THE PRESIDENT: Anything in re-examination, Mr. Thompson? We need to go back and sort
17	out this question on the accounts.
18	Re-examined by Mr. THOMPSON:
19	Q For clarification, it went quite quickly, but I think Mr. Anderson referred to Annex 3 to I
20	think it was the skeleton argument of the Director in the hearing last year, where various
21	comments were made about Annex 1 to your first witness statement. Do you remember that
22	issue? A. I recall it, yes.
23	Q I do not know whether Annex 3 can be provided?
24	THE PRESIDENT: What are we looking for? We are looking for Annex 3 to the
25	MR. THOMPSON: It is the skeleton argument of the Director, or the Authority for the last
26	hearing. It is p.81 to the skeleton, the Annex runs on.
27	THE PRESIDENT: Yes.
28	MR. THOMPSON: It is quite a short point, Mr. Jeffery, I do not know whether you have it in
29	front of you, but A. I do.
30	Q The point was that various criticisms were made of Annex 1 and, in particular, for example,
31	para.4 states: "The numbering of the sections in Annex 1 to Malcolm Jeffery's witness
32	statement appears to be wrong. It may be that Annex 1 is based on an earlier version of the
33	Water Bill rather than the Act itself. This would explain the use of the term "clause". I
34	believe that you can clarify the position of Annex 1, and it may be appropriate for the record

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1	for you to do that, the Annex 1 to your statement and what it is? A. Yes, I am happy to
2	do so, it is a document which, for convenience, was reproduced from legal advice provided
3	by, as it happens, a former employer, the legal department, that related to the anticipated
4	duties and responsibilities under the then pending Water Bill.
5	Q So it does not purport to be the actual Bill itself, it was a document available to you, is that
6	right? A. It was a document available to me, and it was distributed to Envirologic's
7	relevant employees on the basis that "This is the sort of advice that is provided by Statutory
8	Water Undertakers in circumstances of this kind. You guys need to be aware there are those
9	sorts of responsibilities attaching to an inset appointment, and to the extent that they are
10	relevant to your post you will need to be aware that there is legislation and address yourself
11	to it."
12	Q Yes. That was the only point of clarification just for the Tribunal.
13	THE PRESIDENT: Thank you very much, Mr. Jeffery.
14	MR. THOMPSON: I am not sure whether Dr. Bryan is required again or not?
15	THE PRESIDENT: Well let us see. The point that is being made, or was put, I think – Mr.
16	Anderson will correct me if I get it wrong, is that in Mr. Jeffery's witness statement there is
17	a figure of £330,000-odd as the retail margin he says in his evidence is necessary and there
18	is a figure for administrative expenses in Albion's accounts for the year ending 31 st March
19	2001 which is some £30,000, and the only question in my mind is whether that point, if it is
20	a point that is pursued, should be put to Dr. Bryan, who signed the accounts in question. I
21	have a feeling that it should.
22	MR. THOMPSON: I am sure he is in much the best position of anyone in this room.
23	THE PRESIDENT: So thank you, Mr. Jeffery, you stand down, and we will just as Dr. Bryan to
24	come into the witness box again. Sorry to put you to that trouble, Dr. Bryan, and invite Mr.
25	Anderson to put the question to you, if you would be so kind.
26	(The witness withdrew)
27	Dr. JEREMY BRYAN, recalled
28	Further cross-examined by Mr. ANDERSON:
29	Q Thank you. I am sorry to trouble you? A. It is no problem, Mr. Anderson.
30	Q The point has been put fairly well by the President, in the accounts for 31 st March 2001 we
31	find for Envirologic an administrative expenses figure of £730,000 and for the same year for
32	Albion we find an administrative expenses figure of £30,000. That is on p.4, I think, of
33	each set of accounts.

THE PRESIDENT: Have you got the document, Dr. Bryan? A. I have, Sir. Let me just turn up Albion.

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Q Albion is towards the back and it is p.4 of the stuff at the back. A. I am with you. MR. ANDERSON: What is troubling me at the moment is reconciling that figure of administrative expenses of £30,000 for Albion with the retail margin that you are contending, or Mr. Jeffery is contending is a reasonable retail margin that comes to some £340,000? A. Indeed. I am more than happy to explain it. Let me reiterate what Mr. Jeffery said which was when we are talking about retail margin you are talking about the totality of costs incurred by Albion in fulfilling its functions, not all of which would be recognised as retail administrative expense, but let us have in mind the figure of £300,000. If you turn to the Albion accounts, there are two things I wish to draw your attention to. First the gross profit figure, you will see there is turnover of 1.7 million in 2000 and one slight increase over the turnover figure in 2000 and you will see that the cost of sales results in a very small gross profit. That gross profit would have been zero had it not been for slight indexation changes in the way that the contracts work. In other words, we were making a small amount of profit in the few months between indexation changes, that gives us that figure of £29,800.

The second figure I would draw your attention to is the profit figure of the bottom line, which is zero. The problem that Albion had and there was never any attempt to hide this from the Authority, was that Albion was unable, as a stand-alone organisation, to sustain itself at that time. It was suffering margin squeeze. The consequence was that in order to maintain our licence we had to demonstrate to the Authority that we could continue trading, and therefore the maximum costs, administrative expenses, that we could charge against those accounts was £30,000 which resulted in a nil profit figure, and a continuation of Albion as an ongoing concern. The risk was borne entirely by Envirologic and so the full cost, the difference if you will between £30,000 and Mr. Jeffery's figure of £300,000 is in the Envirologic accounts. That commercial risk, while we were fighting a legal battle against Dŵr Cymru and at that stage the Authority itself, that commercial risk was carried by Envirologic with the full knowledge of the Authority and obviously with the full support of Pennan, who were at that point our joint venture partners, and who were providing the finance to allow us to continue.

Q You say with the full knowledge of the Authority, are you saying that some of the administrative expenses associated with the retail activities and statutory obligations that

Mr. Jeffery has explained at some length in his first witness statement appear in Envirologic's accounts but not therefore in Albion's? A. At that date, yes.

Q And so this £30,000 is a construct arriving out of the fact that the operating profit, the gross profit is about the same amount ---- A. It is not a construct, it is a balancing figure. It is the maximum that we could charge to the accounts of Albion that would continue to satisfy the OFWAT requirement that Albion was able to finance its functions.

- Q But how is Albion able to comply with its regulatory accounting obligations without identifying the full extent of its costs of these statutory activities, if Envirologic is not a ----- A. We did so in the full knowledge of OFWAT, that those costs, the costs over and above £30,000 were costs at risk, that the recovery of those costs relied wholly in the absence of any other business, and I am happy to go into that, relied wholly on our ability to pursue this action. We never knew it would take this long. We had no idea that it would involve us in appearing before this Tribunal, but these were actions that we had been fighting since 1995, and that is the only way. I have to say when, in late 2003, as the Tribunal is aware, Water Level sought to acquire Albion back from Pennan in so doing it had to satisfy OFWAT as to its business case, and at that time we made exactly the same point that risk would be carried by Water Level in the same way that risk was previously carried by Envirologic.
- Q And the only way of meeting the risk they had assumed was to win this action? A. Fundamentally yes. What I have to say is that within the £730,000 administrative expenses of Envirologic, to which you have referred earlier, to look behind that you see a team which at that time was twenty-three strong; you see the BedZed Project; you see Hammersmith; you see Albion Yard and Bathhouse; you see a vast range of competitive initiatives that we were trying to take. So, it would certainly be entirely wrong to assume that the administrative expenses within Envirologic were solely, or even mainly, associated with Shotton. They were not.
- Q So, what sort of figure would we be talking about if you added the Albion amount of administrative expenses that they could include in their accounts without looking financially unviable, and some part of the £730,000? A. I would need to look at the detailed Sage records to be able to pull that out. Those records do exist.
- Q They do exist? A. They don't exist in our possession. Pelham should have them. I
 can't swear that they do. They may be able to help you. I have to say that this was
 information that was known and was reported to OFWAT at the time, and at any time there,
 or thereafter, they could have asked for the sort of detail that you now require. I am afraid I
 do not possess ----

