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**IN THE COMPETITION**  
**APPEAL TRIBUNAL**

Case No. 1046/2/4/04

Victoria House,  
Bloomsbury Place,  
London WC1A 2EB

5<sup>th</sup> June 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**

Appellant

Supported by

**AQUAVITAE (UK) LIMITED**

Intervener

-v-

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

Respondent

Supported by

**DWR CYMRU CYFYNGEDIG**  
and  
**UNITED UTILITIES WATER PLC**

Interveners

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**HEARING DAY FOUR**

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## 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.

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1 THE PRESIDENT: Good morning ladies and gentlemen. Good morning Professor Armstrong.  
2 Yes, Mr. O'Reilly?

3 MR. O'REILLY: On reflection, Sir, we have no questions for Professor Armstrong.

4 THE PRESIDENT: You have no questions, very well. Can I just thank everybody for the further  
5 information that has come in which we have not yet had an opportunity to completely  
6 absorb, yet. I think in my head, Mr. Vajda, there is one thing that is not yet completely  
7 clear. Mr. Jones was telling us on Thursday about the process for arriving at what he  
8 described as the revenue requirement and you kindly gave us copies of the price  
9 determinations for the relevant years and just quickly reading those documents I could not  
10 quite draw from those documents the process of reasoning that Mr. Jones was referring to.  
11 In other words it did not leap from the page as to exactly what the mechanism was. So if  
12 there is some other document behind that which sets out the way it actually works that  
13 would help us, I think.

14 MR. VAJDA: I suspect one way of doing it would be actually to take the Tribunal at a  
15 convenient moment to some of the relevant pages in that – it is a rather long document –  
16 and I could certainly do that.

17 THE PRESIDENT: What I could not find, and I only had a quick look and so maybe it is  
18 probably my fault. I could not find the revenue requirement is “this” and we are assuming  
19 this revenue from this, and this revenue from that, and on that basis that gives us a tariff  
20 price limit of plus 4.4 whatever it was, but it may be that I simply missed it or have not read  
21 it with the care that it undoubtedly requires.

22 MR. VAJDA: Maybe what I can do is after we have finished with the experts I can take the  
23 Tribunal through what we consider to be the relevant pages of this and then if the Tribunal  
24 feels that that still leaves some question marks we can then decide how to proceed.

25 THE PRESIDENT: Yes, how it works is presumably non-contentious so it is just a question of  
26 making sure we have understood how it works.

27 MR. VAJDA: And obviously this is a huge document. I have various flags of various pages  
28 which I can certainly take the Tribunal to. Whether it will elucidate the Tribunal fully I am  
29 not entirely sure, but I would hope that it might. Would that be a convenient way?

30 THE PRESIDENT: I think it probably would. I would provisionally suggest that we finish the  
31 evidence and when we finish the evidence perhaps you can do that before we start on the  
32 submissions.

33 MR. VAJDA: Yes, I think we are all assuming we are going to finish the evidence some time  
34 today and so I will do that.

1 THE PRESIDENT: Yes, that sounds as if it is a fair assumption.

2 PROFESSOR CHRISTOPHER MARK ARMSTRONG, Recalled

3 THE PRESIDENT: Professor Armstrong, I have one or two question and I think Professor  
4 Pickering has some questions. Was there anything else, Mr. Vajda?

5 MR. VAJDA: I had three or four questions?

6 THE PRESIDENT: You want to carry on, yes.

7 MR. VAJDA: I am very happy to ask them before or after the Tribunal.

8 THE PRESIDENT: No, you ask them first.

9 Cross-examination by Mr. VAJDA, (continued)

10 Q Professor Armstrong, you remember that on Thursday there was debate between you and  
11 Mr. Thompson in relation to fixed costs and non-avoidable fixed costs, and I just want to be  
12 clear that I have understood your evidence in relation to this. Assume that there are two  
13 identifiable and distinct markets – the upstream and the downstream – and the incumbent is  
14 dominant on both and the new entrant wishes to enter the downstream market. If the  
15 incumbent has non-avoidable fixed costs in the downstream market, is there potential  
16 conflict between the margin squeeze test and the ECPR? A. Yes there is.

17 Q Yes. If, however, the incumbent does not have any non-avoidable fixed costs in the  
18 downstream market is there such a conflict? A. Not to do with the avoidable fixed costs,  
19 but it is possible – there have been, I think, two sources of conflict between the ECPR and  
20 the margin squeeze test is often applied. One is this idea that ... mentioned of non-  
21 avoidable fixed costs in the competitive sector on the part of the incumbent, and the other  
22 one is the fact that there may be extra costs involved in selling the upstream product to a  
23 third party in the competitive market. So it is cheaper for the vertically integrated firm to  
24 supply the upstream product, to itself than it is to supply to an entrant, then there might be a  
25 potential conflict between the ECPR and the margin squeeze.

26 Q I am just at the moment focusing on the question of the non-avoidable fixed costs.

27 A. Fine.

28 Q If I can put it this way, if the incumbent has fixed costs which are avoidable over the long  
29 term, and the ECPR as a test is applied over a sufficiently long run time frame so that those  
30 costs are avoidable, is there a conflict between the two tests? A. In my opinion, no.

31 Q If the new entrant has non-avoidable fixed costs in a downstream market, but the incumbent  
32 does not, is there conflict between the two tests? A. I do not think the cost structure of  
33 the entrant comes into the test, so I do not think there is any conflict in that case.

1 Q Perhaps the question I should have asked you is going back to the incumbent is if the  
2 incumbent has non-avoidable fixed costs in the upstream market is there a conflict between  
3 ECPR and margin squeeze? A. I do not believe so.

4 Q Could I just ask you to turn to the skeleton of Dŵr Cymru?

5 THE PRESIDENT: Have you a spare copy of your skeleton, Mr. Vajda?

6 MR. VAJDA: Yes, I am anxious that the witness gets a clean copy? (Document handed to the  
7 witness) A. Thank you.

8 Q Can I just ask you, Professor Armstrong to read paras. 88-89 of the skeleton, which is on  
9 p.43-44? A. Yes, just give me a second.

10 Q (After a pause) Those paragraphs are dealing with something that troubled the Tribunal in  
11 its interim Judgment - that ECPR focuses on cost, whereas margin squeeze focuses on  
12 price. My question to you is this: do you agree with the analysis at paras. 88 to 89, that  
13 there is in fact no difference in this respect between the two tests? A. No, I agree with  
14 paras. 88 and 89. I wrote something somewhat similar in my first report.

15 Q I think this is the last question: perhaps I could just take you to the transcript of Thursday at  
16 p.61. If I could just ask you to read to yourself the answer that you gave to the President,  
17 which is at the bottom of p.61. In fact, I can read it out because there is only one sentence  
18 I want to ask you a question about: "One would hope that given it is a competitive market  
19 we are trying to set up, there are not vast amounts of fixed costs floating around here".  
20 Could you just expand on what you meant by that? A. I guess, if there are substantial  
21 fixed costs on participants in a particular market, one would normally expect it to be a  
22 particularly vigorously competitive market. That was what I was ---- the point I was trying  
23 to get across there. So, normally, substantial fixed costs are not ---- That would be more  
24 along the lines of a natural monopoly there in the industry than a competitive layer in the  
25 industry. Obviously, competition is compatible with modest fixed costs, but not substantial  
26 fixed costs, I would say.

27 Q Thank you. I have no further questions.

28 THE PRESIDENT: Thank you very much, Mr. Vajda. (To the witness): I want to know if you  
29 can help me on one or two points, Professor Armstrong. It may be a somewhat discursive  
30 discussion, but let us see where we get to. There is a certain amount of reference in the  
31 various reports to the idea of avoidable costs. Over what sort of timeframe are you  
32 assuming that costs are avoidable in the present context? A. I guess one would take a  
33 medium to long-term point on that. It is always quite hard to answer that sort of question.

1 We are not talking about a sort of hit and run entry or anything like that, so it is something  
2 that is avoided in the medium term, is what I would say.

3 Q At the back of one's mind is that one is always brought up to understand 'in the long run'  
4 whatever that run may be 'all costs are avoidable'. A. Yes. The costs are sunk and  
5 they are never avoided, if you like. But, you know, returning to my example of a retail  
6 manager controlling ten customers, it is possible that if the incumbent loses, say, five of  
7 those customers that in the medium term this manager might be able to have part of his job  
8 re-deployed to another serve.

9 Q So, it is a medium view. A. Yes, that is what I would take.

10 Q Could we just take your first report for a moment – the one from March 2006? What I  
11 would just like to do is just to ask one or two things about the examples you give on p.5,  
12 very helpfully. You will probably remember those examples. I completely understand  
13 they are over-simplified and hypothetical, and they are a way of illustrating underlying ...  
14 (overspeaking) ... A. -- the ones that you supplied in your interim Judgment.

15 Q Yes. Absolutely. That is very helpful to us. One appreciates that real life is probably more  
16 complicated. But, just to take these examples in their own terms ---- to take your first  
17 numerical example where you are supposing an incumbent's retail price is £10; its network  
18 cost is £5; and its water resource cost is £3; there is a total cost of providing the end-to-end  
19 service of £8; and then by deduction, I think, a margin of £2 ----- A. Yes.

20 Q That is the way that one seems to work. A. A margin above the usual rate of return.  
21 So, that is an excess of the normal cost of capital involved in ----

22 Q Right. Okay. If we assumed in this example an entrant that comes in and its water resource  
23 cost is also £3, i.e. it is exactly the same as the incumbent's water resource cost, but it says  
24 to itself, "Well, I don't need a margin of £2. I can manage on a margin of £1 [just for  
25 argument's sake] because I work harder and I drive cheap cars, and I'm better at it. So, I  
26 would like to come in and charge the customers a retail price of not £10, but £9 [on this  
27 example]". In that case, would you regard that --- How do you characterise that? Would  
28 you regard that as efficient entry? A. Well, as I interrupted you I was thinking that the  
29 £2 was in excess of what the incumbent's required margin was. So, this margin is over and  
30 above what its shareholders need to be compensated to run the service. So, this £2 I was  
31 thinking of is contributions to fixed costs elsewhere in the business, and there is a  
32 contribution to cross-subsidies, and so on, and so forth. Therefore, it is not a sign of  
33 inefficiency on the part of an incumbent – it is just a sign of its additional obligations which

1 the entrant-to-be does not need to face. So, it is not a sign of the entrant being more  
2 efficient.

3 Q But, in what sense would it be inefficient if the entrant is able to offer a lower retail price  
4 because it is prepared to take a lower margin? A. Well, the example you have given is  
5 exactly as efficient.

6 Q In terms of water resource costs, it costs the same. But, it is just better at organising its  
7 overhead costs, shall we say, so that it can save money there and pass that on to the  
8 customer. I am just trying to tease out the underlying assumptions behind the example, if  
9 you see what I mean. A. The underlying assumptions behind the example are that  
10 there are two things involved in the end-to-end service here: the network ---- the distribution  
11 part, and the water resource part. By assumption the entrant can be only active in one and it  
12 is exactly as efficient in that segment as the incumbent, and therefore all that happens when  
13 it offers a price of 9 rather than 10 is that revenue previously used by the incumbent is  
14 diverted to excess profit of £1 to the entrant. Remember again this is over and above its  
15 required ----

16 THE PRESIDENT: Well how has it got to retail price of 10 in the first place if it is ----

17 A. Because the regulator has required it to set that price. It is the regulator's judgment that  
18 this service has a contribution to other activities of the business of ----

19 Q A cross-subsidy in other words? A. A cross-subsidy or a contribution to fixed costs  
20 elsewhere in the business. I do not know if I would call that a cross-subsidy – cleaning up  
21 beaches or something like that.

22 Q On the admittedly stylised and hypothetical figures that I was suggesting an entrant seeking  
23 to come in in these circumstances could not in fact do so on an ECPR test because its ECPR  
24 price would be 7, it has the same water resource cost of 3, so its total cost is going to be 10  
25 so it would not be able to charge its customers a price of 9? Is that right? A. Well in the  
26 simplified example, we are assuming that it can attract a customer if it offers a price – a  
27 small amount less, so it could offer £9.99, or something like that.

28 Q That would be a loss making price because its total cost on ECPR is going to be 10, is it not,  
29 i.e. a resource cost of 3 and an ECPR of 7? A. Remember this is ----

30 Q I know it is a very stylised example? A. These costs, including the required rate of  
31 returns, they would be able to enter if they can charge a price of 10 in this context.

32 Q But not below 10 in practical terms? A. So it is a level playing field between the  
33 incumbent and the entrant in this context – it can survive if it is as efficient or more  
34 efficient.

- 1 Q But it might be more efficient in terms of being able to take a lower margin because the  
2 incumbent may not be efficient as regards its general overhead costs? A. Whether it is  
3 efficient or not in its other overhead costs elsewhere, as far as I understand it they would  
4 still need to be funded. There is no alternative supplier for those other services and the  
5 regulator obviously will do the best job it can to make sure they are not inefficient but that  
6 is all it can do. They need to be covered and that £2 is a contribution to the overall cost.
- 7 Q Does the rule effectively depend – I think it probably comes in towards the bottom of your  
8 p.5 we were on, needing to fund other needs – does the rule depend on the implicit  
9 assumption that the incumbent is already efficient and that there is in fact no scope for the  
10 incumbent becoming more efficient or managing on less profit than it has at the moment?  
11 Is that the underlying assumption behind the whole thing? A. That is certainly the ideal  
12 situation you would want to be in but we all know that regulation is not a perfect thing and  
13 so it is possible that they get prices wrong, but there is no interaction between that  
14 imperfection and this access price, so whatever the regulator chooses to set as its retail price  
15 and, as I say, it tries to do its best with an eye to the overall revenue requirements of the  
16 firm, given that the best thing to do is the ECPR level, I would argue.
- 17 Q In some industries, you may say this is different because of its monopoly characteristics,  
18 one would say that it is very difficult omnisciently to guess where prices “ought” to be and  
19 one of the only ways of deciding is to allow some competition to take place and see what  
20 turns out – prices reach something resembling what one can loosely call the competitive  
21 level? A. No, an alternative structural policy would certainly be to deregulate these  
22 competitive sectors and not have a price regulation there, and then to have access price  
23 regulation either with a vertically integrated firm, or separated to some degree. That, as far  
24 as I understand is a very different world to the one that we are in now, so I have not  
25 expressed a view about whether that world is superior to the regulated world of ECPR.
- 26 Q Finally on this page, just looking at the example in the middle of the page to see that I have  
27 followed it, this is where there is a subsidy to rural users and in the example there is a loss  
28 making market and a new entrant can come in if its resource cost is lower than a £3 figure  
29 that you give there. Then you go on in the words you use “.. it is more efficient than the  
30 incumbent in the retail level layer...” I understood you to mean there in the upstream  
31 resource costs? A. Yes, you spotted ...
- 32 Q It is just a slip of the pen? A. Yes, it is supposed to be – the history is that I did it as a  
33 retail example and then I switched it to a water resource example, carelessly.

1 Q But in this example the new entrant can come in, but is not all he is doing here effectively  
2 making a profit out of the subsidy that the rural users are receiving? Okay, he has got a  
3 slightly less resource cost but he is, as it were, free-riding on the subsidy being paid to rural  
4 users? Would that be a fair way of looking at it? A. He certainly enjoys the subsidy, that  
5 is the only way that he could compete against the incumbent, but it is nevertheless efficient,  
6 because now the incumbent is no longer having to fund that subsidy any more so it has less  
7 onerous revenue requirements itself, and therefore it is perfectly fair that the entrant should  
8 also enjoy access to the same, what I think of a sort of tax subsidy scheme put on the  
9 industry as the incumbent. I can give a clear example ----

10 Q I think I understand what it is you are driving at. If we just go over the page for a moment,  
11 you summarised the various conditions that NERA at least postulate, one of which – which  
12 I think is more generally advocated by Professor Baumol and others, and so forth – which  
13 there should be some form of price regulation of the final price, and is it right that that is  
14 something that is widely regarded as something that you need to, as it were, accompany an  
15 ECPR approach? A. That is the way you need to control the retail price. There is  
16 nothing in the ECPR which controls the incumbent's retail price on its own, so you need  
17 some other instrument to do that – either competition or price regulation.

18 Q And the point about price regulation would be – would it – to make sure the price bore some  
19 reasonable relationship to cost? Would that be the point of the price regulation? A. That  
20 would be partly a political decision, so we have a focus of last week's evidence was about  
21 the merits or problems with having geographic averaged retail prices to various classes of  
22 consumer. That maybe politically required in some sense and the regulator or the  
23 incumbents do not wish to move away from that, and that would move away from the idea  
24 that prices would reflect local costs, or something like that. So I do not think there is any  
25 automatic reason to think that retail prices do – or even should – reflect actual costs.

26 Q I had always understood, and maybe we have moved away from the original argumentation  
27 of Professor Baumol, but his point about price regulation was that you need some sort of  
28 regulatory framework to ensure that “monopoly rents” – whatever one means by that  
29 exactly – were taken out of the system. That was his argumentation. A. Again it is the  
30 point that the ECPR or the margin squeeze test, or any related rule like that does not have  
31 any mechanism to control retail prices. We want to get both objectives happen, which is  
32 prices close to cost, which is what I called “allocative efficiency” and if you also want  
33 productive efficiency then you need two instruments, one is ECPR and one is retail price  
34 regulation.

1 Q Right. To what extent is there retail price regulation in relation to large industrial  
2 customers? A. I am probably not the best person to discuss that. My understanding was  
3 that it was a price that was quasi-determined, I think is the phrase OFWAT used when they  
4 were talking to me. They told them what they would let the incumbent charge and then that  
5 was the price that the two parties agreed. So a regulated price I would say, loosely  
6 speaking, is any price that the regulator is given permission for the incumbent to charge.

7 Q But not necessarily a price that was cost related? A. As I say there are lots of other  
8 constraints on regulators related to cost.

9 Q There seems also to be in this argument at various stages, quite a lot of reference to cross-  
10 subsidies, and mandated cross-subsidies, and I think your second report which I have  
11 somewhere to hand, but I do not think we need necessarily turn it up, I think indeed begins  
12 with the reference to the cross-subsidy problem. A. Yes.

