Neutral citation [2006] CAT 23

IN THE COMPETITION APPEAL TRIBUNAL

Case No: 1046/2/4/04

Victoria House
Bloomsbury Place
London WC1A 2EB

6 October 2006

Before:

Sir Christopher Bellamy (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 DIRECTOR GENERAL OF WATER SERVICES)

Respondent

supported by

(1) DŴR CYMRU CYFYNGEDIG

and

(2) UNITED UTILITIES WATER PLC

Interveners

JUDGMENT
(ABRIDGED VERSION)

Note: this abridged version of the judgment is identical to the full version, save for the omission of sections I, IV, VI, VII and X, and Annex A.

APPEARANCES

Dr Jeremy Bryan, Managing Director of Albion Water Limited, and subsequently Rhodri Thompson QC and John O'Flaherty appeared on behalf of the appellant, Albion Water Limited.

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

Rupert Anderson QC and Valentina Sloane (instructed by the Director of Legal Services, OFWAT) appeared on behalf of the respondent.

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

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

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[Omitted]

II INTRODUCTION

62. This judgment follows the Tribunal's interim judgment of 22 December 2005 [2005] CAT 40. We repeat, where relevant, parts of the text of the interim judgment so that the reader may find, in one document, the essential facts and circumstances. Since the interim judgment we have received a large quantity of additional evidence and submissions. This judgment replaces the interim judgment except as regards the issues determined in that judgment.

63. We are extremely grateful to all the parties for their assistance and co-operation. We are particularly grateful to Dr Jeremy Bryan, Albion's Managing Director, and to Mr Christopher Jones, Finance Director of Dŵr Cymru, upon whom the evidential burden principally fell. We are also grateful to Professor Mark Armstrong and Dr Eileen Marshall CBE who gave clear and helpful expert evidence on some of the economic issues raised, and to Mr Paul Hope, Head of Tariffs at Ofwat, for his evidence. We recognise that the Decision in issue is clearly written and that a great deal of work went into it.

64. It is important to emphasise that the context of this case is *non-potable* supply to the largest industrial customers in Dŵr Cymru's appointed area. We are concerned only with the legal and factual issues that arise in that specific context.

65. Albion has drawn to our attention what it contends to be widespread public concern about allegedly high profits, supply shortages, excessive leakage rates, and lack of competition in the water industry in England and Wales. We emphasise, however, that we are concerned only with the facts and circumstances of the instant case.

The main participants

66. Albion was granted by the Director what is known as an "inset appointment" pursuant to section 7(5), as amended, of the WIA91 on 1 May 1999. That appointment entitles Albion to supply water within the area referred to in the appointment. In Albion's case the area in question covers, in effect, the premises of Shotton Paper in North Wales. We understand that Albion is the only new entrant into the market by way of an inset appointment since the privatisation of the water industry in England and Wales in 1989.

67. At the time of its inset appointment Albion was the wholly-owned subsidiary of Enviro-Logic Limited ("Enviro-Logic") which, in turn, was 50% owned by Pennon Group plc ("Pennon") and 50% by individuals including Dr Jeremy Bryan, the Managing Director of Albion, under a joint venture agreement. Pennon is the holding company of South West Water Limited, a statutory water and sewerage undertaker serving Devon, Cornwall and adjacent areas. In 2003 Pennon acquired 100% of the shares in Enviro-Logic, which changed its name to Peninsula Water. On 19 February 2004 Waterlevel Limited, a new company set up by Dr Bryan, acquired Albion from Pennon.

68. Shotton Paper is a paper mill established in 1985 on Deeside. It is owned by UPM-Kymmene (UK) Limited ("UPM"). UPM is part of a publicly quoted Finnish group operating worldwide. Shotton Paper produces newsprint and, according to the Decision, uses an average of approximately 6,600Ml[1] of non-potable water in its production process annually. The plant is apparently one of the largest plants of its kind in Europe. This case concerns the supply of non-potable water to Shotton Paper for paper making.

69. To get some idea of the order of magnitude, Albion told us that the volume of water consumed by Shotton Paper is equivalent to the consumption of about 35-40,000 domestic customers, i.e. a medium-sized town. In broad terms Shotton Paper pays

[1] The unit is a megalitre. One megalitre is 1000 cubic metres or 1,000,000 litres and is equivalent to approximately 220,000 gallons.

Albion about £1.7 million per annum for supply of the water in question. A difference of 1p/m³ in the common carriage price paid by Albion to Dŵr Cymru represents revenue of approximately £66,000 per annum.