- 1 MR. ANDERSON: Of course, we did at the beginning of this month, and the answer we got 2 A. I have not had access to that information since May 2003. I back was that ----3 regret that, but that is the fact. Would you like me to clarify about consultancy at Shotton, 4 because I think that was another question you put to Mr. Jeffery? 5 THE PRESIDENT: What do you want to say about that, Dr. Bryan? A. There was indeed consultancy undertaken for Shotton. This is the earlier point. That was non-regulated. I 6 7 think that was the point that was trying to be brought out. Where that consultancy was 8 deemed to be non-regulated, it was deemed to be so because it did not impact directly on 9 our primary role, which was the delivery of water to the mill. I can give you a couple of 10 examples. My memory is not good enough to remember all of them. One was advice to 11 Shotton Paper on possible alternative uses for paper sludges, which were de-inking sludges, 12 which are a by-product of recycling newspaper. They were at that time being disposed of 13 on farmland and that route was going to be closed to them. The other was that we did a 14 significant amount of work for Shotton Paper's sister mill in Scotland relating to waste 15 water treatment. Of course, that could in no way be deemed to be a regulated activity 16 relating to the Shotton paper mill in Wales. Therefore, that, too, would be considered as 17 consultancy, and was indeed charged on a man hour basis. 18 MR. ANDERSON: Finally, Dr. Bryan, you do appreciate how important it is for there to be a 19 clear separation of regulated business from non-regulated business? A. I am acutely 20 aware of that requirement. 21 Q You have recognised that in the business plans you submit to OFWAT. A. Absolutely 22 right. 23 Q Thank you. 24 25 (Further re-examined by Mr. Thompson) 26 27 MR. THOMPSON: Just to clarify what the position has been Water Level took over as the 28 parent company rather than Envirologic ---- Where does the risk now fall? A. Some 29 risks associated with the business still fall on Water Level, but the totality of the costs, the 30 accounting costs, associated with the Shotton supply are reflected in the Albion accounts 31 through a re-charge back to Water Level. As Mr. Jeffery said, Albion does not directly 32 employ people – so, my time, Mr. Jeffery's time, the other director and our manager in 33 Wales ---- that time is re-charged to Albion, together with the laboratory cost and other
 - costs. What is left ---- What is not charged are certain contingent costs ---- I am sure Mr.

1		Thompson will not mind me saying, sir, that some of the fee arrangement that we have
2		certain arrangements that we have with our accountants where costs are being treated on a
3		contingent basis, depending on whether we win this The directors, too, are absorbing
4		certain risks – so that, for example, where we were having to put time into fighting the
5		Thames appeal (the Albion Yard Bathhouse appeal) Those were not costs that could in
6		any way be legitimately charged against the revenues that we were getting from Shotton,
7		particularly given the interim measures component of those revenues. Therefore, those costs
8		are actually absorbed by the directors – in other words, we are giving 25 percent of our time
9		without any remuneration so that we can still undertake some semblance of business beyond
10		this case. I do not know whether that answers your question.
11	THE	PRESIDENT: Dr. Bryan, just remind me: the Shotton paper mill is producing mainly
12		newsprint, is it? A. Solely newsprint.
13	THE	PRESIDENT: Thank you.
14		(The witness withdrew)
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16		PAUL ANDREW HOPE, Called
17		Examined by Mr. Anderson
18	Q	Do you have a copy of your witness statement? A. I do.
19	Q	Can you tell the Tribunal your full name and address and your current occupation? A.
20		My name is Paul Andrew Hope. My address is 12 Shoal Green, Woodbridge Spa,
21		Worcestershire. I am the Head of Tariffs at OFWAT.
22	Q	Thank you. Is your witness statement signed? A. It is.
23	Q	Is it your evidence to this Tribunal? A. It is.
24	Q	Is it true? A. It is.
25		
26		Cross-examined by Mr. Thompson
27	Q	Good afternoon, Mr. Hope. I have a short list of questions, all relating to your statement,
28		and going through it, broadly speaking, in numerical order. The first area is in relation to
29		paras. 12 and following where you raise the issue of the CCCWG, which one might call a
30		sort of eminent persons' group, including Professor Littlechild, Professor Newbury, Mr.
31		Hanks, and Dr. Corbett, which met, as I understand it, in 2000, and which formed an
32		important background to MD163. Is that right? A. That's correct.
33	Q	Then, when we look in para. 15 you have helpfully extracted from MD163 three paragraphs
34		in italics there. In the middle paragraph, the last sentence says, "The ECPR requires reliable

1 information on avoidable costs which can be open to subjective interpretation". Then it 2 goes on, "In general, the accounting cost and LMC approaches are likely to produce lower 3 access prices than ECPR, making entry more likely". Then there is a reference to a possible 4 increase in total costs, and then possible benefits in terms of innovation. Then, towards the 5 bottom of the page there is a further quotation, and in the last bullet point there is a sentence, "Deterring entry that would have reduced these costs, so total costs in both the 6 7 short run and the long run is likely to be a clear infringement of the 1998 Act". Would you 8 accept that MD163 expressed certain reservations about the use of ECPR as a pricing 9 mechanism? A. I would. It did. 10 Q And would you accept that that reflected the views of the CCCWG? A. The views of 11 the CCCWG were, as you would expect, given any panel of experts and divers ---- Some of 12 the members of the group were more sympathetic to ECPR and some were less. What 13 MD163 reports is the consensus view that there were reasons to have reservations about ECPR. 14 15 Q Did you ever reconvene CCCWG to reconsider the issue after the publication of MD163? 16 A. No, we did not. 17 Q Did you consult other regulators – for example, OFTEL – as to their experiences of ECPR 18 after issuing MD163? A. I can't recall whether we did so after issuing MD163, but I 19 do recall that we had informal discussions with other regulations. They are not documented 20 and I do not have any record of them. 21 Q After MD163. A. I think it was before. 22 Q The second area – paras. 23 to 26 ---- Perhaps we should take it back to para. 21. There is a 23 reference to a paper that you wrote, which you have kindly appended to this statement, and 24 also to two reports from NERA, prepared on behalf of Northumberland Water. I suspect 25 you know that ECPR is strongly favoured by incumbents generally – not only in the water 26 industry ----A. Yes. 27 Did you have any reservations about relying on two reports produced for an incumbent in Q 28 A. I think when I refer to the NERA reports later in the paper, I do say in this way? 29 para. 27 that notwithstanding the fact that NERA's paper had been commissioned by an 30 incumbent undertaker, we considered its arguments to be credible. So, yes, we did ---- We 31 were aware that it was commissioned by an incumbent water undertaker, but nevertheless 32 we considered its arguments to be fair. 33 Q But, you had reservations about using an incumbent's paid-for report. But, you thought that 34 the substance was credible. Is that fair? A. I wouldn't say that we had reservations

1		about using an incumbent's report – only that we were aware that it had been prepared for
2		an incumbent.
3	Q	Yes. A. NERA is, after all, a credible – very credible – economic consultancy.
4	Q	Yes. But, I suspect all the barristers here are credible, but their views coincide with those of
5		those who are paying their bills, as it turns out. Paragraphs 25 and 26 give some extracts
6		from the NERA report and set out certain conditions. I note in particular no. 3 in para. 25
7		requiring that avoidable costs can be observed. Do you see that? A. Yes.
8	Q	Paragraph 26 – reference to a need to overcome entry barriers. Do you see that? A.
9		Yes.
10	Q	So, did you accept those as part of the conditions for ECPR to be appropriate – that those
11		concerns could be addressed? A. Probably not in the way that they are expressed here.
12		I do not think it is fair to say that we would agree that it is necessary for avoidable costs to
13		be observed transparently by all – but, rather, that they at least be transparent for an
14		authority that may be asked to make a determination of an access price.
15	Q	That was a concern of the CCCWG A. That there should be transparency, yes.
16	Q	And it was a concern expressed here by NERA. Yes? A. Yes.
17	Q	What about entry barriers? Was that a concern, or not? A. What exactly do you
18		mean by 'entry barriers'?
19	Q	There were conditions under which access prices lower than ECPR might generate more
20		efficient outcomes. The second one: there is a need to overcome entry barriers. As I
21		understand it, they are saying that where that arose there might be a problem with ECPR, to
22		put it crudely. A. We took the view that there were no entry barriers above and beyond
23		those that would be taken into account by what became the water supply licensing regime,
24		or became the water supply licensing regime, there were no barriers or problem beyond
25		those.
26	Q	You do not mention entry barriers, I think further on, but did you accept that there might be
27		a problem about ECPR if there was a need to overcome entry barriers, that is the point of
28		principle that is being stated there, did you accept that? A. Yes, we would accept that.
29	Q	Thank you. Can we now go on to paras.30 and 32 of your statement? In the middle of 30
30		you say: "Under ECPR we could be certain that entry would at least reduce total costs in the
31		short run". Do you see that? A. Yes.
32	Q	Then at the bottom in 32 you say: "There was a greater probability ECPR would encourage
33		entry that would reduce total costs the most over the long run". I would just like to explore
34		how you reached those conclusions given that the CCWG had suggested that ECPR might