13 Q I do not know whether you have had a chance to read our original interim Judgment – I  
14 think you said earlier that you had? A. I have read the relevant parts for my purposes.

15 Q Yes. In that Judgment I think it comes up at various places, but at paras.322 and 323 in  
16 particular – I do not think you need to turn it up, but you can if you like – we set out various  
17 extracts from the consultation paper that preceded the adoption of the 2003 Water Act. At  
18 paragraph 28 the Government says that competition for large users is considered to be  
19 practicable because: “Unlike household customers cross-subsidies have been largely  
20 unwound.” The question is if it turned out that cross-subsidies had been largely unwound,  
21 would that weaken the case for an ECPR approach? A. I would say that what it would do  
22 would make the difference between an ECPR approach and a cost-based access pricing  
23 approach smaller? A. Yes.

24 Q So it would bring them closer together? A. In their limit, if the retail prices are equal to  
25 some measure of cost, an accurate measure of cost then the ECPR boils down to pricing  
26 access, equal to cost. There is no opportunity cost element in the formula any more because  
27 that has been eradicated by prices being equal to cost. So the two policies coincide when  
28 retail prices are equal to, say, the marginal cost of the incumbent supply.

29 Q But the Baumol et al argumentation which I think on this point you do follow, that this is a  
30 very useful approach where there are mandated cross-subsidies, as an argument ---- A.  
31 Yes.

32 Q -- would be less relevant if there were no such cross-subsidies? A. Exactly.

33 Q I think just to complete this part, at para.176 of the consultation paper it is also said:  
34 “However, OFWAT believes that there are no significant cross-subsidies between eligible

1 and ineligible customers [that is to say, customers above the threshold of 150 megalitres].  
2 In general, undertakers will be unable to justify increasing prices to ineligible customers in  
3 order to fund price reductions to eligible customers”. A. Again, my understanding is  
4 that that is a statement about the fact although there are not significant cross-subsidies  
5 between customer groups, but that there may well remain cross-subsidies within a given  
6 class of customer – to do with local costs of supply, for instance. So, there may well be  
7 cross-subsidies present in the tariff for ineligible ---- I cannot remember ----

8 Q In what sense would it be efficient to maintain a situation of cross-subsidy between large  
9 industrial users? A. Within that class?

10 Q Within that class. A. Again, this is quite a big ---- could be potentially a big question.  
11 It would be quite a major change for the industry to move away from their current uniform  
12 pricing plan to a local pricing plan. Again, it is not something ----

13 Q It may be something you really ---- A. Well, no, I have written about the benefits of  
14 what people call re-balancing. One of the ----

15 Q Have you written any more reports ... (overspeaking) ... A. To be honest, I did not  
16 think it was totally what this case was about at this point. So, I didn't focus on that. I have  
17 elsewhere written of the benefits of re-balancing retail prices to reflect costs because it  
18 makes the task of access pricing easier. You don't have to worry about funding these cross-  
19 subsidies and things like that. But, I am also aware of the particular problems that exist in  
20 the water industry here. You know, you might have large users at an historic low price by a  
21 local costs measure, and they might not be able to survive if the price reflected the actual  
22 cost of their supply. So, again, I would call that a political constraint. It is not that the  
23 domestic customers have political constraints and the big users do not. I think there are  
24 political constraints in terms of what tariffs regulators can approve in both classes of  
25 customer.

26 Q Yes, I think those are the only questions that I had.

27 PROFESSOR PICKERING: Professor Armstrong, just as a matter of interest, have you been up  
28 to North Wales to have a look at the Ashgrove system? A. No, I haven't. I have lived  
29 in North Wales. I don't know if I happened to go past it?!

30 Q What would you say is the real purpose of ECPR? A. I would say the real purpose of  
31 ECPR is to achieve an efficient pattern of entry in those situations where there is a regulated  
32 vertically integrated incumbent, whose retail prices cannot be assumed to reflect its actual  
33 cost of supply.

1 Q Thank you. So, it is to achieve efficient entry and therefore by implication to discourage  
2 inefficient entry? A. Yes, that's fine. That's exactly right. And the advantage of the  
3 rule is that you don't need to know whether the entrant is efficient or not. It can find it  
4 possible to come in if its cost characteristics are such that it can make a business.

5 Q Now, you have indicated certain cost features – particularly in terms of the significance of  
6 fixed costs where this policy and approach would particularly apply. Would it apply to  
7 industries outside the former publicly-owned utilities that were vertically integrated and had  
8 similarly high fixed costs? A. Regulated other industries, do you mean?

9 Q Well, it depends what one means by 'regulated'. Is regulation a **sine qua non**? A.  
10 Well, as you say, it depends on what you mean by 'regulated'. I mean, I would, you know -  
11 --- A dominant firm that does not have its retail prices regulated I would believe would  
12 need to have a margin squeeze test ----

13 Q A dominant firm is subject to controls under competition law, is it not? A. That is  
14 right.

15 Q I am trying not to suggest that that is regulation as such, but there are sanctions. A.  
16 Yes.

17 Q So, would you advocate this as a form of access pricing in a privately owned, vertically  
18 integrated industry? A. Yes, I think it is a form of access pricing in margin squeeze  
19 type cases.

20 Q Okay. So, it could apply in other types of industry as well? Yes? A. Aluminium or  
21 programming rights, or ----

22 Q Right. Thank you. Now, you have tended to talk mostly about ECPR being a retail minus  
23 approach. A. Uh-huh.

24 Q Would you agree that it is possible to derive an ECPR type price from a cost plus ---- from a  
25 bottom-up basis? A. Well, I mean, obviously a retail minus and a cost plus can be  
26 equal if you make the minuses and the pluses work in the right way. But, it seems an  
27 inevitable part of the ECPR kind of approach that you need to take account of the revenues  
28 that the incumbent firm receives. So, that sounds to be at odds with a bottom-up approach.

29 Q I see. My impression is that Dr. Marshall is offering us a view that one can derive at least  
30 something very similar from a costs plus approach, but no doubt she will tell me whether I  
31 am interpreting her ---- A. I think it all depends on how closely the retail prices reflect  
32 the underlying costs. If they do follow the underlying costs fairly accurately, then you  
33 should be able to do ---- The two things will be very similar. But, if they systematically  
34 differ, then they will not.

1 Q Is it inevitable that there will be only one single ECPR satisfying price? A. Yes, in its  
2 precise form ---- You have got a price, and you take away its ----

3 Q So, it is a rule ---- A. Yes, it's a pricing rule, yes.

4 Q Some people would say – and I am thinking, for example, of the literature produced by  
5 Lafont and Tirole – that there are occasions where the optimum price is below the ECPR  
6 indicated price. Would you agree with that? A. Yes, there are lots of variants of these  
7 kinds of models. For instance, if the entrant offers a differentiated, not perfectly  
8 substitutable product to the incumbent, then the relatively simple formulae produced in this  
9 note, in my report, would have to be adjusted to take account of the fact that an entrant's  
10 service does not replace the incumbent's service on a one-for-one level. It might be useful  
11 to say one simple example: suppose there is a new residential development somewhere that  
12 has not been factored into an incumbent water supplier's revenue requirements for the next  
13 five years ---- a totally new, unexpected residential development. Then, if an entrant  
14 supplies that development – not the incumbent – it does not displace anything from the  
15 incumbent's revenue, and therefore one would expect that it should be able to use the  
16 incumbent's pipes at marginal cost, and not at any ECPR kind of level. So, that would be  
17 an adjustment to the ECPR to reflect the fact that there is no displacement of the two  
18 services.

19 Q So, it is not necessarily a unique price. A. Well, in a particular context it is a unique  
20 price, but there are variants.

21 Q There are.

22 THE PRESIDENT: I was going to ask whether or not that implies that ECPR is particularly  
23 appropriate where you are dealing with suppliers to existing customers as distinct from new  
24 opportunities? A. I think it does, yes.

25 PROFESSOR PICKERING: Now, you have defined what you understand by 'efficient entry'  
26 and we do not need to rehearse that. But, would you accept the proposition that where a  
27 business chooses to enter a new market, then it will normally do its financial forecasts on  
28 the basis that it expects to make a loss in the short run, and then to retrieve that as it  
29 becomes more established and gains learning advantages and so on? A. I would.

30 Q So, does ECPR, with its emphasis on the minimisation of total production costs as the  
31 condition for efficient entry, not perhaps deprive us of the possibility of entry that would be  
32 efficient and cost-reducing in the medium term, but that by virtue of the additional costs that  
33 new entrants incur in the short run would not be accepted under your ECPR rule? A.  
34 No, I think the ECPR rule is the rule that gives entrants the right price signals about whether

1 ---- If the entrant finds it profitable to enter in the long term, all the discounted future  
2 profits, then it will be also cost-reducing in the long term to enter. So, I don't think there is  
3 a conflict.

4 Q That is interesting. So, you are prepared to anticipate short term entry that is not cost-  
5 reducing, but that would be cost reducing in the longer term. A. That's right.

6 Q Thank you. That is interesting. Now, you have emphasised that if one ones to achieve more  
7 than one objective – say allocative efficiency as well as productive efficiency – then you  
8 need to controls. This requires regulation, or something akin to it. A. Yes.

9 Q Presumably regulation – and you will have seen what is involved in the current systems of  
10 regulation in the water industry from your contacts with those who are instructing you ----  
11 That is pretty demanding anyway. They have complaints to deal with, and price reviews,  
12 and applications for interim adjustments, and so on. They are affected by problems of  
13 information asymmetry, at least to some extent. A. That's exactly right.

14 Q There could be problems about ensuring that there is complete transparency, and, indeed,  
15 probably that flows from information in asymmetry, does it not? A. I'm sure they  
16 would be the first to admit that.

17 Q Yes. If you are going to have that sort of active regulation as well, then I wonder what the  
18 implications would be for the public purse in terms of the need to build up still further the  
19 establishment of OFWAT and other regulators to engage in this sort of active regulation.

20 A. Just to be clear, what the alternative policy is ---- What?

21 Q If we were to have the sort of active regulation to achieve allocative efficiencies that you are  
22 advocating, would you agree that it implies that there would need to be an enhanced and  
23 even more involved regulator? Or, do you believe that what OFWAT is currently doing  
24 is sufficient to achieve the regulation that you seek for allocative efficiency? A. Again,  
25 I'm not sure that I'm necessarily the best placed person. Most of my contacts, as you say,  
26 have been with OFWAT, but it is clearly the case that liberalising an industry, introducing  
27 competition into an industry especially in the short term can make it a more resource  
28 intensive activity. It is actively hard to introduce competition into these industries and that  
29 may require more – the hope may be that in certain segments you can role back regulation  
30 but in the intervening time it often does take a lot of effort.

31 Q There is a commitment to encouraging and facilitating competition as being a desirable  
32 thing, “a good thing” in this industry, as in others. Yet, in the literature and, indeed, some  
33 of the material that we have read in the context of this case, the indication is that ECPR

1 would make the incumbent indifferent as to whether he gets the business or loses the  
2 business, and that flows from the avoidable cost analysis, does it not? A. That is right.

3 Q Is that a good framework for the development of competition policy, do you think? A.  
4 As I say, there are two broad policy approaches you can take. One is the case where the  
5 incumbent has its retail prices controlled, and we are trying to work out when and where  
6 entry may or may not be efficient. In that case, you do not really think of the incumbent as  
7 being a particularly active participant in the competitive process. The entrant looks at the  
8 margins it has between the regulated retail price and the access prices given, and it decides  
9 whether to come in or not. The incumbent is not a particular active participant is all I would  
10 say in that view of how the process is managed.

11 Q Are you, as an economist, comfortable with that? A. I really would have to study the  
12 industry a bit more to know whether you could have the confidence to de-regulate the  
13 market so that competition would be enough to discipline prices.

14 Q Would you be comfortable with any competitive system in any industry where the major  
15 player was allowed to be indifferent as to whether he holds or loses market share? A. I  
16 think that is what margin squeeze regulation does, for instance. The incumbent there is  
17 indifferent about whether entry takes place, or is caused to exist, so I do not see - if you  
18 could explain a bit more why it is a bad thing? In a way it has, as I say, one good thing,  
19 which is that it causes the incumbent not to disadvantage its rivals by non-price means,  
20 which is normally the biggest problem in regulation in perfectly integrated industries.

21 Q The notion of competition as a process is the one that the competition authorities, certainly  
22 in this country, adopt, is it not – a process of improvement, of leap-frogging? What you are  
23 inviting us to accept here is that the largest firm in the industry, and probably the only active  
24 supplier, can afford to be indifferent because even if he loses sales his revenue is protected.  
25 Is that a good thing? A. Well, as I say, the alternative would be to deregulate the market  
26 and to let the incumbent compete. At the moment his hand are tied essentially, he cannot  
27 compete, so if you let the incumbent choose its retail prices freely, subject to competition  
28 law, or whatever, then that would certainly be more what competition authorities had in  
29 mind about competition. But one would have to judge whether the water industry is ripe for  
30 that kind of approach at the moment. It seems to work well, as Dr. Marshall will say, in gas  
31 and electricity.

32 Q Last week we were talking a bit about the problem of stranded assets and particularly  
33 stranding that arose from bypass. I think it was accepted that ECPR offered no solution  
34 where the incumbent's assets were bypassed? A. Yes, that was an interesting exchange, I

1 thought, last week. There are at least two kinds of assets that might be stranded, one would  
2 be to do with water resource management – reservoirs and all that kind of thing – you could  
3 still bypass the pipeline and make a contribution to that. Let me start again. If the entrant  
4 bypasses the water resource asset of the incumbent, maybe by sinking a new borehole or  
5 something like that, then ECPR might still be able to fund that stranding asset because it is  
6 still being levied on the pipes. If bypass involves the pipe, the distribution network, then  
7 almost by definition there is no way that access pricing can help the incumbent maintain its  
8 contribution to its sunk assets.

9 Q What we have actually got is that ECPR, if you can avoid stranded assets, gives the  
10 incumbent protected revenue, but runs the risk of a disappointed and disaffected potential  
11 entrant. At the other extreme in some cases insistence on ECPR could cause a potential  
12 entrant to see whether there is an alternative way of supplying the water. Between those  
13 two is there not scope for some sort of rational bargaining over the use of an asset to  
14 achieve an access price that lays somewhere between fault protected revenue and zero  
15 revenue? A. Well, again I may have been lacking in ambition in my report, I had not  
16 thought that bypassing the distribution network was a significant part of this thing. Again,  
17 in other writings I have stressed when bypass is a danger then ECPR is not going to be an  
18 ideal access price. For instance if it is well above the cost of providing access, which it may  
19 be, then the entrant may have an incentive to bypass even when it is a much higher cost to  
20 do so.

21 Q And if there is a risk of the entrant bypassing, then there is an incentive to the incumbent to  
22 negotiate on something? A. Yes, that is probably true, that is right.

23 THE PRESIDENT: I wanted just to follow that. So in that situation risk of bypassing would  
24 there be some sort of argument from society's point of view – if you can put it very loosely  
25 – that rather than have that risk eventuate and another pipeline be built alongside, it is  
26 actually more sensible for the two to come together and negotiate some sort of deal on the  
27 use of the pipeline, whereby the incumbent is still getting a return on his sunk cost and the  
28 entrant is getting access, but one is doing it on a sort of least cost solution? A. When  
29 bypass is a potential possibility I have in the past argued that you would want to have access  
30 pricing set equal to the actual cost of providing access, and then to have an overarching  
31 retail price – like a universal service contribution scheme – in order to give the right  
32 incentives for an entrant to contribute to the fixed costs of the incumbent, so there would  
33 need to be two layers.

1 Q Two layers, and the essential thing being that the entrant has to bear his share of the fixed  
2 costs and the universal service obligations. Otherwise it gets ---- A. Otherwise the price  
3 signals were wrong.

4 Q -- it gets asymmetric and the incumbent is left stuck with his public obligations ---- A.  
5 And the entrant maybe inefficient and still find it profitable to come in. It is an important  
6 point, it is vital in post and things like that but I was not sure how important it was in this  
7 case.

8 Q The universal service obligation? A. Yes, and bypass.

9 Q Bypass we have looked in parts of this case. Universal service obligations are a bit obscure  
10 still. There is a certain amount of evidence about fire-fighting, but it is not very clear. A.  
11 But a geographic uniform tariff system I would think of as a kind of universal service  
12 requirement.

13 Q There are universal obligations to connect in certain circumstances, for example. A. Yes.

14 PROFESSOR PICKERING: Professor Armstrong, the final point I would like to raise with you is  
15 the New Zealand telecom case, the *Clear* case. As I understand it, notwithstanding the  
16 support that the Privy Council gave to ECPR for the purposes of that industry in fact, what  
17 has happened is that ECPR has not only not been adopted, but has been legislated against.  
18 I wonder whether you are in a position to advise us whether you feel that as a result of not  
19 adopting ECPR in that case, and I recognise that telecoms and water are not necessarily the  
20 same, but I am just interested to know, do you feel that the New Zealand  
21 telecommunications' industry has lost significantly and in what particular ways as a result  
22 of not being allowed to adopt ECPR? A. I did look at it at the time, 10 years ago I looked  
23 at it. I have not followed industry developments in New Zealand in the last 10 years so I do  
24 not know exactly how it has come about. The main thing I understand is that people were  
25 not happy with the reliance on general competition law as a means of disciplining the  
26 incumbent in that industry in the last 10 years so they have gone back to more conventional  
27 regulation. But remember a big difference in the New Zealand case was that the retail  
28 prices were not effectively controlled in that context and that seems to be something that  
29 one would be very nervous about in preventing the ECPR in that context, because it does  
30 not do anything to control that. In that context if you really for some reason could not  
31 control retail prices because of legal requirement or institutional problems then one would  
32 be much more interested in a cost based form of access pricing than an ECPR one.