1		deter entry, so how could entry reduce total costs either at all or in the short or long run if no
2		such entry took place? A. I think what the statement is saying is that to the extent that
3		there is entry under ECPR it would be entry that would, with certainty, reduce total costs.
4	Q	If there were no entry and if it deterred entry then obviously those benefits would not be
5		achieved, would they? A. If there were no entry then, in our view, that would be
6		precisely because the potential entrant (or entrants) would not be able to reduce total costs,
7		would not be able through their act of entering to reduce total costs.
8	Q	How could it encourage entry to reduce total costs if it prevented it? A. Perhaps the word
9		"encourage" was ill-advised. It would allow entry that would reduce total costs the most
10		over the long run.
11	Q	Perhaps you mean it would not allow entry that would not reduce total costs. Is that
12		A. Better still.
13	Q	At para.33 you say that "ECPR performed particularly well against objective B". As I
14		understand Objective B that was the risk that customers who could not benefit from
15		competition did not have to pay more as a result of customers who could benefit from
16		competition. A. That is right.
17	Q	Did you give any thought to the fact that that did not give any weight to the short term
18		effects on customers who were potentially able to benefit from competition which was
19		prevented because of use of ECPR? A. I am sorry, I do not understand the question.
20	Q	Well, Objective B, the position of customers, you are looking here only at customers who
21		are unaffected by competition? A. Yes.
22	Q	Did you give any thought to the position of customers who could have benefited from
23		competition but did not because nothing happened? A. Indeed, I think that is effectively
24		tackled by Objective A to the extent that entry improves efficiency, it must do so because it
25		is beneficial to the eligible customers, so the next question becomes is that entry harmful to
26		the ineligible customers, and that is the separation between Objectives A and B.
27	Q	What about the long term position of customers in both classes who might have benefited
28		from competition in relation to the market generally, did you give any weight to that? A.
29		Given that A is tackling the issue of overall efficiency, I am not quite sure where your
30		question is going. Yes, we gave weight to that.
31	Q	I think the position is if there was no competitive entry because of the deterrent effect of
32		ECPR then nobody would benefit? A. Well if there was no competitive entry because of
33		the deterrent effects of ECPR then our view was that any entry that would otherwise occur
34		would actually have been harmful to customers as a whole.

1	Q	Yes, I see. Then finally, objective C you deal with para.34 and I think that is essentially a
2		non-discrimination condition between the incumbents, downstream arm, and the position of
3		entrants. As I understand it, what you are saying is that there was no subjective reason
4		for the incumbent to discriminate under ECPR, is that right? A. That is correct, yes.
5	Q	I think that is what you were saying there. But objectively, surely there would be a serious
6		risk of discrimination because of the need for the entrant to bear fixed as well as avoidable
7		costs while only having the ECPR margin with which to compete. Would that not be a
8		serious risk? A. I would not regard that as being discrimination. If the objective is to
9		ensure that entry occurs only when it is efficient, only when it reduces the total costs of
10		supplying all customers then that form of discrimination – if you wish to describe it as
11		discrimination – is something that we would regard as acceptable.
12	Q	I think all I am saying is that para.34 appears only to look at the subjective incentives of the
13		incumbent, and does not look at the objective position of the incumbent as against the
14		entrant. Is that correct? A. I am still not sure I understand your distinction between
15		subjective and objective in this case.
16	Q	As I understand it, para.34 says you cannot observe the position, but there is a level playing
17		field, effectively in terms of the incentives of the undertaker. Is that not the point you are
18		making? A. That is the point, yes.
19	Q	But there is no level playing field in terms of the costs position of the undertaker, and of the
20		entrant. That is the point I am making? A. No, there is not.
21	Q	Thank you . From para.36 onwards you address the issue of ECPR and a possible variant of
22		ECPR using LRMC as a proxy for avoidable costs, is that right? A. Yes.
23	Q	And your concern was about avoidable costs, is that right? A. And so you wanted a
24		discount based on a form of total costs, or some variant on LRMC, some sort of proxy
25		instead of avoidable costs? A. Yes.
26	Q	Then if we turn over the page to para. 37, the second paragraph on the second point, that is
27		an issue about resource costs. Is that right? A. It is, yes.
28	Q	So you had a concern about avoidable costs and it was addressed in relation to resource
29		costs, is that right? A. Yes.
30	Q	There is nothing here about downstream costs, and costs of retail? A. About retail costs,
31		we do also have knowledge and understanding of retail costs. The point is made in terms of
32		resource costs but it has more general applicability.
33	Q	That is not the point you make in your statement, that relates purely to resource costs? A.
34		I refer only to resource costs in my statement, yes.

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1	Q	We have a document which is appended to Mr. Jeffery's second statement, which I suspect
2		is a document you have seen. I do not know if you can be provided with that bundle. It is
3		the last tab in the bundle, and if you turn to p.20 you should find a document called
4		"Development of a Revised Access Code Draft Guidance on Access Pricing". Do you have
5		that? A. Yes.
6	Q	The bundle of Dr. Bryan and Mr. Jeffery's statements, tab.10, p.20. It has a date of 18 th
7		April 2006 on it, but I think that was the date it was printed out. Is it a document that you
8		are familiar with? A. Yes.
9	Q	Our understanding is that it was produced at about the same time as the Decision at the
10		beginning of 2004? A. Yes.
11	Q	If you turn through it to p.7 of the documents, p.26, there is a heading "Methodology
12		Wholesale Prices". It says
13		"For wholesale prices zonal measures of avoidable costs are likely to be irrelevant
14		because retail costs tend not to vary within an undertaker's region. So average
15		cost measures for each undertaker may be appropriate.
16		We think that calculating LRMC for retail would be particularly difficult. And
17		companies' accounts do not provide enough detail on the separate elements for
18		retail costs to form a basis for a measure of avoidable costs. So we propose to
19		seek further information from undertakers on the costs of individual retail
20		activities, although we would need to check this for consistency with undertakers'
21		accounts."
22		Is it fair to say that, as at the date of this , you were not in a good position to monitor retail
23		costs and avoidable costs for retail? A. Yes.
24	Q	So why is there nothing about that in your statement, in terms of your concerns over
25		avoidable costs? A. Because the solution that is offered in this guidance was always
26		available to us to seek further information from companies. We have quite extensive
27		powers to seek information from the water company.
28	Q	But the problem I have is as at the date of this Decision you had, as it were, plumped for
29		ECPR in circumstances where you recognised yourself that you were not in a position to
30		monitor downstream costs for retail. Is that not the position? A. No, that is not the
31		position. Sorry, could you repeat the exact phrasing that you have just used?
32	Q	Well we have just looked at a document which indicates that at the time of the Decision you
33		were not in a position to monitor retail costs for ECPR and you recognised that yourself?
	I	

1	A. We did not have the information at that time, but we would have had access to that	
2	information at our request.	
3	Q Yes, but you took a decision in this case at about the same time without having obtained a	ny
4	such information. Is that not correct? A. I cannot comment on the specifics of the	
5	information on retail cost that we obtain in relation to the Shotton case because I was not	
6	closely involved in that.	
7	Q I misunderstood your witness statement. I thought you said you drafted the section on	
8	ECPR in the Shotton Decision? A. No.	
9	Q The para.4? A. No, I said I was involved in the drafting, I did not say that I drafted it.	
10	Q I see. So there was nothing about avoidable costs in relation to downstream services in yo	our
11	statement, and you will recall that we identified the issue of barriers to entry and there is	
12	nothing in your statement to suggest that the issue of barriers to entry was addressed in	
13	relation to the difficulties of ECPR in the water industry. There is nothing about that here	in
14	your statement is there? A. No, there is nothing explicit about that in the statements.	
15	Q Those are the questions I had.	
16	THE PRESIDENT: Mr. Hope, I wonder if I could – unless anyone else has any cross-	
17	examination. Sorry, Mr. O'Reilly, yes, please?	
18	Cross-examined by Mr. O'REILLY:	
19		
19	Q Mr. Hope, I would like to ask you about the application of the costs' principle which is	
20	Q Mr. Hope, I would like to ask you about the application of the costs' principle which is referred to in the Decision as one of the cross checks, and if I can ask you to look at para.	5
20	referred to in the Decision as one of the cross checks, and if I can ask you to look at para.6	
20 21	referred to in the Decision as one of the cross checks, and if I can ask you to look at para.6 to start with. In your witness statement it says "The Tribunal has also raised a number of	
20 21 22	referred to in the Decision as one of the cross checks, and if I can ask you to look at para.6 to start with. In your witness statement it says "The Tribunal has also raised a number of other points on ECPR, for example on the linkage between ECPR and the costs' principle	
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 involved in the drafting? It is not what this witness statement says? MR. ANDERSON: I apologise for that, I understood that he was not, but then again THE PRESIDENT: He says he was? A. I was involved in the drafting to the extent that I was consulted on it. I did not draft it, and nor am I an expert on the details of the application of ECPR to the Shotton case. PROFESSOR PICKERING: But that was your particular contribution, you say, in para.4? A. My particular contribution was in terms of, it does indeed say I was involved in the Shotton case, and in particular the application of it to the case, but not to the detail. I was involved at a high level to the principles involved with applying it to the Shotton case. I am sorry if that is not clear enough. PROFESSOR PICKERING: You were involved in the drafting of those sections relating to ECPR. A. But, again, from the point of view of the principles involved – at a high level – rather than with regard to the specifics. THE PRESIDENT: But presumably you saw quite a late draft of what was coming out and you were happy with it. A. Yes. 	1
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16 were happy with it. A. Yes.	15
	16
17 MR. O'REILLY: In particular with the fact that the way that the access price was computed was	17
18 on the basis that the price was 25.8p (I believe it was) which was the retail price minus the	18
19 3.3p which was the input water price, and there was no other deduction for retail services?	19
A. Yes My understanding from colleagues was that the reason there was no other	20
21 deduction for other services was that the service that Welsh water would be expected to	21
22 provide to Albion Water in terms of retail was essentially the same as the service that Welsh	22
23 Water would have been expected to provide to Shotton Paper. So, on that basis there did	23
24 not appear to be any avoidable costs, any arrow costs.	24
25 Q Was any analysis undertaken of whether or not there would have been any avoidable costs,	25
26or was it simply taken as a given?A.I understand that analysis was undertaken. I	26
27 didn't undertake it myself.	27
28 Q Do you know who would have undertaken it? A. Colleagues at OFWAT.	28
29 Q Turning to para. 39, starting at the bottom of p.12, this is under the heading 'ECPR and the	29
30 Shotton Decision', at the top of p.13 you go on and talk about the consultancy through	30
31 CCCWG. Then, at the centre of that top paragraph on the page, you say, "Concerns we did	31
32 have about ECPR, such as the practical question of whether using proxy for avoided cost	32
33 was more sensible had been removed by the time the decision was made". Then you carry	33
34 on, "Importantly, by then, the credibility of ECPR had also been reinforced by the	34

1	imposition of the costs principle through the Water Act 2003". In para. 40, in the centre of
2	the paragraph, you say, "At the time of the decision we thought that ECPR was a perfectly
3	justifiable alternative methodology for these purposes. In light of the extensive work we
4	had carried out on it in the previous four and a half years, and the fact that the costs
5	principle had been enshrined in the Water Act 2003". So, there are two references to ECPR
6	being enshrined in the Water Act. The final sentence of para. 40 states, "As set out in para.
7	318 of the Decision, for this reason when improving tariffs we examine the proposed tariffs
8	from more than one perspective". That is a reference, is it not, to dealing with ECPR and
9	Section 66(e), the costs principle? A. Yes.
10	Q How did you come to the view that Section 66(e), headed 'The Costs Principle', was
11	ECPR? A. Well, OFWAT was closely involved in the development of the costs
12	principle with DEFRA. So, we understood that the costs principle was, in effect, an
13	embodiment in the Water Industry Act of ECPR – to all intents and purposes.
14	Q The text of Section 66(e) is what the principle is. Correct? A.
15	Q Did you analyse that text? A. We did.
16	Q And you came up with the view that it meant ECPR? A. Yes.
17	THE PRESIDENT: Are we drifting on to issues of law, Mr. O'Reilly?
18	MR. O'REILLY: I am simply trying to understand, sir, how it was that OFWAT came to the
19	view that Section 66(e) was an embodiment of ECPR. I recognise that it is a legal question
20	– whether or not it is A. In short, because Section 66(e) describes the calculation
21	of access prices by beginning with retail revenue and subtracting costs that could be
22	avoided, reduced or recovered in some other way. In effect, that retail minus formulation
23	seems to us to be consistent with the efficient
24	THE PRESIDENT: So, you read Section 66(e) as starting with a retail minus formulation.
25	A. Section 66(e) is drafted in quite a complicated way, but there is reference in there to a
26	starting point of revenues that an undertaker would recover from which are subtracted
27	various costs elements.
28	PROFESSOR PICKERING: Are you actually really leading us to conclude, Mr. Hope – or
29	should we conclude – that actually OFWAT advised DEFRA that this is how not
30	necessarily how the Section should be drafted, but this was the outcome that you were
31	advising should be sought? A. I think it would be fair to say that DEFRA had already
32	stated in its consultation document the form of access pricing the objectives that it had
33	in mind for access pricing
34	Q No doubt with your advice. A. No doubt, yes.

1	Q	So, there was an interaction I mean, looking at the process, there was an interaction
2		between OFWAT and DEFRA whereby OFWAT was saying to DEFRA, "Well, this is
3		what we think ought to be the way in which this is handled in this industry". A.
4		Indeed, we did offer a view, yes.
5	Q	And DEFTRA bought the view. A. I think it would be unfair to say that DEFRA
6		'bought' the view. DEFRA had views of its own, and it may well be that DEFRA's prior
7		view was already one that was consistent with ECPR.
8	Q	But that was what OFWAT was advising DEFRA. Thank you.
9	MR.	O'REILLY: It seems to me, just looking at Section 66(e) that there is no reference at all to
10		retail. The word 'retail' does not appear in that section. So, that was an inference that you
11		drew from the text, was it? A. It was.
12	Q	Can I suggest that what actually DEFRA had in mind is expressed in an extract from the
13		consultation paper that you give at para. 28 of your witness statement? A. Sorry.
14		Before you go too much further, I should say that I am not really in a position to second-
15		guess what DEFRA had in mind.
16	Q	No. I understand that. (After a pause): But, you were involved in formulating the view of
17		OFWAT as to what the principle meant. A. Yes.
18	Q	Did you take legal advice? A. Did we take legal advice on?
19	Q	On the meaning of Section 66(e)? A. Yes. We consulted with our legal colleagues,
20		yes.
21	Q	Internally? A. Yes.
22	Q	Were you aware that on 26 May, 2004 - which is the date of the decision - that Aquavitae
23		wrote to OFWAT, to Beryl Browne, asking for a lawyers' symposium to discuss the
24		meaning of Section 66(e)? A. No, I'm not aware of that.
25	Q	So, you would not have been aware of her response either, saying, "No" effectively? A.
26		I cannot recall it, no.
27	Q	The extract from the consultation paper which is set out at para. 28 of the witness statement
28		says that, "The government believes that whatever methodology, or methodologies, are
29		chosen, the access charges should be consistent with three general principles. These are: (1)
30		undertakers' prices for distribution and wholesale supply should not in themselves deter
31		potential licensees from seeking to supply customers. This implies that they should reflect
32		the actual costs of providing the service. They should not be unduly discriminatory and they
33		should be transparent". So, if we knock out some of the irrelevant words for constructing a
34		shortened sentence, we have 'undertakers' prices for [let us say] wholesale should reflect

1	the actual costs of providing the service'. That is why it is called a costs principle, is it not,
2	Mr. Hope? A. Yes. But, if you go on to read the following bullet points, you will see
3	that the government also expected access prices to compensate for stranded asset costs.
4	Q Yes. It says, "If licensees abstract and treat their own water, there could be a risk of
5	stranded assets", and that was not what happened here, was it? A. Sorry. I don't
6	understand your point.
7	Q Well, the government had a difficulty with stranded assets, and it made specific reference to
8	those. That was in the event that they should become a problem. The headline principle
9	here is that the undertakers' prices should reflect the actual costs of providing the service.
10	That is no a retail minus principle, is it? A. I don't have Section 66(e) in front of me,
11	but there is a reference in 66(e) to the revenues that an undertaker would recover.
12	THE PRESIDENT: You are not expected, Mr. Hope, to take a punt at the legal issues of the
13	construction of Section 66(e).
14	MR. O'REILLY: (To the witness): I am not asking you for a legal opinion. I am simply
15	trying to work out how OFWAT arrived at the view that Section 66(e) and ECPR were one
16	and the say thing. A. It's very difficult for me to do that without reference to Section
17	66(e) and, indeed, to take the President's line, to have a legal punt at interpreting it.
18	MR. ANDERSON: I think the witness has made quite clear that that was OFWAT's view.
19	Whether that was the right view to hold, or not, is a matter for legal submissions.
20	THE PRESIDENT: What I have taken so far from this is that so far we have had no particular
21	factor beyond the wording of Section 66(e) that, as it were, links 6 and 66(e) with ECPR in
22	terms of a retail minus approach. A. Other than the objectives, I think, that were
23	expressed. The way that the government expressed its objectives in its consultation paper.
24	It did seem to us to be consistent with what ECPR is expected
25	Q You would say that the consultation paper is a good starting point, or a sound starting point
26	for working out how it all happened. A. Yes.
27	MR. ANDERSON: I am just asked to point out that there is, of course, in addition to the
28	wording of Section 66(e) the fact that OFWAT's evidence is that they believed that to be
29	the case.
30	THE PRESIDENT: No doubt they did believe it, but just trying to work out why, or how, or by
31	what route
32	MR. O'REILLY: (To the witness): Were you involved in producing the guidance which
33	followed on from the publication of the Water Act? A. I was involved in it, but, to be