33 PROFESSOR PICKERING: Professor Armstrong, thank you very much indeed.

1 MR. LEWIS: Professor Armstrong, I am not an economist you will be pleased to hear. I tend to  
2 look at these things from a larger perspective. What I have understood from your evidence  
3 is that here are two broad approaches – the regulated approach and the approach  
4 characterised by competition. But what we have here is a regulator who has been charged  
5 by the Government with promoting competition in this industry, and I would just like to ask  
6 you whether you think that is a realistic option in the light of the rather polarised and  
7 contrasting way in which you had depicted things? A. I had to read a number of papers  
8 for this task and the one thing I noticed was that there was almost no reporting of what other  
9 countries do about competition in the water industry and I do not know whether that is  
10 because everyone knows it and they have not bothered talking about or whether it does not  
11 really happen very much or something like that, but if it is a fairly novel approach to this  
12 industry then a sensible approach would be to start cautiously and do not de-regulate  
13 everything because there need be a danger of excessive retail pricing developing in that kind  
14 of situation. So one would want to start cautiously and maintain retail price regulation and  
15 in that cautious stage the ECPR seems like a sensible policy. It may well be that things  
16 work much better than you expect and that there really is scope for competition and that  
17 will be clearer in this context, and in that case he might move to an energy kind of model  
18 over the longer term. But I think we could be in uncharted territory here and one would not  
19 want to let go of all the regulatory constraints at this point. That would be my feeling, but  
20 again I am not an industry specialist.

21 THE PRESIDENT: This is more of a comment than a question, Professor Armstrong, but I will  
22 make it anyway, I think in this case we have got a situation where the legislator, quite  
23 possibly the competition law as well, has opened up a very small area to competition and  
24 probably envisaging the experimental and cautious approach that you have just advocated  
25 understandably. The argument between the parties I think is whether, in that context, ECPR  
26 will have the effect – intended or unintended – of strangling this new competition at birth or  
27 whether there is really on an ECPR basis a viable scope for a sensible experiment. That is  
28 the issue, I think – one way of looking at some of the issues we have? A. That is  
29 certainly my understanding of what you have to decide.

30 THE PRESIDENT: Thank you very much. Now, Mr. Vajda, do you want to come back on any  
31 of that?

32 MR. VAJDA: No.

33 THE PRESIDENT: Then I think we go to Mr. Anderson for any re-examination?  
34

1 Re-examined by Mr. ANDERSON

2 Q Professor Armstrong, an issue which arose out of a question put to you by Professor  
3 Pickering about short term inefficient entrants, if I could call them that. Explain, if you  
4 could, to the Tribunal the mechanism, or the motivation of a potential new entrant in that  
5 position, faced with ECPR? Why, and how, could he enter if he were inefficient, in the  
6 sense that the question was being put to you? A. I didn't mean to give the impression  
7 that I meant he'd be inefficient in the short run. I mean, in a way you can't talk about  
8 whether you're inefficient in Year One or Year Two. The overall picture is what you need  
9 to decide – whether an entrant is efficient, or not. What I was hoping to get across is that it  
10 is perfectly possible that this entrant, under ECPR, may well make losses, like any start-up  
11 firm, in the initial period, and get compensated in subsequent periods. So, it is not so much  
12 that it starts off being inefficient and then learns how to do it. I suppose that might be a  
13 scenario, but it is more that it just does not have much market to start off with, and builds up  
14 revenues over time. That was what I was trying to get across at that point.

15 Q Thank you. I have no further questions.

16 THE PRESIDENT: That completes your evidence, Professor Armstrong. Thank you very much  
17 indeed for all the help you have given us. A. Good luck.

18 Q It is not often that we are wished luck by a witness! (Laughter) We will accept the wish in  
19 the spirit in which it is offered! Thank you very much indeed.

20 (The witness withdrew)

21  
22 MR. O'REILLY: Sir, can I just indicate that I am not proposing to ask Dr. Marshall her  
23 address.

24 THE PRESIDENT: I have never understood why witnesses are asked their addresses because it  
25 is not essential information and may not be accurate anyway. We have no means of  
26 checking it.

27 MR. O'REILLY: I am sure it would be, if she gave it.

28  
29 DR. EILEEN MARSHALL, Called

30  
31 THE PRESIDENT: Good morning, Dr. Marshall. Thank you very much indeed for all the help  
32 you have already given us.

33  
34 Examined by Mr. O'REILLY

1 Q Before I go through the formalities, Dr. Marshall, can I just check on what documents you  
2 have with you? Do you have your original report, dated April 2006? A. Yes.

3 Q A report by Professor Armstrong, dated March 2006. A. Yes.

4 Q A second report which is said to be a reply to Professor Armstrong and to OFWAT's  
5 skeleton written by yourself, dated May 2006. A. Yes.

6 Q There was an interim report, dated May 2006, from Professor Armstrong, which came  
7 between yours – the first one and the second one. A. Yes.

8 Q The first report has seventy-six pages in it. The second report has forty-two pages in it.  
9 Can I ask whether any facts you have stated in it are, to the best of your knowledge and  
10 belief, true? A. Yes, they are.

11 Q And any opinions given are your genuine and honest opinions? A. Yes.

12 Q Do you understand your duty to the Tribunal? A. Yes.

13 Q Thank you, Dr. Marshall. Other people may have questions. I have no questions, sir.

14 THE PRESIDENT: Thank you very much.

15 Cross-examined by Mr. THOMPSON

16 Q I have three very short questions. Dr. Marshall, the first question: much of the case is  
17 concerned with the question of whether the treatment and distribution of water raises  
18 different issues of principle for a competition regulator from those the regulator faced in the  
19 UK and around the world in respect of other network industries. I would be grateful for  
20 your comment on that broad question. A. I have looked at what OFWAT says about  
21 why water is different, and I find that there is no real difference in terms of the water  
22 industry compared with other utilities – or, indeed, with other industries that are non-  
23 regulated, in the sense that all industries have their own specific characteristics, and they all  
24 have to abide, for instance, with Health & Safety legislation, environmental legislation, etc.  
25 So, I would certainly say that when introducing competition into water one has to be very  
26 mindful of the particular requirements in terms of environmental standards, drinking  
27 standards, etc. But, that is no different, for example, from having to be very mindful – for  
28 instance, in gas – about what goes into that pipeline and – for instance, in electricity – where  
29 supply and demand has to be balanced instantaneously. All those issues are really, really  
30 important, but I don't see why the particular quality issues, etc. make water stand out as any  
31 different from other industries that can be regulated, and where competition can be  
32 introduced.

33 I think the other point about some of OFWAT's barriers to entry are that to the extent that  
34 they are genuine, as it were, they tend to be associated with the pipeline, I think, rather than

1 the other segments of the industry where competition can be – and, indeed, has been –  
2 introduced. The discussion about capital intensity, for instance, tends to be about the  
3 pipeline, although I have never been that ... (indistinguishable) ... about capital intensity  
4 because there are lots of capital intensive businesses that are not regulated. So, there is not  
5 necessarily a block – in other words, natural monopoly isn't natural. All it says is that for  
6 the foreseeable future, you can't see any competitive challenge in that industry, or any  
7 significant competitive challenge.

8 Similarly, issues about water being heavy – that is certainly about the operational costs of a  
9 water pipeline. There are no issues about that. So, from that perspective, I really cannot see  
10 any difference. Indeed, Parliament has decided that there is going to be competition  
11 introduced into water resources: the extraction and storage; into treatment; into retail  
12 supply; and other services that are already bundled, for instance, within the network  
13 business such as metering, etc. I presume there is just a **de facto** monopoly. So, it seems to  
14 me as if one could get to the situation, as with other industries, where you unbundled all the  
15 potentially competitive segments and concentrate your regulation on the pipeline business  
16 itself.

17 Of course, there always will be, as we have been discussing this morning, some  
18 opportunities for bypass. I mean, it is very rare that you have a complete natural monopoly.  
19 It is more an unnatural monopoly in water in the sense that the market value privatisation  
20 was very low, and that certainly has affected the extent to which people would enter into the  
21 pipeline business.

22 Q Thank you. The second question is the issue of vertical separation. You will have seen,  
23 particularly in Professor Armstrong's reply evidence, some question marks about whether  
24 you had a realistic alternative short of vertical separation. So, I think it may help if you  
25 could explain whether you think there is a realistic middle way between ECPR, or some  
26 equivalent pricing rule, and full vertical separation on the other, and what your evidence is  
27 on that point. A. Yes. I must admit that I am very surprised that people can read my  
28 report and consider that I suggested a separate ownership of the pipeline – and, indeed, as I  
29 set out in my report, that was not even the situation in gas. It was recommended by the  
30 MMC under the Fair Trading Act references, but that was declined by the government, and  
31 therefore there was no ownership separation required of British Gas, even when they had  
32 other types of separation.

1 Now, in actual fact, in the government's consultation document in 2000 they have got a  
2 very good description of different forms of separation which could potentially involve some  
3 legislation.

4 Q This is the earlier consultation document – the first of the two? A. Yes. For instance,  
5 they talked about separate licensing for retail supply and distribution ---- pipeline business,  
6 for example. So, there are discussions, and were discussions as to whether or not that  
7 would be feasible. So, all of those discussions were had, and I totally accept that they were  
8 not pursued. But, what I am suggesting does not need any of those separations. What one  
9 would expect ---- For instance, is that what was required of British Gas, for instance, is that  
10 there had to be physical separation between the businesses, and that was to try to ensure that  
11 there was going to be no anti-competitive information flowing. They were also required to  
12 make sure that they had, in effect, shadow subsidiaries, in terms of their accounts, so you  
13 could be absolutely clear about the separation of costs, etc. But, those, as I have said in my  
14 second report, are what one might call add-ons. As far as I can see, the issue at stake here is  
15 the basis on which the regulator determines what I call the user system price, and that seems  
16 to me to be within the remit of the regulator to determine.

17 Q Thank you. The third question, which I think is central to the concerns here, is whether, as  
18 an experienced regulator, looking at the facts of this case, you consider there are reasonable  
19 prospects for dynamic efficiency gains resulting from competitive entry in this industry,  
20 which does not appear to be the view of OFWAT. A. This case – England and Wales  
21 water industry; not this case ----

22 Q Yes.

23 THE PRESIDENT: Looking at the industry in general. A. Yes. Yes, because I have not --  
24 --

25 MR. THOMPSON: -- gone into this case. No. A. Are there reasonable prospects for  
26 competition? I think there are two different answers to this one ----

27 THE PRESIDENT: I think the question was: is there scope for dynamic efficiency -----

28 MR. THOMPSON: -- and effects in the industry in England and Wales. You approach it, but  
29 that was the question. A. There are potential, I believe, for dynamic effects in the  
30 sense that some people talk about them – which is new products, different qualities of  
31 service, different types of tariff ---- In electricity, for instance, there are offers of supplying  
32 gas and electricity together. There are different risk profiles. Sometimes the supply will  
33 offer a tariff where it is fixed for a couple of years if you want a fixed price. So, there are  
34 various innovations which can occur, and have occurred in terms of what one might call

1 dynamic efficiency. That is on the retail sector. Of course, there are dynamic efficiencies  
2 also in the other areas.

3 I think the thing about this type of dynamic efficiency, where you think about innovation, is  
4 that you cannot see it until it comes, because that is the whole point – you need the  
5 competitive process in order for people to seek out new ways of satisfying their customers.  
6 It is that process itself that induces the dynamic efficiency. But, again, I just cannot see the  
7 difference in this industry as opposed to other industries (gas, electricity), and why there  
8 should not be the same sort of dynamic movements for customers.

9 Q Those are my questions, so I believe there will be other questions.

10 Cross-examined by Mr.ANDERSON

11 Q I wonder if we could start by just describing to the Tribunal what the source of your  
12 information and knowledge of the water industry is? A. The source of my information  
13 and knowledge of the water industry is that – well I suppose for the last 15 years or so I  
14 have always looked across the industry to see what other regulators are doing and therefore  
15 I have knowledge of the water industry in that sense, and I have a fair amount of knowledge  
16 in particular about their regulatory regime. In terms of the technicalities of the water  
17 industry, clearly I do not have specialist knowledge in terms of the technicalities of the  
18 water industry.

19 Q So where did you derive the technical knowledge which appears from your report for the  
20 purposes of this case? A. Can you explain ----

21 Q Well there is an awful lot of detail in your report about the characteristics of the water  
22 industry and the nature of the barriers to entry and points like that, and I am just interested  
23 to know what the information that you had on which you made those points was? A.  
24 The particular barriers to entry in relation to the water industry, which I did not actually  
25 comment on until now, the other barriers to entry which I mentioned were the kinds of  
26 barriers to entry that arise when there has been a vertically integrated industry which has  
27 been privatised and where competition has been introduced into that industry. That is the  
28 situation in fact where the specialist sector regulators have been given a particular job to  
29 introduce competition in to the industry, purely because there are particular known  
30 difficulties of introducing competition in those circumstances. One aspect of the barriers to  
31 entry, for instance, that OFWAT talk about that surprised me, is that they do not actually  
32 talk about these barriers to entry – the general barriers to entry – for instance, with an  
33 integrated industry all of the procedures in that industry have been devised for one provider  
34 and an awful lot of things have to change in order to make them suitable for lots of different

1 providers. They have to be done, and they have to be done efficiently and the fact of the  
2 matter is there is a dominant provider there at every stage of that procedure, and you have to  
3 be careful that there is not a problem associated with the different changes in the procedure  
4 in an anti-competitive way. There is also a problem on the customer side. The customers in  
5 this type of business have never been used to choice before – they may not even know that  
6 there is competition, is it going to be easy to switch, is there going to be problems about  
7 switching back. So there are informational issues on the customer side, and what most  
8 regulators do when they are introducing competition is keep regularly reviewing the market  
9 in terms of these types of barriers to entry. So those are some of the barriers to entry I  
10 mentioned, about dominance, about other aspects.

11 The other section in terms of the barriers to entry is I looked at ECPR to decide and its  
12 associated by products to say will that procedure, and those by products, will that increase  
13 or reduce barriers to entry. In actual fact, in terms of the technical side of water as I say I  
14 did not comment, and I do not see how, in terms of the technical side it is a big issue,  
15 because in a way it has been dealt with through the new Water Act. There are new  
16 regulations for licensees – quite rightly – which they have to abide by and competition has  
17 been introduced.

18 Q I understand that is a very lucid explanation of your case for how the water industry should  
19 regulated. I had in fact asked you what the source of your information about the water  
20 industry was. You mentioned, for example, in that answer there about informational  
21 difficulties that customers had for example. Where do you derive the information on which  
22 you base, for example, that piece of evidence? A. Where I get that bit of evidence is to  
23 say that in not only water, this is a generic issue when you are introducing competition into  
24 an industry where there has been no competition before, a generic issue which has been  
25 found to be a problem in gas, electricity, in other industries including the Post Office, is that  
26 customers do not actually understand the process, and they need information about the  
27 process. So that is the experience of other industries. There is no particular reason why  
28 water industry customers will be more or less informed than other interested customers in  
29 that sense. Therefore, there is a potential issue. There is not an issue if one surveys the  
30 customers and there is not an issue, you can leave that aside and say that is not an issue.  
31 But unless one finds out whether it is an issue one will never know whether there is a  
32 barrier.

33 Q So that the short answer is then for the purposes of your report you have not done a specific  
34 analysis of the water industry. It is based on the mere fact that it is a regulated utility? In

1 other words, if we go through your report and cross out “water” and put “gas” and it would  
2 read exactly the same? It is based on the similarities between utilities. Is that fair? A. It  
3 is based on similarities between utilities that were nationalised which have then been  
4 privatised and in particular have remained vertically integrated.

5 Q I see, so it is essentially a question of what model and privatisation and regulation has been  
6 adopted by the Government that is what determines how the customer is to benefit? A.  
7 The issue about getting competition going in this type of industry, as I say, where there has  
8 been no history of competition and one has to deal with dominance, all the things that I have  
9 spoken about is common, not only to the utility regulation in this country, it is common  
10 around the world. There have been great difficulties in getting competition into the market  
11 in these circumstances. There are therefore generic issues that need to be addressed. As I  
12 say if there is an examination, if people are asked, for instance, is it easy? Are there  
13 barriers? If there are no barriers that is fine. I was surprised, however, that OFWAT said  
14 last week there are no more barriers. There are no barriers that have not been dealt with in  
15 the Water Act and I find that surprising, but then it is their position, then that is a big  
16 difference between me and them, because I would consider that there are lots of barriers.

17 Q We will come to barriers shortly, Dr. Marshall. I just wanted to, if you like, clarify what the  
18 basis of the opinions in your report were, as to whether they were based on particular  
19 knowledge or information or analysis of the water industry, or whether – as appears from  
20 your answers to be the case – that they are based simply on the generic fact that it is a  
21 utility.

22 THE PRESIDENT: Mr. Anderson, would it interrupt you to take a short break?

23 MR. ANDERSON: Not at all, no. I am entirely in your hands, Sir.

24 THE PRESIDENT: Shall we just take five minutes at that stage. Please, Dr. Marshall, remember  
25 the rules that I think I have told witnesses about – do not talk to anyone else about your  
26 evidence while you are in the witness box. We will just rise for five minutes.

27 (Short break)

28  
29 MR. O'REILLY: I hesitate to interrupt Mr. Anderson's cross-examination. I am just a little  
30 concerned that the witness has not fully understood the question that she has been asked as  
31 to the source of her information. It has perhaps been suggested to her -----

32 THE PRESIDENT: You can come back later, I think, Mr. O'Reilly. We will carry on for the  
33 time being.

1 MR. ANDERSON: Dr. Marshall, for better or for worse, in your view, given that the model that  
2 has been adopted for regulation in this industry to date is one of vertical integration and  
3 price regulation - that is the model – where do I find in your reports a discussion of how  
4 access pricing policy could best meet the objectives that the government have sought of  
5 ensuring that sunk costs are remunerated; cross-subsidies are preserved; and the universal  
6 service obligation is met ---- given the model that has been adopted for regulation in this  
7 industry?

8 THE PRESIDENT: A number of assumptions in the question as to what the objectives are.

9 MR. ANDERSON: There are, yes.

10 THE PRESIDENT: That is your case – that some costs cross-subsidies and universal service?

11 MR. ANDERSON: Yes.

12 THE PRESIDENT: In the segment open to competition.

13 MR. ANDERSON: Yes. A. In segments open to competition? Yes. The issue about it  
14 being vertically integrated I have discussed.

15 Q I will be coming back to that. But, on the assumption that it is ---- given that it is vertically  
16 integrated ---- A. Yes. Given it is vertically integrated, and given that there is price  
17 regulation, fine. The issue of where you deal with sunk costs, cross-subsidies and universal  
18 service I have dealt with in my first, and indeed my second, report in terms of identifying  
19 cross-subsidies, and explicitly costing them. I also ----

20 Q Let us just pause there. What would we do then with the cross-subsidies? Firstly, how do  
21 you identify them?

22 THE PRESIDENT: Can we establish what cross-subsidies we are talking about, Mr. Anderson?

23 MR. ANDERSON: Let us go straight to potential cross-subsidies within a class in this class of  
24 non-potable users. A. Can I find the ---- Have you got the page in which I've  
25 discussed these issues?

26 Q The page in which you have discussed the issues of cross-subsidies – though I am not sure  
27 that one could confine it ----

28 THE PRESIDENT: There is nothing on p.42. It may not be the right reference, but it is under  
29 Stranded Costs and Costs Subsidies. A. Yes, that will do.

30 Q There is also in your second report on pp. 5 and 6 'Maintaining Social Obligations, Cross  
31 Subsidies, Geographical Averages'.

32 MR. ANDERSON: Perhaps we could start by taking it at a general level. Would you accept  
33 that one of the characteristics of the water industry is that there are two potential categories  
34 of cross-subsidy: one are the socially mandated cross-subsidies within, essentially, the

1 residential sector; the other is the inherent cross-subsidies that arise out of regional pricing.  
2 Would you accept those two premises? A. Yes.

3 Q Now, would you accept that the current policy is to maintain those categories of cross-  
4 subsidy? A. In the domestic sector in terms of geographical averaging?

5 Q Also in the commercial sector in relation to tariffs. A. Okay. You've just asked me  
6 two different questions. The first one – in terms of the domestic sector, yes, but I'm not  
7 sure unless there was a cross-subsidy between the domestic sector and the business sector –  
8 which I understand now it does not actually occur, that this is relevant to the issue of  
9 competition in the business sector.

10 Q I am not asking you that. I am asking you, if we go in stages, whether you accept that the  
11 subsidies are there. A. Yes.

12 Q Do you accept that the current policy is to maintain those subsidies? A. Yes.

13 Q Right. Now, if that is accepted as policy, and we have ----

14 THE PRESIDENT: Can we just identify whose policy we are talking about, Mr. Anderson?

15 MR. ANDERSON: I am talking about the government's policy.

16 THE PRESIDENT: Government policy to maintain cross-subsidies between large industrial,  
17 non-potable companies.

18 MR. ANDERSON: Government policy to maintain tariffs which has that inherent effect as we  
19 have already described ----

20 THE PRESIDENT: It is government policy to maintain cross-subsidies between large industrial,  
21 non-potable customers. That is your case.

22 MR. ANDERSON: If I can just, for a moment, ensure that I am not going too far ----

23 MR. O'REILLY: Can I just suggest that even if Mr. Anderson is not going too far, he might  
24 turn up a page where this policy is stated. As far as I am concerned he is giving evidence  
25 about what the policy is.

26 THE PRESIDENT: I just want to establish on what basis the witness is being asked questions at  
27 the moment.

28 MR. ANDERSON: I am simply at the moment trying to identify that there is an element of  
29 subsidy existing in this water industry. So far as the domestic sector is concerned, it is  
30 effectively mandated. Insofar as it arises out of tariffs, which in themselves arise out the  
31 statutory regime, there is an inherent element of ----

32 THE PRESIDENT: I was under the impression that the tariff point was an OFWAT point rather  
33 than a government point.

1 MR. ANDERSON: On the basis of that distinction the tariff policy, yes, is an OFWAT policy,  
2 yes.

3 THE PRESIDENT: And that at a certain period in which this case in fact took place, no-one was  
4 actually on the tariff.

5 MR. ANDERSON: No. But, because of the special agreements and the taking over of ----- Yes,  
6 that is true.

7 THE PRESIDENT: Because of the special agreements regime it would imply that there was not  
8 a policy at that time of cross-subsidy between large industrial and potable users.

9 MR. ANDERSON: But the aim was to move across the tariffs, as I understand it.

10 THE PRESIDENT: That was the OFWAT aim.

11 MR. ANDERSON: Yes. Yes.

12 THE PRESIDENT: We do not at the moment have any evidence that it is the government's  
13 policy.

14 MR. ANDERSON: Well, okay ----

15 THE PRESIDENT: Unless you are going to call someone on behalf of the Secretary of State.  
16 A. Can I answer the issue about the industrial cross-subsidies?

17 Q Yes. But, just a moment. Just wait for Mr. Anderson to take instructions.

18 MR. ANDERSON: (After a pause): We can go back to the papers from last time round, but it  
19 was both the government's policy and OFWAT's policy to move from special agreements  
20 to regionally based tariffs. That is in the papers from last time round - some of the annexes,  
21 I think, as far back as our defence.

22 THE PRESIDENT: Let us not pause too much on that. Let us see if Dr. Marshall's comment on  
23 cross-subsidies in the industrial sector ---- That is something you wanted now to comment  
24 on? A. I was asked to comment. The issue of cross-subsidies in the industrial sector I  
25 think is an issue, as I hoped to make fairly clear in my second report, is an issue about  
26 undue discrimination, or not, as the case may be, because ECPR, as I explained, abstracts  
27 from that particular discussion. Therefore, the issue is: are those tariffs unduly  
28 discriminatory, or not? That is an empirical question which would have to be determined. I  
29 think in terms of the business customers – and there was a discussion about this – my  
30 general observation about cross-subsidies is that I am always surprised that people talk  
31 about the problem of people actually paying more in line with the costs to them of supply.  
32 Very rarely do people talk about the other customers who had been overcharged for a very  
33 long time, and who would be charged more in line with the cost of supply. So, there are

1 always two sides to any unwinding of a cross-subsidy. I also accept that it may need to be  
2 done in terms of a transition ---- for people to make the transition.

3 You asked me specifically about potable and non-potable. Now, as I said before, you  
4 know, I haven't gone into this case, but one comment that I read in Michael Meacher's  
5 declaration, as it were, about water competition ---- He said that, for instance, it could allow  
6 large industrial customers to choose the quality of their water. Now, it strikes me – at least  
7 in terms of general discussion – that unless one is fairly clear whether there is, or is not, a  
8 difference in costs between those two, that that choice will not be clarified. As I say, I do  
9 not know whether there is a difference, or is not a difference.

10 MR. ANDERSON: I see. Bear with me for a moment, and let me put a hypothesis to you. I  
11 know it is a hypothesis that you do not like because you are not keen on these average  
12 tariffs ---- But, assuming there is a regime that wishes to preserve that position, how does  
13 your pricing model accommodate the desire to maintain that if the maintenance of that  
14 desire is accepted as the premise? You may not accept the premise – I see that. But, if that  
15 premise is accepted, how does your pricing model accommodate the desire to maintain that?

16 A. I explained this very explicitly in my second report.

17 Q Show the Tribunal. A. I think it is p.5 – as to retaining geographically average prices  
18 by alternative means ----

19 THE PRESIDENT: So, work out what the network charge should be ---- Is that right? A.  
20 You work out the total revenue for the network in much the same way as the present total  
21 revenue is worked out, and then you simply average that revenue as the present revenue is  
22 averaged. You only go another stage to determine more cost reflective prices if that is what  
23 you want to do.

24 Q This proceeds on the basis – just reading down a little bit - that you split the distribution  
25 between something called a pipeline network business and something called a retail supply  
26 business. A. Yes, and indeed 'the other'.

27 Q The other activities. A. The other activities where there is a potential for  
28 competition, and it has been introduced.

29 MR. ANDERSON: So, it depends upon what you were describing earlier as 'unbundling'.

30 A. Yes.

31 Q Yes. I see. A. Unbundling of costs.

32 Q What about ----- Would you accept that in this industry there are very significant sunk  
33 costs? A. Yes, but I think, again, I would want to distinguish between sunk costs in the  
34 network ---- what I call the pipeline ---- and sunk costs in other parts of the industry. One

1 of my concerns, actually, in the way in which sunk costs have been ---- is used ---- is that  
2 they tend to be used ---- sometimes it is sunk costs; sometimes it is stranded costs. I  
3 actually think there's a very big difference.

4 Q Let us just concentrate on the sunk costs and put the stranded costs aside ---- A. Okay

5 Q Or, the stranded assets to one side. A. Sunk costs, in the competitive parts of the  
6 business. That is what you are interested in?

7 Q Well, I am actually interested in sunk costs throughout the business.

8 THE PRESIDENT: Shall we do it in two stages? You are drawing a distinction between sunk  
9 costs in the potentially competitive part of the business, and sunk costs in the hypothetical  
10 pipeline business. What is the distinction you are drawing there, Dr. Marshall? A. The  
11 distinction I'm drawing is that in terms of sunk costs in the competitive parts of the business  
12 the idea that a competitor ----

13 MR. ANDERSON: Can we just clarify what you are calling 'the competitive part of the  
14 business' for the purposes of this case? A. I am talking about the areas which have  
15 been open to competition.

16 Q All the areas? A. Yes, it doesn't make any difference.

17 Q Which, in your view, is everything other than the pipeline. A. Well, it's just not my  
18 view, is it? I thought that was what ----

19 Q That is what you are talking about when you say 'the competitive sector'. A. That's  
20 what I'm talking about. I thought that was what the legislation said as well.

21 Q I see.

22 THE PRESIDENT: Anyway, that is what you are talking about.

23 MR. ANDERSON: That is what you are talking about. A. Yes, that's what I'm talking  
24 about. I think there is a real problem in terms of the sunk costs that the incumbent is able to  
25 recover those sunk costs in the competitive part of the market from its access charges to  
26 competitors, because that seems to be the **prima facie** situation which can harm  
27 competition.

28 Q I see. A. That is why I made the distinction between what in liberalised markets is  
29 sometimes called stranded costs and sunk costs, because in certain circumstances – it hasn't  
30 happened in this country, but it has abroad – there has been some suggestion that  
31 companies, for example, have entered into expensive arrangements before the market was  
32 open to competition, which could not bear the weight of the competitive market. For  
33 example, supposing there was a generation station which was cited, for the sake of  
34 employment policy, or whatever. Then, there has been, in certain circumstances, the idea

1 that if they are very clearly identified, in certain circumstances they would be allowed to be  
2 passed through in some way and recovered. But there was a big difference between stranded  
3 costs in that sense and general sunk costs which normally, in a competitive market, are open  
4 to competitive challenge. Indeed, one definition of competition is that competitors are  
5 trying to sink their rivals' sunk costs.

6 Q But, if they are not open to competitive challenge, your view is that it harms the competitive  
7 process to require access charges in the competitive sector to bear any contribution towards  
8 those sunk costs in the network – the non-competitive sector. A. No.

9 THE PRESIDENT: I thought it was the other way round. A. ... (overspeaking) ... for the  
10 network.

11 MR. ANDERSON: You are happy for the competitive sector, or the new entrants to the  
12 competitive sectors, to make a contribution towards the sunk costs in the network section.

13 A. Yes.

14 Q Now, how does your pricing mechanism achieve that? A. The way it achieves that is  
15 that you separate the costs between ----

16 Q This is the long run marginal cost? A. No, it is nothing to do with long run ----

17 Q I see, explain to me your access pricing mechanism? A. You separate the costs of the  
18 businesses and you identify the cost of the network business. Once you have separated the  
19 costs of the different businesses, there may well be a common cost or some common  
20 services which would need to be apportioned between the businesses. Then you have your  
21 allowed revenue for the network business.

22 Q Yes. A. Then, as now, that revenue is devised by looking forward for five years, or  
23 whatever, to determine those costs, and there is also a looking backwards in terms of the  
24 regulatory value, and to the extent that the pricing formula for the regulator determines that  
25 in terms of the pipeline the nature of that control is that those sunk costs in the pipeline  
26 should be recovered, and then the return on those sunk costs would be included in the  
27 regulatory value.

28 Q I see. So now let us move to the sunk costs in the competitive sector. The existing sunk  
29 costs in the competitive sector – should the new entrant be making any contribution towards  
30 those? A. No, not unless they were stranded.

31 Q So who pays for those? A. Who pays for those? When the market is opened and the  
32 incumbent is not able to recover those sunk costs in their price in the competitive market?

33 Q Yes. A. Shareholders pay for that.

34 Q Shareholders pay for that? A. Yes.

1 Q Shareholders or other customers? A. No, not other customers.

2 Q Why can they not be passed on to other customers? A. Because that is anti-competitive.

3 Q I see. Could I ask you to pick up the bundle that contains the Director's Defence, perhaps  
4 with some help from the Tribunal staff? If you could turn to Annex 2 to the Defence,  
5 beginning at p.9. There are some extracts from a debate in the House of Commons in  
6 relation to the introduction of the new Act and a discussion of what is called the "Costs'  
7 Principle". If I could just ask you to read para.19 which puts this in context. The cost plus  
8 approach.

9 THE PRESIDENT: This is apparently an exchange between ----

10 MR. ANDERSON: Mr. Langley who is advancing an amendment ----

11 THE PRESIDENT: Yes, a Member of Parliament who is advancing an amendment and over the  
12 page we have Minister's reply. It goes on for several pages, Mr. Anderson, how far do you  
13 want the witness to read?

14 MR. ANDERSON: I only want to take her through to the end of 22. A. (After a pause) Yes.

15 Q Am I to take it from your last answer that you consider that answers that the Minister has  
16 given, and his reasoning is anti-competitive, as you put it?

17 THE PRESIDENT: Hang on, Mr. Anderson, in para.22 he is talking about the infrastructure  
18 costs. What do you say he is referring to there?

19 MR. ANDERSON: Effectively the sunk costs in, amongst other places, the competitive sector.

20 THE PRESIDENT: What would those costs be? What are the sunk costs in a retail operation, for  
21 example?

22 MR. ANDERSON: Well that was going to be another question.

23 THE PRESIDENT: Right, I see. (To the witness) Anyway, that is what is being put to you, Dr.  
24 Marshall, that the Government does not want to encourage people to compete who do not  
25 take a fair share of the infrastructure costs. Of course, that would mean there were more  
26 costs on existing customers who do not benefit from the competition? A. I do not know  
27 what the infrastructure – I would call it infrastructure pipeline – but the wider issue is, if the  
28 issue is about sunk costs, and of course there are sunk costs upstream (in the competitive  
29 market upstream, potentially, although we do not know whether they are sunk for a very  
30 long time) and also there are potentially so-called sunk costs – historic fixed costs I think is  
31 a better term for them in the retail business because in the beginning the payment systems  
32 are quite expensive. So what is discussed there, as far as I am concerned, is yes the pipeline  
33 business should be funded and there is a debate about, as it were, the form of the price

1 control in that period over that particular infrastructure. Upstream, the issue as I understand  
2 what he says, is that other customers should not pay for them, and I entirely agree.

3 Q So anything other than the pipeline costs your position is that the new entrants – or  
4 competition law requires that new entrants should make no contribution to any other costs,  
5 existing costs? A. I have tried not to use the words ‘of competition law’ because  
6 economics and competition law coincide to a large extent but not entirely.

7 Q Okay, competition policy, would you be happy with that? A. Yes. So the idea that a  
8 competitor is able to recover all its sunk costs and do that from another competitor in my  
9 view would dampen competition.

10 Q I see. Can I now turn to the question of barriers to entry, and if you would turn to p.39 of  
11 your first report. You will see in the bottom section of the page, under a heading in italics,  
12 “Barriers to entry and the additional entry barriers that ECPR creates.” The discussion, if  
13 you could just remind yourself, I think you have helpfully put in bold the principle barriers  
14 that you identify as being existing barriers – that is limited size of the contestable market,  
15 limiting the economies of scale and achieving market awareness and product differentiation.  
16 A. Yes.

17 Q You see those as the main barriers to entry in the sectors of the market that have been  
18 opened up to competition? A. Well just above this I was also discussing what I discussed  
19 earlier which are the barriers to entry associated with the dominance of the incumbents  
20 throughout the market.

21 Q Where ... A. At the top of the page “... where those incumbents have an economic  
22 incentive to retain their dominant position for as long as possible.”

23 Q I see, but these barriers that you have identified in the paragraph I have taken you to, those  
24 are barriers that presumably exist at whatever access pricing policy is used? A. Yes.

25 Q So those are faced by any new entrant. Now, when one turns then to the barriers that you  
26 say are associated with ECPR, what exactly is the barrier to entry that ECPR creates? A.  
27 Well I have listed a lot of barriers to entry.

28 Q Well explain them in your own words? A. I will. Number 1 is at the bottom of p.39,  
29 which is what has been discussed a lot which is the idea that the incumbent’s activities are  
30 priced at avoided cost, including normal profit and that in the circumstances of the England  
31 and Wales’ water industry is, I believe, too tough a test to encourage competition.

32 Q What do you mean by “Too tough” a test? A. It will not – the likelihood is that the  
33 competitive process will not develop in the circumstances of the water industry against this  
34 test.

1 Q And why is that? A. Because the new entrants have to recover their own fixed costs.  
2 They have a high access charge associated with the fact that everything above avoidable  
3 costs, not only any additional cost but also the higher profits are being recovered by the  
4 access charge, and that means that it was very difficult to enter this market.

5 Q Now, Professor Armstrong, you will recall, addressed this question in his response to your  
6 report at paras ....

7 THE PRESIDENT: There is an annex which summarises the points of agreement and  
8 disagreement.

9 MR. ANDERSON: I am thinking of Professor Armstrong's second report, it is just the reference  
10 in that to which Dr. Marshall is then addressing her mind at pages 6 to 7. So it must form  
11 part of the "B"

12 THE PRESIDENT: We were on Dr. Marshall's first report a moment ago, but we are now on ----

13 MR. ANDERSON: I just wanted the full picture which, when we moved on to barriers to entry,  
14 dealt with also in the second report.