1 clear, given my comment earlier about being involved in things, I did not draft it, but I did 2 comment upon it. 3 Q Did you have a look at some of the examples that were produced? A. ... (inaudible) ... 4 Q And do you recall the example which appears – and perhaps I can hand up a copy ---- I 5 believe that the Tribunal should have copies of the Guidance as well. (Handed) What you 6 have there, Mr. Hope, is an extract from the Guidance. If I could ask you to turn to p.48, we 7 see there an equation -6.5.1: the access prices = any expenses reasonably incurred plus 8 retail charge minus the ARROW costs (that is, the costs that are avoided, reducible, or 9 recoverable in any other way). Did you have a hand in drafting the way that this equation 10 is set out? A. No, but I was aware of it. 11 Can I ask you to turn to some of the examples? Can I ask you to turn to Appendix 2 at Q 12 p.63. Here we go through a detailed calculation. So, for example, the first set of figures are 13 ---- The example starts at the middle of p.63. That is wholesale prices. We see the retail 14 charge there, and the example that is given is at the bottom of the page -a fixed charge of £5,000 for this particular customer; a maximum daily demand charge of £70 per cubic 15 16 metre, and a volumetric charge. In this particular worked-up example, the total is 17 £346,000. So, that is the retail charge that would be applied to that particular customer. 18 There is then a sample calculation of ARROW costs undertaken. You will find those at 19 Table A2.1 at p.65. That arrives at a total of £606 being the avoidable costs. In addition, the 20 equation that we had a look at at 6.5.1 requires the addition of the expenses - that is at p.67, 21 Table A2.2 – giving expenses to the incumbent of \pounds 209. The net position is set out at p.68. 22 We see at Table 6.7.1 a total discount of £397. Do you see that? A. Yes. 23 So, for a retail charge of £346,781 the retailer has to buy at a discount of only £397. Did Q you check through this calculation at all? Were you involved in ----24 A. I will have 25 seen this, yes. 26 Q Did you think that that was in line with what DEFRA wanted in terms of applying 27 competition to the industry that there should only be a 0.1 percent margin even for such a 28 large supply of water? A. This was an example of how to undertake an access price 29 calculation. It is not a prediction of a likely level of access prices. 30 Right. Presumably, when compiling the example, realistic figures would have been input, Q 31 A. Well, I seem to recall that there were other examples which would would they not? 32 have been consistent with entry appearing more attractive. You are quoting selectively an 33 example in which entry might appear to be unattractive.

 companies? A. Yes. Sorry. Is this still within the remit of my witness statement? Q I am simply asking. A. Yes, I am aware. Q You said that you were involved in the preparation of this guidance. I am simply asking about that. A. Yes. Q Are you aware that some companies publish indicative access prices that give a zero margin? A. I am aware of that, yes. Q Have you taken steps to check whether that is appropriate or not? A. We have. Q Okay. What is your provisional view? You are a senior economist working for OFWAT? A. No. I am the head of the tariffs team. I am no longer a senior economist. Well, our view was that we asked the companies concerned to explain the basis on which you could arrive at an access price which was higher than the retail charge. The company explained the assumptions that it had made in reaching that price, and on those particular assumptions we did not consider the company's indicative access price to be unreasonable. Q Zero margin in that case, on those assumptions - we are not going to go into that case – was considered by OFWAT to be a reasonable margin in these circumstances. A. Yes. MR. ANDERSON: Whilst talking about access guidance under the new regime we took great exception to Aquavitae putting in all this access guidance stuff after the last hearing. There is no conceivable way it can arise out of anything in the interim Judgment. THE PRESIDENT: Mr. Anderson, the interim Judgment very clearly links the costs principle to the ECPR as used in the decision, and by way of background it is of some interest, I think, to see how ECPR works, or is now seen to be working now that we have got a bit more information about it. MR. ANDERSON: My learned friend should also have been putting to the witness in the context of the paper he has just been putting to him this second paragraph on p.63 which would have made perfectly clear the point about them being illustrative figures. THE PRESI	1	Q Are you aware of the access prices? The indicative access prices published by water
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1	for illustrative purposes in terms of the methodology for making a calculation. They are not
2	there for predictions or an indication of what we think is likely to occur in practice.
3	PROFESSOR PICKERING: Do you not think that there is a very considerable responsibility on
4	any Regulator to be extremely careful not to appear to be setting the tone for its industry in
5	terms of almost acting as – forgive me, I am using this in quotation marks, Mr. Anderson, -
6	but almost acting as the "price leader"? We know at times that Governments acts as price
7	leaders whether wittingly or not, but I would have thought that a Regulator would recognise
8	the responsibility to be very careful not to send any implied messages that may affect the
9	way in which its constituent companies addressed particular price indecisions? A. Yes, I
10	would accept that point. As I said earlier, I do not have the full text in front of me, I have
11	only this selective test from the Guidance on Access Codes, but my recollection is that we
12	had examples, even in the final published version that would have appeared more
13	favourable to a potential entrant.
14	MR. O'REILLY: If that is the case then I am sure submissions can be made on that. Were you
15	aware that some companies were charging for switching to retail? A. To wholesale
16	price?
17	Q Sorry, were you aware that some water companies were charging a fee?
18	THE PRESIDENT: I do not think that that arises in this case does it, Mr. O'Reilly?
19	MR. O'REILLY: No, not in the case of Shotton it does not.
20	THE PRESIDENT: Well I am not sure it is a wholly relevant question if it does not arise in this
21	case.
22	MR. O'REILLY: In that case I withdraw it, Sir, and no further questions.
23	THE PRESIDENT: Right, thank you. I think we will just rise for five minutes. Mr. Hope, by all
24	means rise with us, as it were, but I have one or two questions myself when we come back,
25	so if you would be kind enough not to discuss your evidence with anyone else until we
26	come back. Thank you.
27	(<u>Short break</u>)
28	THE PRESIDENT: Mr. Hope, if I may, the Tribunal is trying to sort out the history of all this and
29	what happened when, and it is not entirely straight forward, so we are very glad of your
30	help, and if I get something wrong you will put me right, please. On p.8 of your witness
31	statement at the top there, you are referring to the second of the NERA papers which was in
32	March 2001, which followed an earlier paper in March 2000, and you set out in that
33	paragraph various requirements for ECPR to be effective, including that the final prices

must be regulated, services must be substitutable and voidable costs can be observed, that is clear what that paper says.

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- Now, I have not gone back to look at it, and we can look at it, if necessary overnight, but as I recall it that paper at that stage was talking about the water industry as a whole. Is that right? A. Yes.
- Q By which I mean that that paper was not addressing whether there was any relevant difference between the generality of household or smaller customers and the larger industrial customers. A. No.
- 9 Q If I have the chronology right, for the charging year 2001/2002 Industrial customers above a 10 certain size were taken out of the tariff basket and my general question, and I am going to 11 put it very generally so you may give as general an answer as you wish, is how far in your 12 view, as regards large industrial customers is the first of those conditions met, namely that 13 final prices must be regulated. What, in the relevant period of regulation is there, as regard 14 prices to large industrial customers, particularly those on special agreements? A. The 15 policy is to larger customers, customers that have been covered first, those that are 16 published in companies' charges' schemes, in most cases they make up the bulk of large 17 user charges, are submitted to OFWAT for approval. So we approve charges that are in 18 companies' charges' schemes, and that apply generally to customers of a given class. So we 19 have powers of approval. We examine those charges each year to ensure that that they are 20 consistent with companies' condition of appointment E, which requires ----
- Q This is the non-discrimination condition? A. Yes, neither unduly preferential or unduly
 discriminatory, and we do so by comparing those charges with other charges, in particular
 with regulated charges that are contained within the tariff basket. So in that sense we would
 not expect to see any noticeable divergence between rates of increase in prices for large
 users and prices for customers who are within the tariff basket, without good reason.
 - Q Is it fair to infer that prices to industrial customers, as I think the earlier OFWAT submissions told us are less regulated than final prices to the generality of retail customers?A. Yes, they are in the sense that they are not subject to the price limit, explicitly.
 - Q They are not subject to the price limit. And in terms of special agreements where there is no tariff it comes down to Condition E, is that right? A. Yes.
- Q Yes. In relation to the next requirement, which is not there but a little bit later on in the
 consultation paper, which I think you think is as good a starting point as any for the
 discussion that is going on in this case, there is a reference and it comes up several times
 in your evidence to stranded assets and the cost of stranded assets? A. Yes.