15 THE PRESIDENT: Yes.

16 MR. ANDERSON: (To the witness) If I could just ask you to turn to that and look towards the  
17 bottom of p.6? A. This is Professor Armstrong's second report.

18 Q No, this is now your second report? A. Right.

19 MR. O'REILLY: The reference in Professor Armstrong is a very short one in the bottom of the  
20 first paragraph of 'B' on p.2, where he equates barriers to entry to 'F'.

21 MR. ANDERSON: Yes, I am obliged to my learned friend. If you look at para.2 of Dr.  
22 Marshall's second report, just to take the picture through, under 'B' "Contestable Markets"  
23 she says: "In my simple framework I assumed that an entrant incurred fixed entry cost 'F'  
24 which can be taken to represent its barriers to entry and the existence of this fixed entry cost  
25 presented no problems for the validity of ECPR." Then you return to the question of  
26 barriers to entry at the bottom of p.6 of your second report, with reference to that.  
27 "Professor Armstrong also comments on barriers to entry stating that in his simple  
28 framework he assumed that the entrant incurred a fixed entry cost 'F' which can be taken to  
29 represent the barriers to its entry and the existence of his fixed entry cost presented no  
30 problem for the validity of ECPR." You say his observation is, of course, true, at the  
31 theoretical level.

32 "Given retail prices and avoided costs and hence given access charges, and given  
33 fixed barriers to entry the model simply says that a competitor will only enter if its  
34 total costs, including what it takes to overcome the fixed barriers to entry are

1 lower than the avoided costs of the incumbent in the potentially competitive  
2 segment. The outcome, according to the theory, will be productively efficient,  
3 ensuring that inefficient entry does not occur.”

4 So that is the theory. Do you agree with that theory? A. I agree that it is coherent within  
5 the theory.

6 Q What do you mean by “is coherent within the theory”? A. The assumptions, as given in  
7 the theory.

8 Q But do you agree with the theory? A. No.

9 Q You do not agree with the theory? A. I have said why we need to unbundled what is  
10 below this. You have to go behind what is in “F”.

11 Q Right, so it is back to the unbundling point? A. No, it is a different unbundling.

12 Q Well explain to me, I mean I am not an economist, I do not understand these things? A.  
13 Yes, and, as I say, I tried to set it out fairly clearly from p.7 onwards. The issue is that, for  
14 example – and this is just an example – the fixed costs that the entrant is facing includes all  
15 the barriers to entry that we have been discussing this morning.

16 Q The ones set out in your first report – the existing barriers to entry? A. Yes, all the issues  
17 associated with the dominance of the incumbent and in this case it is all the additional  
18 barriers associated with ECPR. All of those are barriers to entry, and indeed all the other  
19 barriers to entry in terms of the limitation of the market, all of those barriers.

20 Q The ones that we agreed existed whatever access price, yes. A. Now, it is perfectly  
21 possible – in actual fact I think Professor Armstrong had some agreement on this, but I  
22 would not put words into his mouth – that those barriers to entry are so high that you could  
23 never get a margin that would allow someone to enter. It is perfectly possible if those  
24 barriers to entry are indigenous, for example, i.e. the incumbents could remove those  
25 barriers to entry as indeed they can unless they are stopped, then you could basically  
26 increase the competitor’s fixed costs such that the total of their costs means they cannot  
27 enter that market.

28 Q So that suggests that incumbents could artificially increase the barriers to entry, is that what  
29 you are saying? A. Yes.

30 Q And that is one of your objections to ECPR, is it? A. There are two aspects to that. One  
31 is that they can raise barriers to entry, yes, in general, and particularly in terms of ECPR  
32 there is a possibility of removing barriers to entry as well. For example ----

33 Q Could I just ask you what you mean by ‘in general’ before you moved on to ECPR in  
34 particular? How could they raise the barriers to entry ‘in general’? A. The issue about

1 raising barriers to entry in general is the idea that we have here one industry which is  
2 dominated by the incumbent. That incumbent, other things being equal, will have an  
3 incentive to protect its dominant position, and there are numerous cases along the line where  
4 changes have to be made in the industry – these are called the non-price issues – where an  
5 incumbent could, if it so chose, raise barriers to entry.

6 Q That would be the role of the regulator, would it, to police that? A. Yes, and that is  
7 why the issue about how you police it, and how effectively we can police it, and what  
8 structures you need to be able to do the effective policing is such an important issue. One of  
9 the most obvious issues which I have raised in terms of ECPR is that it is associated with  
10 negotiated access. It is perfectly clear that negotiated access can indeed raise the costs of  
11 entrance, and therefore deter them from entering the market, and also ----

12 Q Let us just explore that. Why is that? Because they have to spend time and money entering  
13 into negotiations with the person from whom they want access? A. Yes. They have to  
14 enter into discussions. It is possible – it is certainly possible – that the incumbent can drag  
15 their feet on those negotiations. You know, that is the ----

16 Q What is the solution to that problem? A. The solution to that problem is not to have  
17 negotiated access, but to have regulated access. The regulator determines the price. The  
18 incumbent publishes that price before the next charging year. That is what occurs in  
19 electricity, gas -----

20 Q Before you move on to the other industries ---- This regulated access price set by the  
21 regulator – is that an access price that applies to all situations? A. Yes.

22 Q So, there is no variation between different applications for access. There is a fixed rate.  
23 What? Is it based on a per pipe length? I mean, how is this fixed access price to apply?

24 A. The access ---- The total allowed revenue is determined in the way that I suggested.

25 Q Yes. A. What then is described as the structure of the charges that recover that total  
26 revenue is a matter for the companies and the regulator to determine. You would say it has  
27 to be geographically averaged, and therefore those would be the prices that were published.  
28 In gas, the structure of the charges are turned into more cost-reflective charges, and those  
29 are calculated by the companies, checked, and they are published – obviously for different  
30 categories of customer, different ---- Obviously, there is not one price. So, they are  
31 published.

32 Q When you say ‘we’ would have geographically averaged access prices, what would you in  
33 your ideal world be suggesting? A. Well, I have said what I consider about  
34 geographically averaged prices. I don’t think ---

1 Q I am just interested in this move away from negotiated access prices to these regulated  
2 access prices, and how it would actually work in practice – whether there is going to be a  
3 tariff that applies across the board ---- A. Well, it applies across a board in the sense  
4 that the incumbents and all competitors will be charged the same price if they were  
5 supplying the same customers or group of customers.

6 Q Will that apply to the whole country, or just to within regions, or ----? A. No. It will  
7 be undertaken by undertaker because the price control is undertaken by undertaker.

8 Q I see. So, these will be regionally averaged access prices. A. Well, no, not necessarily.  
9 As I say, there are two stages in determining what the access prices are going to be in a  
10 regulated system. First, you determine the total allowed revenue you've recovered from  
11 those charges ----

12 Q I understand that. A. Then you determine the structure of the charges ---- how those  
13 are going to be ---- how that allowance is going to be recovered from different classes of  
14 customer. Okay? If it is deemed that those charges have to be recovered from different  
15 classes of geographical averaging then that is what would happen. If it was to be  
16 determined that there should be more cost-reflective charges, then you work out what those  
17 more cost-reflective charges would be. You only go to that stage if you want more cost-  
18 reflective charges.

19 Q But, in your view, which would be the preferable avenue from the point of view of  
20 competition policy? Which would be more pro-competitive if I can use that non-technical  
21 term? A. In terms of whether it is pro-competitive or not --- in terms of the charge for  
22 the pipeline ---- If all the users are charged the same price then it doesn't matter very much  
23 whether it is geographically averaged, or not. The issue about geographical averaging is  
24 about the efficient development of the pipeline, about the efficient location of water sources  
25 and large loads, and about non-discrimination.

26 Q I can see all that. I am just interested in the practical operation of this tariffed access  
27 pricing because it seems to me – and correct me if I have misunderstood this – that if it is  
28 deemed the appropriate course is a regionally averaged access price, there will be some  
29 situations, will there not, where it is particularly profitable for a new entrant to take that  
30 access and supply – in other words, where the local costs are lower than that average – and  
31 other circumstances where that is less likely because the actual costs would be above that  
32 regional average. Is that right, or have I misunderstood the system? A. The issue of  
33 geographical averaging doesn't come into this issue

1 Q I see. A. The issue is: is the regulator determining the structure of charges? The  
2 incumbent then goes away and from its allowed revenue it determines the structure of  
3 charges that it is considered are consistent with what the regulator does, and consistent with  
4 non-discrimination, or whatever. Basically, the incumbent then publishes those prices three  
5 months before the new charging year so that everybody can see them.

6 Q I see. A. That is the difference between negotiated access and regulated access.

7 Q If one adopted, for example, a long run marginal cost basis for access pricing, would that  
8 not raise similar problems that you have identified in relation to negotiation? A. No.

9 Q Why not? Or, is that again to be a published, regulated tariff? A. The issue about  
10 calculating a long run price is the procedure whereby the incumbent will look to within his  
11 allowed revenue. It will calculate what it considers to be the long run marginal price, and  
12 the prices that can be directly attributed to particular classes of customer. Then, once you  
13 have done that to all particular classes of customer, you will have a lump of revenue that  
14 cannot be allocated in that way.

15 Q Right. A. What you do then is you take the total revenues that you are allowed, and  
16 you mark up the directly attributable costs ---- the long run marginal cost that has been  
17 calculated by a so-called mark-up principle, and the issue is: what is the basis of that mark-  
18 up principle? The mark-up principle used by OFTEL, OFCOM, OFGAS and POSTCOM  
19 is what is called an equal proportional mark-up principle whereby the additional revenues  
20 that are required to be raised are divided up in proportion to the directly attributable costs.

21 Q I see. So, your system would not involve, for example, on the facts of this case, Welsh  
22 having to calculate the long run marginal cost of supplying, or providing access to Albion in  
23 the circumstances of this case. It would be some sort of applicable formula, or access price,  
24 that would apply to anybody, whatever the actual nature of the access service they required  
25 from the incumbent; is that right? A. Yes. I mean, the calculation of the long run  
26 marginal cost price, which is the cost that would be directly attributable to that customer, is  
27 irrelevant to issues of discrimination.

28 THE PRESIDENT: When you reach a convenient moment, Mr. Anderson?

29 MR. ANDERSON: I have, sir. Just one point of information. Last Thursday, there was some  
30 questioning about Corus in relation to Mr. Jones. There is in fact a very recent Judgment  
31 which I only received on Friday which goes to that question. I think it may be relevant to  
32 hand up to the Tribunal. It is a published Judgment. I can hand that up.

33 THE PRESIDENT: Hand it to the Registry, and we will take it on board in due course.

34

1 (Adjourned for a short time)

2 MR. ANDERSON: Dr. Marshall, I wonder if you could turn to p.31 of your first report? At the  
3 very bottom of the page there, in answer to a question “Does ECPR raise barriers to entry  
4 you say: “I agree that the ECPR can raise barriers to entry in that the entrant will need to  
5 cover its total costs within the incremental costs of the incumbent in the competitive  
6 activity.” Then you go on to explain that that is one of the reasons why Oftel rejected it. Is  
7 it fair to say then that that is the barrier to entry occasioned by ECPR? A. No, not only.

8 Q What other ones are there? A. Well, I list them afterwards.

9 Q It is what we find in the remainder of those paragraphs, is it? A. No, this is in answer to  
10 the Tribunal. This was in answer to a particular barrier to entry they identified and I  
11 identified others.

12 Q So what are the others? A. They start at p.39.

13 Q Yes. A. The first one is the one that we have just discussed.

14 Q Yes. The second one is in the second paragraph on the next page, where I have said that the  
15 fact that the avoidable costs have to be identified if this works, and I consider that they may  
16 be able to be manipulated through cost shifting is an additional risk that the new entrant face  
17 and therefore that, as it were, would raise their costs of capital.

18 Q Why is the manipulation of costs and costs shifting unique to ECPR, why can that not occur  
19 in any access pricing model that is used? A. Well it could, but the point about this  
20 particular cost, the avoided costs in the competitive sectors is that this dictates the margin  
21 which the incumbent develop towards – that is why this is a particularly crucial figure.

22 Q One alternative that you have advanced in your ... to your second report is long run  
23 marginal cost as an alternative access pricing. Surely under that regime that is equally open  
24 to the kind of abuse that you have identified? A. Long run marginal cost was raised  
25 because I was asked whether if a cost ... along the lines I suggested was not possible, what  
26 other regime would I prefer to ECPR. Is there any other I would prefer to ECPR, and I said,  
27 in those circumstances, given the barriers to entry into the water industry, which I consider  
28 to exist, the long run marginal cost would be preferable. Obviously, there are always  
29 calculation issues and that may well be associated with calculation issues. The point about  
30 long run marginal cost is that in my view you could not set an excess price below that figure  
31 because that tends to be the figure used in terms of non-discrimination issues.

32 Q Yes, but in relation to long run marginal cost as an alternative to ECPR would you accept  
33 that there would be equal incentives on an incumbent there to misallocate, for example,

1 retail and water resources costs into its distribution costs? A. Well what would be  
2 calculated is the directly attributable costs of the network.

3 Q Yes. So that is where the incentive to mis-allocate costs would apply equally in that  
4 context as to ECPR. There is nothing unique about ECPR? A. You would examine the  
5 costs of the network, that is the cost you would examine in terms of long run marginal cost.

6 Q Yes, but how is that an answer to the question of whether or not there would be an equal  
7 incentive to cost shift? A. Sorry, because you went on to say that there would be  
8 potential cost shift ... competitive parts and that would knock the curve out. That would  
9 have been determined when you separate out the costs of the network. As I said, if you  
10 actually go to a different rate, you go one step further after calculating the total revenue to  
11 get to a long run price, that is when you do the next calculation, but those are all network  
12 costs.

13 Q So the barriers to entry, so far, that you have identified – apart from the need for the new  
14 entrant to cover the unavoided costs of the incumbent in the competitive sector – is an  
15 ability to manipulate costs. What is the next barrier? A. The next barrier is the fact – it is  
16 related to the discussion we had this morning – that all the costs above the avoided costs are  
17 recovered from the access charge in the future, so all the sunk costs are recovered.

18 Q How is that different to your first barrier? The barrier that is described at p.31? A. Well  
19 this is about the avoided costs.

20 Q “The entrant will need to cover its total costs within the incremental costs of the incumbent  
21 in the competitive activity.” Does it not amount to the same thing? It is the requirement of  
22 the new entrant to cover the incumbent’s unavoided costs in the competitive sector? A.  
23 That is part of it, but that provision also means that the incumbent is protected from  
24 competitive challenge.

25 Q Yes. A. I do not see how that is a different barrier to the barrier that we are discussing?  
26 A. Well I think it is a very different barrier.

27 Q How is it a barrier? A. Because it means that the incumbent’s retail business is a  
28 different kind of retail business compared with the new entrant’s retail business.

29 Q I see. Now, another point that you make, and this is over the page at p.32, in the middle  
30 paragraph:

31 “Professor Armstrong says, as does Baumol, from a perspective reminiscent of  
32 central planning that it is not an undesirable feature of ECPR policy that it  
33 discourages entry which causes significant duplication of fixed costs.”

1 Do you consider from a competition policy point of view that duplication of fixed costs is  
2 beneficial or harmful? A. We are talking about duplication of fixed costs in the  
3 competitive areas?

4 Q Yes. A. Okay. I think duplication of fixed costs in the competitive areas is part and  
5 parcel of the competitive process. People enter into industries and they have to decide  
6 whether or not to enter those industries upon the basis that they will almost certainly have to  
7 incur fixed costs, and there may well be duplicating costs already in that industry. For  
8 example, a new generator will come in, it is duplicating the fixed costs associated with the  
9 previous generator who already has sufficient capacity.

10 Q Yes. A. And, as far as I am concerned, that is part of the competitive process, that in  
11 certain circumstances it means that if you do indeed replicate fixed costs there is a separate  
12 issue which is does that disadvantage customers? The fact of the matter is that the people  
13 who carry that risk are the new entrants. Customers will not buy from that new entrant if it  
14 does not have anything to offer to the customer. So the risks are being borne by the new  
15 entrant.

16 Q I see. Now, could you contrast or compare that with a comment that you make in your  
17 second report at p.8:

18 "Since competition is yet to gain a foothold in the water industry in England and  
19 Wales a powerful argument could be mounted that some entry assistance may well  
20 be justified to overcome existing barriers to entry."

21 Just what are you suggesting there? A. I am saying, as indeed OFWAT said in MD163  
22 that in certain circumstances, for instance, charging ... at long run marginal cost may be  
23 preferable in order to encourage entry into the industry, given the barriers to entry that are  
24 already there, is an offset to the barriers to entry.

25 Q So who would finance it, this assistance? A. If you had charged long run marginal cost  
26 then the mark up would be borne by the other players, by the incumbent.

27 Q In turn, therefore, given the way in which price regulation operates in this business from  
28 the other customers of the incumbent? A. Well the mark up would have to be recovered  
29 elsewhere, which is why I do not favour this ----

30 Q I see. A. -- which is why I favour my approach. I was asked what would I suggest -- I  
31 couldn't if my approach could not be adopted. I do not, as I have ----

32 Q You are not very keen on long run marginal cost ----

33 THE PRESIDENT: I think the witness is just in the middle of an answer. (To the witness) Just  
34 go on, doctor? A. I have repeatedly said that although there is a powerful argument along

1 these lines and it was not made in MD163, I do not personally agree with that approach. I  
2 do not think there should be assisted entry in relation to access prices. Would it be fair to  
3 say that many of your other criticisms of ECPR in fact relate to the practicalities of its  
4 application such as the need to regulate retail prices, identification of avoided costs, the  
5 ability of incumbents to manipulate costs, and exaggerating the costs of what you call  
6 ‘concealed cross subsidies’. A. No. The other barriers to entry ----

7 Q I mean, those are all points that you have made, have you not? A. In terms of the  
8 barriers to entry ---- the additional barriers to entry from ECPR – I have listed those in the  
9 pages that we were referring to before.

10 Q If we just look at your first report at pp.14 and 15, it struck me – and I may have mis-read it  
11 – that the point you are effectively making at the bottom of p.14 is that there are difficulties  
12 in regulating retail prices in such a way as to ensure that incumbents do not earn monopoly  
13 profits. Is that a fair reading of that paragraph? A. Well, this is in relation to the idea  
14 that if there were inefficient costs or what is called monopoly profits (and I do not like the  
15 term) in a retail business which were then passed over ---- or a competitive business which  
16 were passed over into a natural monopoly, then unless that was regulated, they may well be  
17 passed through to the retail price. What I think I am saying here as well is that the large  
18 retail tariffs are not price-regulated.

19 Q That is a separate point. On the question of regulation, whether you are saying it here or not,  
20 would you agree with the position that one of your objections to ECPR is that it requires  
21 continued price regulation, and there are problems associated with price regulation? A.  
22 Continued price regulation of all the competitive activities, as well as the price line(?).

23 Q Yes. A. Yes.

24 Q I mean, what you say, if I can just put my hand on it at p.3 of your second report – because  
25 one of the points that Professor Armstrong makes is that it is the role of retail price  
26 regulation to deal with the existence of monopoly profits, or monopoly inefficiencies, and  
27 ECPR performs a different function. You say, towards the bottom of p.3 of your second  
28 report, that “Strictly speaking, ECPR is separate from retail price regulation, as I  
29 acknowledged in my report – that is, in a technical sense, ECPR and retail price regulation  
30 can be said to be distinct problems. However, in practice, they cannot be so distinguished.  
31 In fact, comprehensive and permanent price regulation of water undertakings’ activities  
32 covering both network natural monopoly and all the other components of the supply chain  
33 which are in principle open to competition is an unfortunate by-product of ECPR”. A.  
34 Yes.

1 Q Then, going back to your first report where we were at p.14, and over the page to p.15, you  
2 identify in the middle of the first paragraph of p.15 difficulties in identifying the avoided  
3 costs as being a practical problem in ECPR. A. Yes.

4 Q Then, further down the page, you revert to this question of incumbents being able to  
5 manipulate ---- Sorry. Further down the same paragraph: incumbents to cost shift. Yes?  
6 A. Yes.

7 Q Then, in your second report, at p.5, you refer to exaggerating concealed costs subsidies.  
8 A. Yes.

9 Q So, in many senses, I would suggest to you, those are practical problems concerned with  
10 regulation rather than conceptual difficulties with ECPR. Would you accept that? A. I  
11 don't think you can distinguish the two.

12 Q You do not think you can distinguish. I see. A. Because I think you have to consider  
13 the incentive regime that is created through a particular rule. For instance, I could give you  
14 an example of what I mean ----

15 Q Yes, please do. A. In relation to RPI minus X, there the incentive regime is that the  
16 regulator determines some reasonably allowed revenue, and there is incentive for the  
17 regulated company to lower its costs and earn more profit. That is a positive incentive. The  
18 incentive in relation to avoided costs does not have that particular property. Incentive for  
19 the incumbent, in terms of the ... costs is to cost shift. There is no incentive that goes with  
20 the commercial incentives of the incumbent. It is similar in terms of avoided costs, in terms  
21 of sunk costs. There is an incentive to over-emphasise sunk costs. It's a perverse incentive  
22 - rather than an incentive that goes along with efficiency

23 Q Yes. But I mean, going back to your 'best of a bad world' suggestion of long run marginal  
24 costs, you would accept that in that case there is less of an incentive on the incumbent to  
25 pursue to efficiencies at the network level because under a long run marginal costs basis,  
26 any benefits that it secured for efficiency would simply be passed on to the new entrant.  
27 A. No.

28 Q You would not accept that? Why? A. Because it would be passed on to the new  
29 entrant?

30 Q Yes. Any savings ----- any benefits ---- any savings. A. Well, the long run margin cost  
31 is exactly the same as avoided costs in the retail business.

32 Q Yes. So, any savings that are achieved at the network level in that part of the network not  
33 open to competition would simply be ---- the benefit of that would be passed on in the long  
34 run marginal cost to the ---- A. No. On the contrary, it wouldn't be.

1 Q It would not be? A. No.

2 Q Explain to me why that would not be the case. A. Because the long run marginal cost  
3 is the same as the avoided cost, which would presumably be calculated on the normal cost  
4 of capital. It wouldn't be calculated on the basis of the actually achieved rates of return.

5 Q Well, then, let us look at the costs in the regulated sector ---- I mean, the area open to  
6 competition. Surely in that case any benefits would be passed ---- any efficiencies secured  
7 by the incumbent in that sector would be passed on in a reduction of the long run marginal  
8 costs so that there would be no incentive in pursuing efficiencies. A. I don't ----

9 THE PRESIDENT: Can you just put the question again, Mr. Anderson, because I have just lost  
10 the thread for a moment?

11 MR. ANDERSON: An incentive on the incumbent to reduce costs in the areas of the market  
12 open to competition ---- The incentive would not be there in long run marginal costs  
13 because simply the benefit of that would simply be passed on to the new entrant. That is the  
14 proposition. A. No, because they would be regulated separately. Indeed, they may not  
15 be regulated at all. The incentives in terms of areas open to competition relate entirely to  
16 how competitive the incumbent is versus new entrants.

17 Q I see. So, you do not accept ----- A. No.

18 Q Would you just bear with me? (After a pause): Thank you very much, Dr. Marshall.

19

20 Cross-examined by Mr. VAJDA

21 Q. I just have a few questions for you, Dr. Marshall. First of all, before lunch you remember  
22 you were asked some questions about cross-subsidy. I was not entirely sure about your  
23 answer as to whether you were taking the view that there were, or were not, cross-subsidies  
24 between the domestic customers and large customers. Could you just clarify what you  
25 intended to say? A. What I intended to say I that I thought it had been established that  
26 there were no cross-subsidies. If there are cross-subsidies, then it can be dealt with in the  
27 way that I suggested – the costs should be identified and they can independently be passed  
28 through to the access charge.

29 Q Would you accept that if supplying the large industrial customers is more risky than  
30 supplying the household customers, that if you apply common rate of return across the  
31 business, that would be a cross-subsidy? A. I have some difficulty with this whole  
32 issue about riskiness ... customers, because the riskiness in terms of ---- a lot of the  
33 riskiness associated with the network is about the form of the control, and, you know, it is

1 regulation that reduces the cost of capital. To the extent that there are riskier customers  
2 who ---- You are talking about customers who disappear and therefore ----

3 Q Yes. Exactly. I mean, if, because of competition, the Far East steel-making ends in Wales  
4 that is going to affect quite a number of ---- A. Well, to the extent that it is not about  
5 the network, but is about a particular customer on the end of a network, then to the extent  
6 that there is considered to be a particular risk in those circumstances, my experience is that  
7 they tend to be dealt with through the connection charge rather than through the use of  
8 system charge.

9 Q Right. That is your experience in what industry? A. In electricity.

10 Q Right. Okay. Thank you. Can I move on to the area of sunk costs? In your view, in a  
11 market where there are significant sunk costs, is that something which is going to encourage  
12 or discourage competition? A. Costs which are basically a heavy fixed cost before you  
13 enter an industry ---- a factory, or something like that ---- I do not see that that is  
14 necessarily a barrier. It all depends, as Professor Armstrong says, whether shareholders can  
15 finance that activity. It is not a particular barrier, we know, in the industry as a whole. As I  
16 say, in terms of pipelines, often it is considered that the nature of the capital intensity there  
17 may be that, you know, you cannot bypass that very easily. But, we are not talking about  
18 that. We are talking about the fixed costs in the areas that were open to competition.

19 Q No. I am just asking you generally at the moment. A. They are not necessarily a  
20 barrier to competition.

21 Q Not a barrier to competition. A. No, not necessarily, no.

22 Q What about with the rate of return that one earns in the industry? Would that, in your view,  
23 be a barrier to competition if it was a low rate of return, or would that be a factor  
24 encouraging competition? Where would that fit into the analysis? A. If the businesses  
25 were separated between the pipeline and the competitive business – for instance, if there had  
26 been a separation between the large user market that has been open for a long time, and the  
27 network, then what I would expect is that you would dis-aggregate the cost of capital and,  
28 other things being equal, the cost of ... for the network would be lower and the cost of  
29 capital for the business open to competition would be higher. You would dis-aggregate it  
30 in that sense.

31 Q Thank you. We are now coming to what you, I think, have called the ‘upstream’ and the  
32 ‘downstream’ market, and we have two identifiable markets, and the monopoly of the  
33 incumbent is dominant in both markets, and the new entrant wishes to enter the downstream  
34 market.

1 THE PRESIDENT: When you say the ‘upstream’ and ‘downstream’, which are these two?  
2 MR. VAJDA: Well let us, for the sake of argument say upstream is production and distribution  
3 and downstream is retail – all right? A. Well you have combined the ... line with a  
4 competitive sector there.  
5 Q Well, perhaps, Dr. Marshall, give me an example in industry where you can identify an  
6 upstream and downstream market for me? A. Both sides of the network, you mean?  
7 Q Yes. A. Water.  
8 Q Yes, and if you could just tell me what is the upstream, and what is the downstream? A.  
9 No, it is so confusing. If the pipeline is in the middle, how I would describe ‘upstream’ and  
10 ‘downstream’ is upstream is all the wholesale side and downstream would be the retail.  
11 Q Right thank you.  
12 THE PRESIDENT: On stream of the pipeline you mean? A. Yes.  
13 Q I know all these streams flow with the pipeline but ... A. If you have only got one  
14 competitive – if you are talking about retail, upstream of retail is the pipeline.  
15 Q So the customers at the end of the pipeline is one lot and the people who are supplying the  
16 inputs are the other lot, with the pipeline in the middle? A. Yes.  
17 MR. VAJDA: So if we now just look at the customers, as the President says at the end of the  
18 pipeline ---- A. The retail?  
19 Q Yes. A. If the incumbent has non-avoidable fixed cost in that market, is there a potential  
20 for conflict between margin squeeze and ECPR? A. Yes.  
21 Q Now, if the incumbent has fixed costs which are avoidable in the medium to long run, and  
22 the ECPR test is applied over the same period of time, so those costs are avoidable, is there  
23 a conflict between ECPR and margin squeeze? A. Well ECPR I cannot deal with past  
24 costs, because that is all forward looking.  
25 Q The question I am putting to you is assuming the fixed costs of the incumbent are  
26 avoidable in the medium to long term – all right? A. The new fixed costs? The forward  
27 looking fixed costs you are talking about?  
28 Q Yes. We are dealing with a situation where there are no non-avoidable fixed costs ---- A.  
29 In the future?  
30 Q Yes.  
31 THE PRESIDENT: In the retail sector.  
32 MR. VAJDA: In the retail sector? A. If you look in any sector, where ever you look ahead  
33 then other things being equal, the more costs that you would include in that sector, in that  
34 calculation, and therefore the general rule the short run at avoided costs would be lower

1 than a long run of avoided costs, because of what you would include in that. So the margin  
2 would be bigger, okay? There is still an issue of the fixed costs that cannot go into that  
3 calculation but it would be bigger.

4 Q The point I am putting to you, Dr. Marshall is this, that the problem, the conflict, as it were  
5 between ECPR and margin squeeze, only arises, does it not, if the incumbent in the  
6 downstream market has non-avoidable fixed costs. If he does not have non-avoidable fixed  
7 costs the conflict does not arise. Do you agree with that? A. Yes, that is what we have  
8 discussed before, whether there are any economies of scale in that industry or not. If there  
9 are the marginal costs were not recovered costs.

10 Q I think you accepted that so far as the non-avoidable fixed costs are concerned in the  
11 upstream market that those should be reflected in the access price. Am I right in that? A.  
12 No, those are the sunk costs.

13 Q I thought you said in answer to Mr. Anderson earlier, before lunch, that the new entrant  
14 would have to pay his share of the costs in the upstream market. I am not now looking at  
15 the downstream market, I am looking at the upstream market? A. The upstream market –  
16 it is very confusing – it would have to cover the cost of the pipeline.

17 Q I come back to ‘upstream’ I thought we took to mean the pipes, is that right? A. Yes.

18 THE PRESIDENT: I thought a moment ago the pipes were in the middle and there was  
19 something further up ----

20 MR. VAJDA: All right, further up. (To the witness) I took it, I may have misunderstood you, but  
21 in answer to Mr. Anderson you accepted that the new entrant, who comes in at the  
22 downstream market must pay his share of the non-avoidable fixed costs of the upstream  
23 market? A. Of the pipeline?

24 Q Yes. A. Of the pipeline ... yes.

25 Q Thank you. Now, I put to you and I think I can deal with this quite quickly, this is really the  
26 same point that Mr. Anderson put to you, that a number of your criticisms of ECPR appear  
27 to go to the practicality of it rather than its principle. If I could just ask you to turn up your  
28 report, and if we go to your second report – do you have your second report to hand, p.24? If  
29 we look at the top of that page with ECPR pricing, the dominant incumbent supplier has no  
30 incentive to set the minus above avoided costs, and then further down you say “Indeed, a  
31 Professor Armstrong agrees the dominant company has an incentive to set the minus below  
32 its actual avoided costs because it raises the profits it can make from competitors by their  
33 access charge” and that is, if you like a problem of identification, is it not? It is not a

1 problem of principle, of methodology? A. Yes, it is a problem of identification and  
2 incentives.

3 Q So obviously for the ECPR rule to be properly applied one needs to properly identify what  
4 the avoided costs are? A. You need to be able to do that, yes, and I contend that you  
5 cannot do it. That is why what I have looked at is the application of ECPR to the water  
6 industry, as it is now, as the ECPR ----

7 Q You have or you have not looked? A. I have, that was the thrust of what I was doing.  
8 The ECPR theory is ahistorical, it does not deal with a particular case.

9 Q Yes, but that is obviously a matter on which submissions will be made to the Tribunal, but  
10 just to understand your evidence on it, what you are saying is that this is a problem of  
11 identification of costs, this is the point you are making? A. Yes, it is.

12 Q Thank you. Now, can I ask you a few questions about the use of ECPR generally outside  
13 this country? Would you accept that ECPR in fact has been used in a number of situations  
14 in a number of industries outside the United Kingdom? A. A retail minus has often been  
15 used.

16 Q Well perhaps I can just – if we just start off with your first report, we just go to appendix A,  
17 you start off with the “International British Experience” – do you see that? You tell us that  
18 it was originally proposed by Professor Baumol in the context of railway competition, do  
19 you see that? A. Yes.

20 Q You then go on to look at the telecommunications’ industry – is that right? A. Yes.

21 Q You then tell us, at least from Appendix A that this rule was rejected in the  
22 telecommunications’ industry in the United States. Was that the thrust of your evidence?  
23 A. In this case, yes.

24 Q Can I now ask you to pick up your second report, and go to p.41? Just if I could ask you to  
25 read to yourself – and if I could ask the Tribunal to read as well – the last paragraph on  
26 p.41. A. (After a pause): Yes.

27 Q Why did you underline the word ‘one’ in that – “It finds one extra example”, what is the  
28 significance of that? A. I thought you did find one extra example.

29 Q Yes, but the thrust of Appendix A of your original report was that the US had rejected  
30 ECPR and telecommunications was it not? That was the thrust of what you were saying?  
31 A. Not entirely. I said that ----

32 Q Where do we find in Appendix A of your original report, an acknowledgement that ECPR is  
33 used in telecommunications in the United States? Can you point to a passage in Appendix

1 A? A. I do not know if I said it in the United States' market, but it is one additional  
2 example, we can have a look at that, if you like.

3 Q Well could you please answer my question. Where in appendix A of your original report  
4 did you point out to the Tribunal that ECPR was used in telecommunications in the United  
5 States? A. Well I do not know if I did.

6 Q You did not, did you? A. My genuine feeling at the moment is I do not know whether I  
7 did or I did not. But I do not ----

8 Q Well, take your time, Dr. Marshall ---- A. No, can I just say a word?

9 Q Of course. A. I think the cases on telecoms are interesting, and they are particularly  
10 interesting because most of the issues in relation to ECPR and whether they are applicable  
11 have taken place in the telecoms industry, and obviously the telecoms industry has  
12 particular characteristics. My feeling is that in terms of telecoms the most important  
13 experience is British experience because Ofel and Ofcom have expertise in telecoms and  
14 then in some respects they apply retail minus, and in other respects they have explicitly  
15 excluded the use of ECPR , and those are where competition has yet not been established in  
16 the industry.

17 Q Well let us just take this in stages. What you are telling us is that so far as the British  
18 experience of ECPR is concerned in telecoms that in some cases it is used and in some cases  
19 it is not. Is that right? A. Yes.

20 Q It is a case of not one size fits all, is that correct? A. It is not one size fits all, and where it  
21 is used, and indeed, where it is not used, both Ofel and Ofcom have stated categorically  
22 and repeatedly that it is not suitable to be used when competition has yet to be established in  
23 the market.

24 Q Right, if we go back to p.67 of appendix A, which is headed "The ECPR in United States  
25 Telecommunications" can you please tell the Tribunal the relevance or otherwise of the  
26 *Iowa Utilities* case that you then refer to at p.41 of your second report? A. I am getting  
27 confused here.

28 THE PRESIDENT: What do you want the witness to ----

29 MR. VAJDA: The witness purports to summarise how ECPR is used in the US  
30 telecommunications in appendix A of her first report. She then in her second report at p.61  
31 says this: "It [Dŵr Cymru ] finds (1) extra example from US telecommunications  
32 \*\*\*\*\* ... because I failed to include the case ... re-sale of telecommunications  
33 services" and I would like the case ----

1 THE PRESIDENT: The case is the *Iowa Utilities*. You are asking her: what is her view about  
2 the IOWA Utilities case; is that right?