1 Q In terms of the Shotton case, how does the stranded asset argument, as it were, play because 2 we have an asset that is being used and is not going to be stranded, indeed the contrary? 3 A. Well my understanding is that the same assets – essentially the same assets would be 4 used regardless of who is the designated supplier to Shotton Paper, so yes, there would be 5 no stranded asset, which is why the avoidable cost in the ECPR calculation that OFWAT 6 undertook was the bulk supply price from United Utilities. 7 0 I suppose what I am struggling for is the question how does a pricing approach that is 8 intended to deal with stranded asset costs help us in a case where, by definition, there is not 9 going to be a stranded asset? A. Well it deals equally well. If there are no stranded assets 10 then that will be reflected in the access price. 11 Q In what way? A. Well to the extent that there are going to be stranded assets then it is 12 more likely that the access price will be higher. The lower the likelihood of stranded assets 13 then the lower the likely the access price, the greater the avoidable costs. 14 Sorry, say that again – i.e. the more – repeat that because I am rather slow and I could not Q 15 quite understand it all? A. If there are not any stranded assets then the avoidable costs are 16 likely to be higher. The lower the risk of stranding the greater a company's avoidable costs 17 are likely to be. 18 Q "The lower the risk of stranding the greater the avoidable costs are likely to be"? A. Yes, 19 all else being equal. 20 Q But in this case we have a nil risk of stranding? A Yes 21 Q Quite a low figure? A. The avoidable costs were low because the resource costs were 22 low, they were low in value. The bulk supply price was low. 23 PROFESSOR PICKERING: Just following that, if the probability of stranding was very high, let 24 us assume that the probability was one that there would be stranding by bypass, how then 25 do you get any contribution towards the cost of those stranded assets? A. If the assets 26 were going to be stranded then avoidable costs would be correspondingly lower, and the 27 access price would be close to the retail price, if not equal to it. 28 I do not see how this would apply. Let us suppose that something equivalent – you are not Q 29 arguing that this would have been replicable in the Shotton case, but just suppose that 30 Albion took its water supplied from United Utilities, was able somehow or other to bypass 31 the Ashgrove system and deliver direct to Shotton Paper, it has no contractual arrangement 32 with the company whose assets were stranded, so how can you say that ECPR can deal with 33 stranding, and furthermore you seem to be saying that one is taking a forward view about 34 the probability of stranding and that you build that in, but I mean ECPR is actually about

2 pick up a provision for stranded assets? A. It does in the way that avoidable costs are 3 calculated, if there are going to be stranded assets then avoidable costs will be smaller. If 4 there are not going to be stranded assets then avoidable costs will be greater and access 5 prices will be lower. 6 Q So, in this case you are saying that there would not have been stranded assets. So, the 7 ARROW costs should have been up. A. My understanding in this case is that the 8 avoidable costs would be the costs of the bulk supply for the United Utilities, but you will 9 have to correct me if I am wrong. Since Dwr Cymru would no longer be taking bulk 10 supply from United Utilities, then it would not be incurring specifically those costs. It 11 would be able to avoid them. Those are the avoidable costs, but the assets are not stranded 12 because those assets are being deployed to supply Albion Water. 13 Q I think it is the other way round, is it not? The raw water is provided by United Utilities. 14 tree common carriage system is provided by Dur Cymru. A. Tyes. 15 Q Perhaps you could tell us this: how then did you handle the comparison within your tariff 16 setting and your approval of the bulk supply price? How	1		observing avoided costs. So is there not a fundamental problem that ECPR cannot actually
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32 Q You do not. A. No.	30		would have happened if
	31	Q	If there had been stranded assets. A. I don't recall that we considered that case, no.
33 Q Let me come back to the basic question which the President put: how realistic is it to talk	32	Q	You do not. A. No.
	33	Q	
34 about including within the price some sort of provision on the basis of an expectation as to	34		about including within the price some sort of provision on the basis of an expectation as to

the probability that some, or all, of the assets will be stranded? A. Well, companies have to provide all the time ---- Each year they have to provide assessments of what water resources are required to meet their supply obligations. So, they are in the business of forecasting what resources are required to meet demand. They have to allow for different scenarios. So, it is not unusual for water companies to have to make a forecast as to what resources they will need to meet demand. That is precisely what you do in the calculation of an ECPR access price. You compare two scenarios. You compare your base case scenario - the demands you are expecting to have to meet – with a hypothetical scenario, which is the base case minus whatever demands are relevant to the customer that an entrant is going to supply. So, you compare two supply/demand investment programmes, and you calculate the difference. The difference is the avoidable costs. So, if some of the assets are not going to be able to be used in some other way, or not going to be avoided, and so on, then since they are not avoidable, the access price will remunerate the undertaker for those costs.

Q Assuming that the undertaker remains the undertaker and that there is not a bypass.

THE PRESIDENT: I think what Professor Pickering is getting at is this: if, as was at one time suggested in the annex to the decision, there was simply another supply to Shotton from somewhere else, or a new pipeline (as we have been discussing in the course of the day), the existing pipeline would be stranded – but on the basis that it is a supply direct from United Utilities/Albion to Shotton there is no-one from whom Dwr Cymru can recover the cost of that asset. It has just been stranded. It has been bypassed. So, we have got a situation theoretically in which if the asset is stranded there is no mechanism for recovering the cost of that stranded asset, but if the asset is not stranded, nonetheless the entrant has to pay, under a pricing mechanism designed to protect the incumbent from stranded assets, even though the asset is not stranded. Do you see what I mean? A. Yes. ECPR does not provide for situations involving bypass.

Q No.

PROFESSOR PICKERING: If you could look at para. 28 and the second bullet point there ---I recognise that this is the DEFRA consultation paper. Does what is said there actually
then still hold? If undertakers were not compensated for these stranded asset costs, how do
you do it? A. Well, the costs principle provides for the kind of circumstances that arise
under the water supply licensing regime. So, they work for those kind of circumstances. I
think the scenario you are talking about involving bypass is outwith the water supply
licensing regime, if I have understood it correctly.

1	THE	E PRESIDENT: It is the scenario the Director developed in an annex to the decision. It
2		might be said that that scenario is, in a sense, self-defeating because it would give rise to a
3		stranded asset that the current pricing policy is designed to avoid. So, in other words, what
4		we are trying to get at is: if there is a bypass, does this rule help, on the one hand? If the
5		asset is fully used, what is the relevance of the reference to stranded assets? I suppose
6		thirdly – and this is probably what you might say: is there some intermediate position where
7		there is partial stranding which needs to be taken into account? Do you follow what we are
8		trying to A. I think I do. My understanding is that the key point is the one that I
9		made a few moments ago - that ECPR does not provide for cases of bypass. But, in the
10		context of the costs principle nor is it intended to. It is intended to apply to the
11		circumstances that arise under the water supply licensing regime.
12	Q	I think, just to complete this part of the case, if we go back to p.10 of your witness
13		statement, under the heading '(b) Protecting customers', you are talking about protecting
14		those who are unable to benefit directly. You refer to the cost of stranded assets that we
15		have just been discussing. You then refer to the incidence effects of unwinding socially
16		desirable cross-subsidies. What socially desirable cross-subsidies are we talking about?
17		A. Well, we might be talking about, for example, the regional averaging of charges to all
18		household customers which provides a degree of protection to those customers in areas
19		which are more costly to supply, which may include rural areas, for example.
20	Q	That is household customers? A. Yes.
21	Q	If we just jog back to the consultation paper - we can look at it, but just let me draw your
22		attention to two passages in that paper, which are not, I think, quoted in the witness
23		statement at the moment Paragraph 28 says, in relation to competition for large users,
24		"Unlike household customers, costs subsidies have been largely unwound". A. That
25		is a reference to cross-subsidies as between the non-household customers as a class on the
26		one hand, and household customers as a class on the other hand. In terms of the reference
27		to there being continued cross-subsidies with household customers, I think that is probably a
28		reference to the fact that most household customers remain unmetered. They pay a charge
29		according to the rateable value of their property, which, of course, bears no direct relation to
30		the cost of supplying them.
31	Q	I can understand that there may well be some sort of cross-subsidies within the household
32		class for all sorts of reasons – social and otherwise. I think a little later on – at 176 I the
33		paper - "However, OFWAT believes there are no significant cross-subsidies between
34		eligible and ineligible customers". A. Yes. In effect that is saying that we think that
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- on the whole tariffs for commercial customers reflect the lower costs of supplying commercial customers relative to the costs of supplying household customers.
- Q Yes. So, going back to the witness statement on p.10, how does the consideration of the incidence effects of unwinding socially desirable cross-subsidies still play in relation to large industrial customers? A. Sorry. If I can take a moment just to re-read ---- (After a pause): Sir, that refers specifically if we are talking about the paragraph following (b) 'Protecting Customers' ---- That does refer specifically to customers who are unable to benefit directly from common carriage or retail competition; that they should be protected from the possible costs of such competition.
- 10QBut, the White Paper says there are no significant cross-subsidies between eligible and11ineligible customers.A. At present, yes.
- 12 Well, can we assume the consultation paper ---- that what the consultation paper says is Q 13 A. Yes, we can. I think what the consultation paper was getting at – and here I correct? 14 am second-guessing what DEFRA were attempting to say ---- I think what it was getting at 15 was that there may be a risk if new entrants in the water industry are allowed to come in and 16 compete, and if by doing so they were to leave the incumbent undertaker with stranded 17 assets, then the cost of those assets would still have to be financed, and DEFRA's view was 18 that the financing of those stranded assets should not fall to ineligible customers – as 19 eventually they could do.
- 20 Q Can we park the stranded assets for a moment, because I think we have just been on that? I 21 am on the next bit – the socially desirable cross-subsidies. What I am struggling with at 22 the moment is whether, and if so in what sense, there are any 'socially desirable cross-23 subsidies[' in relation to large industrial customers. A. That, I think, would be a 24 reference to the risk that with certain approaches to access pricing undertakers would be 25 encouraged regionally to de-average their tariffs for commercial customers. In so doing, 26 they may feel that it then necessarily follows that they should be de-averaging their tariffs to 27 all customers. So, in that sense, there would be a knock-on consequence for household 28 customers.
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Q But, at the moment, it is only open to customers above 50 megalitres. A. Yes.