3 MR. VAJDA: That is right, and in particular how that fits into the application of the ECPR and  
4 US telecommunications, which is what she was giving evidence on in Appendix A. (To the  
5 witness): I mean, do you say that the *Iowa Utilities* case is irrelevant to the approach that  
6 this Tribunal should take, or is it relevant? A. What I am saying is that I looked at the  
7 main case in US telecoms where the economic arguments were put for both sides. That was  
8 what I was looking at. Indeed, I also said why it was rejected in that particular case. What I  
9 said also in my report is that ECPR has been little used in practice. I said that it had been  
10 used, and that in terms of telecoms, as I have just said, I think the best expertise in this area  
11 where it is applicable and where it is not applicable is in relation to the British experience  
12 where both OFTEL and OFCOM have said that it is not relevant in circumstances of the  
13 England and Wales water industry.

14 Q It is just that ----- A. Therefore, an extra example ---- The world is a very big place,  
15 with lots of countries in it. I should think if you went round the countries, you could find  
16 others. You may even find it has been applied in circumstances where I would not consider  
17 it applicable. But, then, lots of people do that.

18 THE PRESIDENT: Are you familiar with the *Iowa Utilities* case? A. No.

19 Q You are not.

20 MR. O'REILLY: Sir, I do not know whether this might help: the first paragraph of p.67 ----

21 THE PRESIDENT: It is going to be a matter for comment, Mr. O'Reilly.

22 MR. VAJDA: You say you are not familiar with the *Iowa Utilities* case, but you summarise it in  
23 the bracket, do you not – a re-sale of telecommunications services? A. Well, just to  
24 identify it. That is what you said, is it not?

25 Q But, sorry, this is your report I am asking about. Presumably you got that from somewhere.

26 A. Yes, I looked at it after you -----

27 Q Supposing a water company comes along in the water industry and says to an incumbent,  
28 “You get the water, process it, transport it, and deliver it to your existing customer, but I  
29 will own the retail relationship, and so I will deal with billing and things like that”. That is  
30 essentially re-sale of a finished product, is it not? A. (After a pause): I don't follow  
31 the whole of it, but I accept if you say it is, it is.

32 Q I do not want to put words in your mouth. Do you want me to repeat the question?

33 THE PRESIDENT: You are assuming a pure retail function now?

1 MR. VAJDA: Yes. Yes. (To the witness): Do you want me to ---- Shall I pose the question  
2 again, Dr. Marshall, or -----? A. That's fine. If that's what you're describing – a retail  
3 function ----- Fine.

4 Q You would then accept that would be economically similar to what was being considered in  
5 the *Iowa Utilities* case – re-sale of a finished product? A. I looked up ----

6 Q Could you just answer my question? A. No. Could I just explain, please, because I  
7 think the extent to which I understand this case is ---- I want to explain this. I looked it up  
8 simply to identify what you're dealing with. I don't know this case in detail. I actually had  
9 two hours to look at your statement before having to respond to it. So, there is no way in  
10 which I could have researched this particular case.

11 Q Just a moment. You are an expert. You are under a duty to provide impartial evidence to  
12 this Tribunal. You gave in Appendix A international and British experience, and then you  
13 deal with the ... United States telecommunications. So, plainly, you have looked at the use  
14 of ECPR in the United States to form Appendix A, did you not? A. I looked at  
15 particular places in it, yes. The main place actually.

16 Q Did you know about this case when you prepared the ---- A. No.

17 Q You did not know about the case. A. No.

18 Q No. Well, now that you know about the case, the question I am putting to you is: is that  
19 case not identical really to the example I gave you a moment ago about the water company  
20 coming along and just saying, "We will just own the retail relationship"? A. Not  
21 necessarily because you would have to look at the circumstances of the particular industry  
22 which is the distinction that OFTEL and OFCOM make. You have to look at where the  
23 competition has been established in that industry and the circumstances of the particular  
24 industry.

25 Q So, is your answer that the *Iowa Utilities* case may not be relevant in this case because it is a  
26 different industry? Is that your answer to my question? A. No. No. The issue is  
27 really whether competition has been established in that industry or not.

28 Q But I am not asking you that question. I am asking you about the analogy between the *Iowa*  
29 *Utilities* case - re-sale of a finished product where ECPR was considered appropriate and  
30 the example I gave you ---- At the moment I cannot see where the difference between those  
31 two cases is, apart from the point that you have just made which is that they are in different  
32 industries. But, what other differences are there? A. Well, it is not that it's a different  
33 industry. It's that the circumstances of the particular industry as to whether competition has  
34 been established is relevant. This is what our telecoms regulator has said repeatedly.

1 Q But I have difficulties, Dr. Marshall. A moment ago you were saying that the *Iowa Utilities*  
2 case may not be relevant because it is a different industry. Now you are saying, “Well, we  
3 need to look -----“ A. I’m sorry. If I said that I didn’t ---- I didn’t imply that. I’m  
4 saying ----

5 Q Is there a read-across between the result in the Iowa case and the hypothetical example I  
6 gave you? Yes or no? A. Well, in terms of it being a retail business, you mean?

7 Q Yes. A. In terms of whether it is applicable, there are other issues that ... yes – as  
8 OFTEL and OFCOM have.

9 Q Right. So, you would accept that when one is looking to see whether ECPR is appropriate,  
10 one needs to look at the specific characteristics of the industry. Would you agree with that?  
11 A. Yes.

12 Q Yes. Could I ask you to look at an article ---- This is an article which I think the Tribunal  
13 has. It is the Paul Grout article. I have some copies. (Handed) Am I right in thinking that  
14 you had a look at this article before you wrote your report? A. Yes, I did. I wouldn’t  
15 say I studied the whole of it, but I did look at it, yes.

16 THE PRESIDENT: This is 2003, is it? A. I looked at it in relation to margin squeeze.

17 MR. VAJDA: I think it is 2001.

18 THE PRESIDENT: Maybe it does not matter.

19 MR. VAJDA: Can I just ask the witness and the Tribunal just to read to themselves to read the  
20 first six lines on the first page, right-hand column? “There are many who are sceptical ...  
21 falsely promoted”? Then, also, p.147, again right-hand column. The paragraph beginning,  
22 “In summary, the network charge control -----“ (After a pause): So, my question for you,  
23 Dr. Marshall, is this: does this article not show that there are simply differences of views as  
24 to whether or not you can apply one pricing methodology from one industry to another?  
25 You obviously take a different view from Professor Grout, but that is ----

26 THE PRESIDENT: Shall we do it in stages? Shall we look at the first six lines on the first page  
27 first, and see whether the witness agrees with that?

28 MR. VAJDA: Yes. I am grateful to the President. (To the witness): Do you agree with what  
29 Paul Grout says there?

30 THE PRESIDENT: The sentence beginning, “There are many who are sceptical?” A. I  
31 said this morning, I don’t agree with that. But, I dare say many are sceptical, but I’m not  
32 sceptical myself.

33 THE PRESIDENT: Then we go through to p.147. As I have understood it, is he saying there  
34 that pricing strategies deliberate promote entry as, according to him, had been used in the

1 telecommunications example, are, according to him, not necessarily transposable to water.

2 Is that a fair way of putting it?

3 MR. VAJDA: Yes, that is a fair way. I am very grateful, sir. (To the witness): Do you agree  
4 with that – the way that the President has just summarised the ----? A. I don't agree in  
5 relation to the word 'network' ---- that these network charges are calculated because what  
6 OFWAT did in this respect is that they calculated the ... for costs, and then they had a  
7 mark-up principle to cover the total costs. So, I don't actually see that that is particularly a  
8 way of promoting competition. It was a way of ensuring, indeed, that the total costs were  
9 recovered, and not jut the marginal costs.

10 Q Yes. But, I think the point that Paul Grout is making here is that you cannot, as it were,  
11 simply read across from telecommunications to water and I would like your evidence in  
12 relation to what he says there. Do you agree with him – that you cannot necessarily read  
13 across from telecommunications to water? A. Well, in what respect? I have said that  
14 in telecommunications ---- I think that water is capable of being a competitive market, and  
15 that is what Parliament suggests, and that the machinery for promoting competition ----  
16 Well, that is what the regulator's job is anyway. In terms of the access charge that was  
17 calculated for the network by OFTEL in the mid-1990s ---- As I say, that was not actually a  
18 charge that subsidised an entrant in anyway – it was actually based on ----

19 Q You are against subsidising the new entrant, are you not? A. In terms of access, yes, I  
20 am. That was not a subsidised approach. It does not actually say it here, but presumably  
21 Professor Grout was suggesting there should be a harsher regime than OFTEL used.

22 Q I think all he is saying is that you cannot necessary have a read-across, and what I am  
23 interested in is whether your evidence is that you can have a read-across. A. I think in  
24 this case in terms of the network ---- This is a case were OFTEL said, "ECPR isn't  
25 appropriate because competition hasn't been established". This is the case ----

26 Q One of the things he says is that in an industry – that is, I think, the telecommunications  
27 industry – where it was anticipated that there would be an enormous degree of competition -  
28 --- Now, pausing there, would you agree with his observation about the  
29 telecommunications industry as being one where there would be an enormous degree of  
30 competition? A. Well, the issue here ----

31 Q Could you answer my question, please? A. Would I agree that there was potentially a  
32 lot of competition in telecoms?

33 Q The certainty, he says, is an industry where it was anticipated that there would be an  
34 enormous degree of competition, then one can see how a regulator with duties that include

1 promoting the interests of consumers in respect of price, quality ... of telecommunication,  
2 and promote effective competition would be attractive to an MRIC model that positively  
3 enhances competitors” ---- Just pausing there, is that a description of the  
4 telecommunications industry that you would agree with? Or, do you disagree with it?

5 A. That there is a lot, and that you should therefore apply this rule?

6 THE PRESIDENT: That is the suggestion. He is saying that it is understandable that ---- Put me  
7 right if I am not following ---- I am just struggling to understand it myself. He is saying ----  
8 Professor Grout is apparently saying that in telecoms there was an expectation that there  
9 could be a lot of competition so that therefore a rule which encouraged competitors was a  
10 correct rule for telecoms ----

11 MR. VAJDA: Absolutely.

12 THE PRESIDENT: He then, apparently – and the first question is whether you agree with that --  
13 --

14 MR. VAJDA: Yes.

15 THE PRESIDENT: He then goes on to express a doubt as to whether that sort of scenario could  
16 really happen in water, and therefore whether a similar approach in water would be a good  
17 approach for water?

18 MR. VAJDA: I think the President has asked three questions, if you could answer them, as it  
19 were, the way the President has put it very helpfully? A. Yes. I do not agree with what  
20 Professor Grout is saying here, because it strikes me that if there was going to be a lot of  
21 competition in the industry such that there will be a lot of entry anyway, then you could  
22 actually have a harsher access pricing regime where you could still get entry. It seems to be  
23 the wrong way around. But if there is an industry, such as water, which Professor Grout  
24 considers hard to enter, but the Government wants the regulator to promote entry then that  
25 would be the situation, but one would have a laxer regime.

26 Q Can I just understand your evidence, is what you are saying that ECPR is inappropriate for  
27 the water industry because entry is harder than the telecommunications’ industry. Is that  
28 your evidence? A. I am saying that the barriers to entry at the moment are such that it is  
29 difficult to enter the water industry.

30 Q So it is a different industry from the telecommunications’ industry? A. Yes, there are big  
31 barriers to entry.

32 Q So does that mean that one accepts the lessons in the telecommunications industry or one  
33 looks specifically to the water industry? A. I think you can take both, because the issue

1 in terms of the ECPR and not in telecoms, was whether competition had been established at  
2 that time and it had not been at that time. It was in prospect, it was not there at the time.

3 Q You say that the issue is whether competition was established, but was that the issue in the  
4 *Iowa Utilities* case on the resale of finished products and telecommunications industry?

5 A. I don't, I told you that.

6 Q So you are simply there, when you are talking about competition in the establishment,  
7 simply talking about the position of the British Regulator in the British ---- A. Yes.

8 Q Yes, I see. Let me put something to you to see whether you agree or disagree. Would the  
9 rate of return that you would have expected to earn in industry, would that be relevant to  
10 whether or not it would facilitate competition? If an industry was highly profitable with  
11 high rates of return, would that make it more or less likely that there was entry? A. If you  
12 unbundled the competitive bits from the pipeline then the rate of return ----

13 Q I am not asking a question about the water industry, Dr. Marshall. I would appreciate it if  
14 you actually answered the questions I ask you. Do you want me to ask the question again?

15 A. If you wish?

16 Q The question was, if you have an industry where there are high rates of return, is that feature  
17 – the facts of the high rates of return, is that likely to encourage or discourage entry? A.  
18 High profits?

19 Q Yes high rates of return? A. High profits would encourage entry.

20 Q Yes, and if you have an industry where rates of return are modest, considerably more  
21 modest than the industry I have just described, what effect would that have on competition?  
22 Is that going to make entry more or less likely? A. There would be less headroom, and  
23 therefore it is likely to be less.

24 Q Yes. Thank you very much.

25 THE PRESIDENT: Yes, Mr. O'Reilly?

26 Re-examined by Mr. O'REILLY:

27 Q Just one question, Dr. Marshall. Right at the outset you were asked about the sources of  
28 your information. Can I perhaps ask you to have a quick turn up of annex 2 of your first  
29 report, and annex 3. Annex 2 is your letter of instruction, p.3 of that letter sets out the  
30 summary of your brief. Do you have that? A. Yes.

31 Q You have three items there and the final paragraph on the page is:

32 "We have supplied you with a series of papers provided by [the Authority] which  
33 may serve as the starting point for your investigation."

34 Annex 3 is a list of documents. Did you receive those documents? A. Yes.

1 Q At p.46 of your first report, the first paragraph, the final sentence:  
2 “The information in this section has been provided to me by Aquavita, taken from  
3 published data.” Did Aquavita provide you with that information as you say? A. Yes.

4 Q When you were asked the question you were being asked about barriers to entry and the  
5 reference is at p.39 of your first statement, and there is a cross-heading in italics: “*Barriers*  
6 *to entry and the additional entry barriers that ECPR creates*”. You will see there is a  
7 reference to “50 megalitres a year” – do you see that? A. Yes.

8 Q Where did you get that figure from? A. From the DEFRA report.

9 Q And there is a footnote number 26, almost in the centre of that paragraph, down to DEFRA,  
10 did you read that report? A. Yes.

11 Q In your opinion, is there anything in this report where you have based your opinions on a  
12 fact that you have not referenced in this document? A. No.

13 Q Thank you. No further questions, Sir.

14 THE PRESIDENT: Thank you, Dr. Marshall. Thank you very much, both for your reports and  
15 for your evidence in the witness box. I am sorry, Dr. Marshall, that was completely  
16 premature of me because Professor Pickering may have one or two points he wants to raise.

17 PROFESSOR PICKERING: There are a few points. Dr. Marshall, you probably heard me put  
18 this morning to Professor Armstrong, the interpretation that there were alternative ways of  
19 deriving an access price using ECPR, either retail minus or cost plus. Was I correct in that  
20 belief, the cost plus being opportunity costs plus incremental costs, to give the price? A.  
21 Yes, you can do it that way.

22 Q Would it lead to the same price? A. In certain circumstances it should do.

23 Q It should do. But would you expect that it would in a practical situation? A. If you  
24 started with the cost of the network and you took that price control as given, then you  
25 calculated a price control for the competitive part of the business, you added those together  
26 to get a total retail price, then you could get to the situation where you would take away  
27 from that retail price the allowance you had for the retail business – the supply business –  
28 and you would get a cost based approach back to the network.

29 Q Is ECPR really a means of price determination or a means by which one might test the  
30 appropriateness of a price? A. Well in my view it is price determination which is the  
31 discussion – the written discussion – I had with Professor Armstrong, that I consider it is  
32 very different from, for example, the exercise that I undertook to determine whether British  
33 Gas’s prices were predatory when they priced down in a competitive market, because that is

1 a snapshot and you are not holding those prices at that particular level, so I considered them  
2 to be quite distinct.

3 Q Now, Professor Armstrong said this morning – I hope I got it down correctly – that there is  
4 no reason to think that retail prices should reflect actual costs, the level of the retail price  
5 does not matter I think was what he was saying, but only the avoided cost. Would you go  
6 along with that? A. In competitive markets?

7 Q Well and in relation to the sort of markets that we are talking about here? A. Again, I  
8 tried to set this out again in my second report, where I would not expect it would be held at  
9 that level for a long duration, especially if it did not cover the total costs of the industry,  
10 because people would exit if they were not covering total costs.

11 Q The Ashgrove system itself I do not suppose that you have been to see it, but you have seen  
12 diagrammatic representation of it. I think there was one in our interim Judgment, for  
13 example. It is really rather an independent system, is it not? I hesitate to use the word  
14 “stand-alone”, but it is something where the water comes in, it goes through a dedicated  
15 treatment and piping process and ends up with two customers. The fact that it is essentially  
16 independent of the rest of Dŵr Cymru’s network, does that have any bearing on the way in  
17 which we or the company or a potential entrant might see the situation, do you feel? A. I  
18 have not studied the Ashgrove ----

19 Q Okay. A. I think to the extent that it was short and discrete then I think one issue that  
20 could possibly arise, well two issues: one, whether you can bypass that system by another  
21 system; and secondly, whether or not if you have average charges there is some  
22 discrimination in that particular price, because it is short. Therefore, a new entrant may  
23 advise on bypass, or it may advise on disputing the basis of the charge.

24 Q The final aspect that I would just like to explore with you, is about the effect of price on  
25 industrial demand for, well, let us say non-potable water. It would seem to me that the  
26 implicit assumption is that the price elasticity of demand for such water is zero. In other  
27 words, the quantity that the large customers will take is not influenced by price. Am I  
28 interpreting it correctly and, if so, is that in your view and experience likely to be valid?

29 A. Well in a situation where a demand is completely unresponsive to price is quite unique,  
30 so it is not likely to happen. I think that is not – I had better not go on.

31 Q So, could pricing of water, especially where water is perhaps a significant input into a  
32 production process, could the level of price affect the industrial performance of customer  
33 firms? A. It certainly could, yes – as can all utilities.