Q So, there is a sort of psychological thing that you do not want it unravel into the household sector. A. That is right. I think the idea is that once you start unravelling for those above 50 megalitres, it becomes difficult not to do so equally for those below 50. If you imagine a customer who is using 49 megalitres a year, for example, who is subject to a regionally averaged tariff, it may end up with an incentive to consume an extra megalitre of

water in order to qualify for the regionally de-averaged tariff, which is lower for its zone. It could actually, in effect, save money by using more water – which would be perverse and not something we would regard as desirable.

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Q Doesn't the very idea of allowing competition in, even if it is in a limited way on an ECPR process, but presumably it is done in the expectation that some competition will take place --- It is said to encourage it. That is your evidence. If that is going to encourage competition, and there is going to be some competition as apparently we all hope, then that is going to begin to undermine regional averaging in the sector where that competition is allowed to take place, is it not? A. Well, it wouldn't do with the efficient component pricing rule, no.

Q Why not? If someone can produce a cheaper source, he will produce a price that is a bit lower than the tariff. A. It will indeed result in regional de-averaging for the customer who is being supplied by the new entrant, but there is no reason for the incumbent water company to de-average its tariffs.

Q No. But, once you start this process ---- once a new entrant comes in you will have a situation in which it is no longer the case that all customers are paying the regional average because someone will be paying lower than the regional average. A. That is true, yes.
 Q To that extent at least regional averaging will be qualified, weakened, or whatever, by the effect of competition. A. Yes.

20 Q And may result, I suppose, in some sort of re-assessment by incumbents of their pricing 21 policies or greater efficiency, or something that will have a sort of continuing effect. A. 22 It might do, but the point of the efficient component pricing rule was that it provides no 23 incentives for the incumbents to pre-empt this process by regionally de-averaging their 24 tariffs. They have no need to do so because the access price is calculated by taking the 25 regionally averaged tariff as the starting point, and then subtracting the actual location-26 specific avoidable costs – ARROW costs. So, there is no need to regionally de-average 27 your final tariffs to your commercial customers in order to pre-empt competitive entry ----28 So, the people who do better than the average are those who can benefit from competition, Q 29 are they not? A. Yes.

30 Q Everybody else stays where they are. A. Yes.

Q Can we understand a little better regional averaging and how it works in relation to these
 very large customers that we are talking about in this case, most of whom historically have
 been, for many years, on special agreements – although there has been a sort of recent move
 across? What is the underlying rationale for regional averaging in relation to these very

1		large customers? A. It basically follows from companies' Condition E – Condition E
2		of their Conditions of Appointment, which requires that they be shown neither undue
3		preference, nor undue discrimination in their charges. So, our view has always been that
4		they should charge customers according to the customer's characteristics rather than to the
5		characteristics of the location. So, a given customer with the same characteristics should
6		receive the same charge whatever its location.
7	Q	Let us stick with these large customers for the time being. Does regional averaging for
8		those large customers imply some cross-subsidy between industrial customers? A.
9		Yes, it does, yes.
10	Q	i.e. that the costs of serving some of those customers are lower than the costs of serving
11		other customers, however we get at the costs – by some mechanism. A. Yes.
12	Q	We know it is difficult, but A. To the extent that costs do differ between all zones,
13		then, yes.
14	Q	Isn't charging somebody the same price if the costs are different as much undue
15		discrimination as charging them different prices when the costs are the same? A. Then
16		we come back to the point that I was making about the gradual unwinding for the remainder
17		of the customer base.
18	Q	Customers are different, how does Condition E prevent them being charged different prices
19		that are more reflective of their individual cost? A. Sorry, could you repeat the question?
20	Q	Yes, we have got a hypothesis in which, apparently, the costs of supplying these various
21		large customers – let us deal with the top 10 for argument's sake – are apparently different,
22		there are some cross subsidies between the various customers, and the point I am putting,
23		which will no doubt be a question of argument and all the rest of it, but you are the only
24		representative of OFWAT we have so in fairness I have to put it to you, is it not undue
25		discrimination to charge two customers the same price when the costs of serving them are
26		different? A. I think what we have said in the past is that it is the companies to come to
27		us if they wish regionally to de-average their tariffs for business customers then they would
28		need to come to us with the costs' justification for doing so, but in default of that we are
29		comfortable with the notion that customers should pay regionally averaged charges.
30	Q	So on your view, to put it rather A. But it is possible.
31	Q	in a rather basic way, if we take these large, non-potable customers, you are comfortable
32		with the possibility that the paper mill is subsidising the steel works, which is subsidising
33		the oil refinery, or vice versa? A. With the principle, yes. I do not know the facts.
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- Q The principle that these various organisations should be subsidising each other is one you are comfortable with? A. That is what happens, yes.
 - Q It may be what happens, but what is the policy justification for that? Why should a steel works in the South subsidise a paper mill in the North or vice versa? A. It is, as I say, the fact that once you start unwinding for the industrial customers, the question becomes where do you stop? An example of the customer using 49 megalitres per year who may be incentivised to use a little more in order to save money if regionally de-averaged charges only extended to customers outside ----

Q So it is a "where do you stop?" point? A. Yes.

PROFESSOR PICKERING: What about the views of the customers? The Enterprise Act was preceded by a White Paper that I think we understood really came from the Treasury about the competition policy was very important for Britain's economic performance. Now, if you have a large customer who is very dependent on water as an input, then if that customer is subsidising and therefore paying a higher price than the real costs of supplying, then the implication is that that puts that customer in England or Wales at a disadvantage, maybe relative to its international competitors. That may therefore cost us sales, it may actually give rise to closure of a UK plant to the advantage of plants elsewhere in the world. Does that enter OFWAT's thinking? A. It is not something that we have actually discussed.
O I am amazed.

THE PRESIDENT: Could I just, on the last topic, Mr. Hope, you have been very patient, so thank you very much for your help, go back to this basic point. What the new entrant under ECPR has to play with is the avoided costs of the incumbent, of course he has his own overheads to pay for as well. He has his own fixed costs. He is also holding harmless the incumbent whose profits remain the same under this theory. So is it not the case that the new entrant is effectively bearing two sets of overheads, his own and the incumbents? In those circumstances would a new entrant have to be not merely as efficient as the incumbent but super efficient in order to make any realistic stab at entering in an effective way? Would that be a fair way of putting it? A. I think it would. It is perfectly possible that you could have a side by side comparison comparing the costs of supplying a particular customer, say a particular large user customer; you could see a potential entrant being able to make that supply at lower cost than the incumbent. But if the outcome is that the total cost of supplying all customers, not just the customer who is subject to competition, but if the cost of supplying all customers would be higher in the event of entry then that is

something that the efficient component pricing rule and, we think, the cost principle would prevent.

Q But why should the costs go up to all customers? A. In the event that entry which raises -

Q Well let us take a simple example. As I have understood it. We have two equally efficient competitors, i.e. a new entrant and incumbent, and they have both got a similar overhead structure, even so the new entrant is marginally more efficient. In normal circumstances that would be the entry of an efficient firm into the industry. He manages to get a customer. We have some competition starting that might be seen to be a good idea, certainly if we are thinking about the 1998 Act, probably also under the O3 Act. That cannot really happen under ECPR, because it is quite a narrow margin, the avoided costs he has to play with. Then I think, so the argument runs, if you did have a firm that was more efficient coming in (or equally efficient) event though that firm was equally efficient that might load some other costs on to other customers, that is the argument? A. Yes.