34 PROFESSOR PICKERING: Thank you very much.

1 THE PRESIDENT: Thank you very much, Dr. Marshall.

2 MR. O'REILLY: Could I ask for the witness to be released if she wishes.

3 THE PRESIDENT: Yes. (To the witness) You are not required to stay if you have better things to  
4 do, as I am sure you have.

5 (The witness withdrew)

6 THE PRESIDENT: That, I think, probably completes the evidence at this stage, Mr. Vajda, and I  
7 think we had thought you might take us through some of this price setting stuff now.

8 MR. VAJDA: I have three housekeeping things. First, the final determination. Secondly, perhaps  
9 if I could give it to the Tribunal before I forget – everybody else has a copy – these are the  
10 asset balances, this is where the debt came in in relation to the Ashgrove treatment system.  
11 The questions that Professor Pickering ----

12 THE PRESIDENT: We had some stuff about this over the weekend or this morning?

13 MR. VAJDA: This is simply a document. This is to replace what has become known on this side  
14 of the Bar as the “Snow Letter”, and I will explain that in a moment.

15 THE PRESIDENT: These are better copies of what we have seen already.

16 MR. VAJDA: Precisely.

17 THE PRESIDENT: That is very helpful, yes.

18 MR. VAJDA: Just so that I can explain. Does the Tribunal have Mr. Jones’ third witness  
19 statement?

20 THE PRESIDENT: Yes.

21 MR. VAJDA: If you go to CAJ-1 I think there is some urgency been pressed on my clients to get  
22 something out by the 1<sup>st</sup> March. CAJ-1 begins, this is a letter to Dr. Bryan: “As you may be  
23 aware there is a great deal of snow ...”

24 THE PRESIDENT: Yes, we do remember this letter, yes.

25 MR. VAJDA: Unfortunately, in a sense the casualty of the snow were these tables, because if you  
26 go over you will see there is a fax – and in fact not only is it a fax, it is a fax of a fax – and  
27 in particular if one goes to the second table where one sees “Ashgrove new debt” which  
28 was I think a figure – I think this was something that came up in the evidence, and although  
29 it looks on the fax that it is 1957, in fact the original is 1987. So that is what we are simply  
30 doing, replacing this.

31 THE PRESIDENT: I see.

32 MR. VAJDA: This was found at the weekend by my clients. If this could simply replace what is  
33 in the Tribunal’s bundle, that is the only significance of this. This is the closest we have got  
34 to an original.

1 THE PRESIDENT: Yes.

2 MR. VAJDA: We apologise.

3 THE PRESIDENT: No, not at all.

4 MR. VAJDA: Can I then do my best to take the Tribunal through this document?

5 THE PRESIDENT: Yes.

6 MR. VAJDA: If there is something outstanding then we can obviously try and rectify that. Does  
7 the Tribunal have copies of the document?

8 THE PRESIDENT: I have “Future water and sewerage charges 2005 – 2010 final determination.”

9 MR. VAJDA: What I would like to do – in a sense – if one just has a look at the table of contents.  
10 I would like to start in Chapter 14, which is revenue, which is p.211. What the Authority  
11 does then, this is in terms of the revenue calculations, and we see at p.211 – and we will  
12 come to this in a moment – that there were effectively forecasts of revenue given by the  
13 companies and then there were OFWAT forecasts which differ, but not by very much. You  
14 will see in the second bullet “Companies’ forecast a broadly stable revenue base, with the  
15 upward influence of a growing customer base offset by the downward impact of increasing  
16 metering.”

17 Then 3 “We have assumed that price movements for large users will be related to those  
18 experienced by tariff basket customers. Where our view of price increases are lower than a  
19 company’s we have adjusted forecast large user prices to reflect this.”

20 Then if we go to the bottom of that page – table 41, over the page shows the forecasts of the  
21 industry based revenue which were used in setting price limits. “These forecasts are shown  
22 on a “K = 0” and that is the ‘K’ Factor. “Price limits are then calculated to be the change  
23 required in the base revenue forecast so that companies can recover sufficient revenue to  
24 finance their functions”. Then, if we go over the page – and this is, I think, done on an  
25 across-industry basis – you see the industry forecast for 2004/05, and then you have  
26 household revenues, non-household revenues, and that would include the large non-potable  
27 customers total tariff, total non-tariff, total revenues. Then, as I understand it, what  
28 OFWAT did ---

29 THE PRESIDENT: Surely, the large non-potable customers are in the last of those figures.

30 MR. VAJDA: Yes, I beg your pardon. The non-tariff, yes. OFWAT then produces its own  
31 table, which I think the discrepancy is because it is on a five year basis whereas the  
32 company’s is on a one year basis. In fact, OFWAT, itself, at Table 42, sets out the  
33 differences between our forecast of base revenue, and the forecast in the company’s plans in  
34 aggregate. The differences are not large, but this masks a more mixed picture at company

1 level where a challenge to companies' figures range from up to 2.1 percent of turnover.

2 Then, if we go over the page, sir, to p.214 ----

3 THE PRESIDENT: Let me see if we have followed it: in Table 41, under 'Industry-based  
4 revenues for non-tariff basket revenues for water service – 2004/05' we have got a figure of  
5 285.

6 MR. VAJDA: Yes.

7 THE PRESIDENT: In Table 42 on the five year annual average basis we have got a figure of  
8 296 from the companies' business plans, and 298 in the final determination on the basis of  
9 an annual average over the five years.

10 MR. VAJDA: Yes, for water.

11 THE PRESIDENT: So, it is slightly higher, but the same sort of figure.

12 MR. VAJDA: Yes.

13 PROFESSOR PICKERING: I am sorry. Is this in constant prices or in current prices?

14 MR. VAJDA: Perhaps I can leave Mr. Anderson to ---- Can I just continue through this, and  
15 perhaps ---- (After a pause): We will give you the answer in a moment? (After a pause)  
16 Can I go over the page to p.214 where OFWAT then explain the non-tariff basket revenues  
17 where the people like Shotton would appear.

18 "Non-tariff basket revenues is mainly generated from large users. These customers have a  
19 large water consumption that allows them to choose their supplier, so their charges are not  
20 subject to price limits. Forecasts of non-tariff basket revenue are important in price setting  
21 because they are deducted from the total revenue requirement for tariff basket customers.  
22 Lower expectations about non-tariff basket revenue will lead to higher price limits for tariff  
23 basket charges, and vice versa."

24 Then if we drop down a paragraph: "Many companies have forecast that non-tariff basket  
25 revenues will decline due to lower demand and industrial change. We have assessed the  
26 evidence presented by companies and made challenges where this was not robust or was  
27 inconsistent with established trends. We also assessed companies' assumptions about non-  
28 tariff basket charges to ensure that prices charged were similar for all customers. A  
29 majority of companies agreed with our view that price changes should be similar for all  
30 customers, unless bill changes were being driven by facts that are not relevant to large users.  
31 We therefore expect that non-tariff basket customers should also face price increases. We  
32 have only allowed future re-balancing between tariff basket and non-tariff basket customers  
33 where evidence supports a compelling case based on improvement in cost-reflective  
34 charging. A number of companies argued in their representations on our draft

1 determinations that price increases should be lower for non-tariff basket customers. These  
2 companies argued that the costs of serving non-tariff basket customers will increase much  
3 more slowly than those for households and other tariff basket customers. Our assessment of  
4 the evidence put forward, however, supported only a much smaller difference between the  
5 price changes for tariff basket and non-tariff basket customers. Therefore we have assumed  
6 that non-tariff basket customers for potable water will face price increases of at least three-  
7 quarters of those applied through RPI plus K to tariff basket customers”.

8 We can then look to see how that actually applied in the case of Dwr Cymru, and if we go  
9 back in this report ----

10 THE PRESIDENT: That is, customers for potable water there? Non-tariff basket customers for  
11 potable water?

12 MR. VAJDA: Yes. If we go to p.68, I think this deals with Dwr Cymru. What you see there is  
13 effectively Dwr Cymru’s approach, and then WaterVoice Wales’ comments on the draft  
14 determination. Then you have the OFWAT analysis, as we see on p.69, of what is driving  
15 the changes in bills. This is 2004/05. We see that at the level of Dwr Cymru, if one looks  
16 at 3(a) - changes in revenue – as I understand it, because there is, in that case, a loss of  
17 revenue from the non-tariff customers, that is going to be reflected in the household bill.  
18 But, Dwr Cymru, in fact, appears to be the exception to the rule generally because if we  
19 look at the industry generally – and we go to p.32 – we will see in the heading ‘Revenue’ ---  
20 -

21 “At a price review, our assumption about future revenues take account of what has actually  
22 happened to each customer’s customer base over the past five years. The starting point for  
23 our assumptions is the companies’ current revenue base, which incorporates the number of  
24 customers they currently supply and the level of income they receive from them .

25 companies are now receiving more revenue than we forecast when we set price limits in  
26 1999, and this allows for bills to be adjusted downwards.

27 “At an industry level, companies have collected slightly more revenue than we assumed in  
28 the price limits set in 1999”. We see one of the reasons for that is the larger number of new  
29 customers connecting than expected.

30 If we go to p.11 then, this is, as I understand, a similar picture. This is not at the Dwr  
31 Cymru level, but at the level of the industry as a whole. We see there that because of the  
32 increases in revenue you have got six which, in effect ---- The six is in brackets, so that  
33 comes off the householder’s bill, whereas in the Dwr Cymru figure we saw that it was £10  
34 which was going to have to be added on. Here it is £6 that is going to be taken off.

1 If I could answer Professor Pickering's point, I have been told that the answer to that is at  
2 p.4. I do not know if that is what Professor Pickering was ----

3 PROFESSOR PICKERING: That is projecting then some volume of growth in the non-tariff  
4 basket activity. Thank you.

5 MR. VAJDA: I think possibly the last page that may be of assistance to the Tribunal, which  
6 shows what I have tried to show in diagrams at p.62 ---- It puts in diagrammatic form what  
7 I have sought to explain. Importantly, I think the President asked, "What was the revenue  
8 requirement?" and we see that that is dealt with in the last sentence of the first paragraph:  
9 "The sum of these costs is called the revenue requirement – that is, the revenue that will be  
10 required to finance the operating expenditure and capital investment programme". That is  
11 why it is called the revenue requirement.

12 THE PRESIDENT: That is very helpful, Mr. Vajda. Thank you very much. Can I just ask one  
13 question: this is over the period 2005/2010.

14 MR. VAJDA: Yes.

15 THE PRESIDENT: Is there any discussion in the document ---- or, perhaps you can point us to  
16 any discussion in the document on the effect over that period of the coming into force of the  
17 Water Act 2003?

18 MR. VAJDA: I am not aware of it, but no doubt ---- I am told that there are.

19 THE PRESIDENT: It would be very helpful just to have somebody feed us the cross-references  
20 at some point.

21 MR. VAJDA: While I am on my feet – and I say this in a non-contentious way, because I have  
22 had a word with Mr. Thompson – we are still waiting for the amendment to the pleading.  
23 Mr. Thompson has indicated that he is working on it. It is just to flag up that we would like  
24 to have that before he starts tomorrow morning. Perhaps I can use the Tribunal, as it were,  
25 to lean gently on Mr. Thompson in that respect. We do not want that, as it were, to slip  
26 through the crack.

27 THE PRESIDENT: Where are we generally? Mr. Thompson, we are going to proceed to  
28 speeches in the morning – is that the agreed approach?

29 MR. THOMPSON: I think that is right. I think that is probably going to be the most orderly  
30 way forward given that there is quite a lot of material. I would obviously prefer to start in  
31 the morning.

32 THE PRESIDENT: We would probably like the chance to collect our thoughts as well.

33 MR. THOMPSON: In relation to the pleading, it is not necessarily going to be a completely  
34 comprehensive re-writing to take account of everything that has happened in the last two

1 years since the original pleading was drafted. But, I hope it will meet Mr. Vajda's  
2 requirements.

3 THE PRESIDENT: If that is the end of proceedings for today, can I just say something about  
4 the issue that is not in this hearing? According to our indications at the last case  
5 management conference – which is the question of dominance –to which we have been  
6 giving a certain amount of thought, I think our approach so far has been a very, I hope,  
7 cautious one and that we have not yet reached the stage where we know whether or not that  
8 is an issue we need to decide and/or we know whether or not this is a case in which the  
9 Tribunal should consider taking its own decision or not, or what would be the most  
10 convenient and just cause in the circumstances.

11 However, as far as we can see at the moment there may come a stage where we cannot  
12 necessarily rule out the possibility that we might want to take a view on that issue – subject,  
13 or course, to hearing arguments as to whether we should, or not. But, the practical question  
14 that arises is: are there further matters of evidence on that point, or other points relevant to  
15 dominance that we have not got, in relation to which the parties might wish to provide some  
16 further evidence beyond that that we have got at the moment. Very provisionally, just to  
17 allow you to think about it overnight, what we thought we would try to do at the end of the  
18 submissions is to reach a provisional view as to whether we would like to invite further  
19 evidence on the dominance issue without prejudice to the question of whether we were  
20 going to decide the dominance issue, and, if so, what procedural framework we would adopt  
21 for doing that. I think that is, in very provisional terms, roughly speaking, the state of our  
22 present thinking on that issue. I have just taken this opportunity to reflect that in case  
23 anybody wants to come back on that at whatever suitable point they feel it is appropriate to  
24 come back on, that is our state of mind at the moment. So subject to that and any other  
25 points that arise we will start tomorrow morning at 10.30 on the submissions in this case.

26 MR. VAJDA: Could I just say this, my clients are obviously very concerned that when I make  
27 my oral presentation I am actually focusing, in a sense, the issues that trouble the Tribunal  
28 and of course given that we have a limited period ----

29 THE PRESIDENT: Yes, we are not focusing on any other issue.

30 MR. VAJDA: No, no, no, but in relation not the evidence and so on that we have heard this and  
31 last week, there is a particular point or points that are troubling the Tribunal I would be  
32 grateful – as I say in relation to the matter that has been dealt with in evidence I will  
33 obviously try ----

1 THE PRESIDENT: You mean if there is a particular point we would like you to concentrate on  
2 on the issues that we have got at the moment?

3 MR. VAJDA: On the issues, yes, because obviously there are a whole host of issues here and I  
4 obviously I have half a day and I will have to make a judgment call as to what to address the  
5 Tribunal on, but if there are one or two points where you say “We are not very happy with  
6 this” it would plainly be of assistance to me to try and meet those rather than going off on  
7 something which the Tribunal thinks is in the bag or whatever.

8 THE PRESIDENT: No, we do our best, Mr. Vajda, to try to help the parties in this respect and all  
9 I can say is that we will do what we can, but there is a great mass of stuff and I am not sure  
10 we have really focused yet on the critical point.

11 MR. VAJDA: Obviously I will take my own course, but if overnight, or as a result of Mr.  
12 Thompson’s address the Tribunal thinks we would really like to hear from Mr. Vajda on X  
13 or Y it would obviously assist me ----

14 THE PRESIDENT: This is speaking very subjectively and very personally and very  
15 provisionally, I think there is one issue that we will need a bit of help on, which you have  
16 described from time to time as a question of law, which is this whole approach to what has  
17 become called “stand-alone costs”, what we mean by that and how it works in this context,  
18 and whether it is an appropriate approach in this context.

19 MR. VAJDA: I am grateful. That was in fact one of the points that I was going to focus on in  
20 any case and I can see ----

21 THE PRESIDENT: That was one?

22 MR. VAJDA: Yes, because I know that is a point that has certainly been troubling the President –  
23 I say ‘troubling’, it is an issue.

24 THE PRESIDENT: Well I think it is a point upon which maximum clarity from which ever  
25 direction is going to help all of us.

26 MR. VAJDA: I am very grateful.

27 (The Tribunal confer)

28 THE PRESIDENT: The point that Mr. Lewis is making, and it is partly that it is a point upon  
29 which we had submissions last summer, and it is partly a point on which we had  
30 submissions before there was a change of team in the Dŵr Cymru case, that if there are  
31 points of emphasis that people want to make on the construction of s.66(e) of the Act, just  
32 so that it is fresh in our minds, in case we have missed something, that is another point that  
33 it would probably be useful just to look at, to see if there is anything you want to add. In  
34 some respects it is indirectly relevant because of the link made in the Decision between the

1 costs' principle and the section and how it works and all the rest of it. Of course, I suppose  
2 the other point to bear in mind is that we are at the end of the day deciding on this Decision  
3 and not on a wide range of other very interesting things that we might, at some stage in  
4 another context find it interesting to go into.

5 MR. VAJDA: I am grateful.

6 THE PRESIDENT: That is all we have in mind immediately.

7 MR. ANDERSON: If I could say something very quickly on that last point, on s.66(e) ----

8 THE PRESIDENT: Just a moment, Mr. Anderson.

9 (The Tribunal confer)

10 THE PRESIDENT: Yes, Mr. Anderson?

11 MR. ANDERSON: Simply this, it was not currently my proposal to say anything more on  
12 s.66(e). I expect that I will be on my feet tomorrow, so if there is any particular point on  
13 s.66(e) that is troubling Mr. Lewis on which you would like to hear from me I really need to  
14 know today, otherwise I was just proposing to rely on what we have already said.

15 THE PRESIDENT: I think the point that is concerning Mr. Lewis is that in the event that in our  
16 judgment we felt that we needed to form a view on the construction of s.66(e) we would just  
17 like to be certain that the submissions that we had on that last time, which we have still got  
18 and which we have refreshed our memories about and are in the transcript, remain  
19 comprehensive from the point of view of the various parties and, as far as they are  
20 concerned, sufficient for that purpose, but if they would like to add something about it or  
21 emphasise some particular point then we are very happy to listen, since it is a while ago  
22 since we heard the argument.

23 MR. ANDERSON: I understand fully. I remember it was quite a complicated debate at the time  
24 about primary and secondary undertakings and all the rest of it.

25 THE PRESIDENT: And all sorts of things.

26 MR. ANDERSON: We will look at this again.

27 THE PRESIDENT: That is very kind. Very well, we will say 10.30 tomorrow morning. Thank  
28 you very much.

29 (Adjourned until 10.30 a.m. on Tuesday, 6<sup>th</sup> June 2006)