- There are two things, I suppose – well they come down to one thing I suppose that worries one, why is it assumed that with that sort of entry the incumbent necessarily needs to raise his prices to everybody else as distinct from increasing his efficiency or taking perhaps even a marginally less profit whilst still remaining financially healthy? A. It is not automatically assumed. I think we said in MD163 that we would look to incumbent undertakers to find alternative uses for their assets and to become more efficient, etc. But ultimately we have a duty to ensure that companies can finance their functions and to the extent that they are unable to reduce these costs or avoid the costs of stranded assets, then those are functions that need to be financed, and the knock on effect for other customers comes through the price review process, which occurs every five years. In the intervening period an undertaker might well make and absorb a loss as a result of an entrant coming in, but at the following price review the way we calculate price limits is by comparing on the one hand the costs that we expect the undertaker to incur over the coming five years, with the revenues that it is likely to receive. If those costs include stranded asset cost then so be it, we are taking them into account – to the extent, as I say, that we are satisfied that there genuinely is no way that they could find an alternative use for the assets or so on.
- Q Because you mention, quite rightly, in MD 163 there is reference to incumbents increasing
 efficiency, and so forth, and one understands that, but if under ECPR the incumbent's
 profits are guaranteed, whatever happens, is there any real pressure on the incumbent to

increase efficiency? A. There is, of course, the incentive to become more efficient in 2 order to make greater profits ----

Q From the incentive built into the general price scheme? A. Yes.

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Q Yes, I see. Well I think we will probably leave it there, thank you very much, Mr. Hope. There may be some more questions arising out of that from your counsel. Thank you very A. Thank you. much for your help.

Re-examined by Mr. ANDERSON

Q Just one or two questions. If I could just go back to this question of stranded assets. I understand your answer on the question of bypassed assets, because if you build a completely separate parallel network you are not going to be seeking access from the stranded assets, and that is just a hint that the owner of that asset takes. But perhaps you could explain to the Tribunal how it would happen if there were partially stranded assets, what is the mechanism for it finding its way into the ECPR calculation? Assuming you have got, I do not know, a 3p resource cost, some of it is avoidable, some of it is stranded, because you do not need some particular aspect of what your original supplier provided to you, how does that calculation then operate under ECPR? A. Well, if some of it is stranded it is not being subtracted from the retail price in order to calculate the access price; hence the access price is correspondingly higher than it otherwise would be, even if the stranding is partial.

20 Q And that is because it is not avoidable? A. Indeed.

- 21 Q Right. If taking hypothetically this example, Albion and Shotton went bust and closed 22 down, Welsh would have some stranded assets. They would no longer be obtaining an 23 access price because there is no longer a supply happening, it is just a stranded asset, what 24 happens in that situation? How does Welsh, if at all, compensate itself for stranding in those 25 A. Sorry, the scenario is that Albion Water ceases to supply Shotton. circumstances? 26 Who, in this scenario, is supplying Shotton instead?
- 27 Nobody, they are just plain stranded assets, that Welsh wakes up one day and finds we have Q 28 got these treatment works and pipes we can no longer put them to any use because there is 29 A. That is precisely the kind of scenario that companies encounter no supply occurring? 30 all of the time in the sense that business customers go out of business. The incumbent water 31 companies lose the revenue from those customers and unless those revenue losses trigger an 32 interim determination of price limits then the company simply absorbs those losses until the 33 next price review.

1 PROFESSOR PICKERING: And what happens at the next price review? A. At the next price 2 review price limits will be set to ensure that the companies can finance their functions but 3 again we will be challenging the companies to find greater efficiencies and to find 4 alternative uses for any assets that might be stranded, and also that would include re-5 allocating water, selling water through bulk supplies to neighbouring companies that might 6 need it more 7 THE PRESIDENT: And obviously in the postulated example there would be some savings as 8 A. Yes. well? 9 Q Water is spare and staff you could reduce and so forth and so on? A. Yes. 10 PROFESSOR PICKERING: But if the asset stayed unused for four years and, at the point of the 11 next price review, was still unused, would the determination of the overall price for revenue 12 allowable to that company include a provision for the remuneration of that unused capital 13 A. Yes. asset? 14 A. Not necessarily, it would depend; OFWAT makes a judgment on Q Indefinitely? 15 whether the stranding of any assets has resulted from poor management on the part of the 16 undertaker concerned, or whether it is from factors outside of the undertaker's control. If it 17 has resulted from poor management then there is no obligation to finance that asset. 18 MR. ANDERSON: Seeking an alternative use might be one way forward for them? A. Yes. 19 Q Although, given that these pipes are where they are that might not always be possible, I 20 suppose? A. But if our view was that there was an alternative use and the company had 21 failed to ensure that the assets were allocated to meeting that alternative use then we would 22 not make allowance in setting price limits recovering the costs of the asset. 23 MR. ANDERSON: Thank you very much. 24 THE PRESIDENT: Thank you. I think we will adjourn at that point. We are not getting on 25 particularly well as far as time is concerned at the moment, are we, Mr. Thompson? I am 26 just concerned a bit about our expert witnesses, Mr. Anderson, we are spending a lot of time 27 here dealing wit things that are not directly in their bailiwick and I am just wondering if we 28 should perhaps try and do the expert evidence tomorrow rather than Mr. Jones, and come 29 back to Mr. Jones on Monday, and I am not sure whether we can even get through the 30 experts in a day? 31 MR. ANDERSON: I have no idea how long Mr. Jones will take. I would have thought we would 32 certainly get through the experts in a day, probably less than that? THE PRESIDENT: What is your view, Mr. Thompson, Mr Vajda, Mr. O'Reilly? 33

 examination-in-chief of Mr. Jones to be. He was threatening half a day yesterday, which seemed long to me but at lunch time he was suggesting that we might let Mr. Jones go this afternoon, which obviously proved optimistic. In terms of the experts, I have one or two questions for Dr. Marshall, and probably slightly longer than I have with Mr. Hope for Professor Armstrong, but that suggests that unless anybody else has a great deal of cross-examination we will comfortably deal with both the experts in a day. THE PRESIDENT: Do you agree with that, Mr. O'Reilly, as far as you know? MR. O'REILLY: Yes, we are going to co-ordinate questioning of Professor Armstrong so I should imagine I shall only be a few moments, really. THE PRESIDENT: Mr. Vajda, would it be more convenient to try to do the experts tomorrow, because we are not sitting on Friday, and that would just leave Mr. Jones for next week? MR. VAJDA: There is a balancing exercise in that Mr. Jones has also been here. THE PRESIDENT: Yes, but he is a party and the others are not parties. MR. VAJDA: Yes, I accept that. What I can say in the light of – I was not threatening anybody in terms of my examination of Mr. Jones, I have very much in mind what you, Sir, have said to me and how the case has gone – I am not now planning to be two hours. There will still be some examination but I would anticipate it would be somewhere between half an hour and 45 minutes. THE PRESIDENT: It is true. It is not normally necessary to bring out things in chief in this Tribunal. You can take us quickly to the paragraphs, and we can note them, and carry on. We have read it all several times now. MR. VAJDA: Yes, but there are particular points THE PRESIDENT: It is the references? You may have to ask Dr. Marshall and Professor Armstrong what their preferences	1	MR. THOMPSON: I think the most uncertain thing is how long Mr. Vajda is anticipating his
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31 Mr. Thompson is going to be. I can see that one would want to be confident that one would	29	MR. VAJDA: I think what is being said by those behind me is if Mr. Jones could start tomorrow
	30	morning Obviously there is a balancing exercise to be done. I do not know how long
32 get through the experts as well tomorrow. I think so far as the cross-examination of Dr.	31	Mr. Thompson is going to be. I can see that one would want to be confident that one would
33 Marshall is concerned, so far as I am concerned, I would not anticipate that I would be		
34 longer than an hour.	34	longer than an hour.

1	THE PRESIDENT: Perhaps we could ask Dr. Marshall and Professor Armstrong whether they
2	have got any preferences?
3	MR. THOMPSON: I am happy for them to do it directly, but I did ask Dr. Marshall whether she
4	was available on Monday. She is available on Monday. So, there is no particular problem if
5	we carry on with the current batting order.
6	THE PRESIDENT: Dr. Marshall, what is your general position. Would you be happy to come
7	back on Monday?
8	DR. MARSHALL: Yes, I am happy to fit in.
9	THE PRESIDENT: Right. Professor Armstrong? I am sorry you have been listening to quite a
10	lengthy debate about some fairly arcane subjects. Would you be able to be available both
11	tomorrow and Monday, if necessary?
12	PROFESSOR ARMSTRONG: Yes.
13	THE PRESIDENT: If there is no objection from the experts, then I think we will go on with Mr.
14	Jones.
15	MR. VAJDA: I am very grateful. Obviously, he is the client. He has a business to run.
16	THE PRESIDENT: We get the direct fact out of the way, and then we can get on to the more
17	complicated matters. But, we may not get through both expert witnesses tomorrow as far
18	as I can see.
19	MR. VAJDA: As far as I understand it, we are dealing with Professor Armstrong first; is that
20	right? That is my understanding.
21	THE PRESIDENT: I would have thought, in the normal course, it is for the Appellants to call
22	Dr. Marshall and for the Respondents to cross-examination Dr. Marshall.
23	MR. THOMPSON: I think it was agreed that Professor Armstrong would go first.
24	THE PRESIDENT: We will proceed on those lines. Ten-thirty tomorrow. Thank you very
25	much everybody.
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27	(Adjourned until Thursday, 1 June, 2006 at 10.30 a.m.)
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