70. Dŵr Cymru is a statutory undertaker providing water and sewerage services in Wales and some adjoining areas of England, which took on the functions of the previous Welsh Water Authority at the time of privatisation in 1989. Dŵr Cymru is ultimately owned by Glas Cymru Cyfyngedig, a not-for-profit company limited by guarantee which was established some years ago for the specific purpose of acquiring and owning Dŵr Cymru. In 2002/2003 Dŵr Cymru's total turnover was some £457 million, divided approximately equally between water and sewerage services.

71. United Utilities Water plc ("United Utilities") is a statutory undertaker providing water and sewerage services to customers in North-West England. Pursuant to Heads of Agreement dated 10 May 1994, Dŵr Cymru purchases a "bulk supply" of water from United Utilities, for onward sale to Dŵr Cymru customers via the Ashgrove system. This agreement is referred to in the Decision as the "First Bulk Supply Agreement".

History of the Ashgrove system

72. The Ashgrove system was constructed in the 1950s by Birkenhead Corporation, a predecessor of North West Water, now United Utilities. Essentially, the water is abstracted from the River Dee at Heronbridge, and then pumped to the Ashgrove water treatment plant. From there the water descends by gravity through the Ashgrove pipeline which covers a distance of some 15 kilometres as the crow flies. We have been given various different figures for the exact length of the pipeline – a somewhat basic point – but it appears to be between 15.0km and 16.5km. Dŵr Cymru's letter to the Tribunal of 20 March 2006 states a length of 15.7km but Mr Jones' second witness statement of 20 February 2006 states a length of 16.5km. The Decision (paragraph 157) assumes that the length is no more than 15 kilometres, but that is inconsistent with Mr Jones' evidence. The pipe splits in half at one point to go under the River Dee. Although it was earlier assumed that the pipeline is a 600mm diameter pipe, the pipe is predominantly 700mm in diameter, according to Mr Jones.

73. When originally constructed, the Ashgrove pipeline supplied non-potable water to a water treatment works at Sealand, which is on what is now the Shotton Paper site. At Sealand the water was treated to a potable standard for onward supply to consumers. At the same time the Ashgrove pipeline also supplied non-potable water to the neighbouring steelworks owned by British Steel, Corus' predecessor, and to a third customer no longer in business.

74. Shotton Paper sought a non-potable water supply from North West Water in 1984. Around the same time, North West Water decided that it no longer needed to supply potable water from the Sealand treatment works, so the Sealand plant was decommissioned and the site sold to Shotton Paper. Since the late 1980s the Ashgrove system has been used to supply non-potable water to Shotton Paper and to Corus[2].

75. The Ashgrove system (but not the Heronbridge pumping station) was transferred from North West Water to the Welsh Water Authority, Dŵr Cymru's predecessor, in about 1986, shortly prior to privatisation. It does not appear that there was any consideration for this transfer, except that the Welsh Water Authority took over an outstanding debt of some £165,000. North West Water, as we have said, is now part of United Utilities.

The present situation

76. The water intended for the Ashgrove system is abstracted from the River Dee by United Utilities at the Heronbridge pumping station. At a water meter a short distance from the pumping station, the water passes into the Dŵr Cymru supply area, from where it is pumped a short way to the Ashgrove water treatment plant. The price paid by Dŵr Cymru to United Utilities is governed by the First Bulk Supply Agreement, mentioned above, which we are told contains a cost-sharing formula. According to United Utilities, the price paid by Dŵr Cymru under this formula does not cover United Utilities' costs. Dŵr Cymru takes about 20 per cent of the water abstracted at Heronbridge[3].

[2] Corus is also in dispute with Dŵr Cymru as to the latter's charges, on grounds which include those raised by Albion in the present case: see the judgment of Hart J in *Dŵr Cymru Cyfyngedig v Corus UK Limited* [2006] EWHC 1183 (Civ) 26 May 2006.
[3] The balance of the water abstracted at Heronbridge is used by United Utilities to supply its customers in the Wirral and elsewhere.

77. At the Ashgrove water treatment plant aluminium sulphate is added to the water, which then passes through sedimentation tanks called clarifiers. The various solids and particulates in the water react with the aluminium sulphate and coagulate to form a "sludge blanket" within each clarifier. This blanket effectively acts as a filter. As the water passes through each sludge blanket, the solids and particulates are progressively filtered out into the sludge, which is periodically removed. According to Albion, the main purpose of this treatment is to reduce the risk of sedimentation in the Ashgrove pipeline through which the water subsequently flows.

78. There is no agreed description of the quality of the water leaving the Ashgrove treatment works. Albion contends that the treatment process is relatively simple, equivalent to no more than the use of a reservoir where solids and particulates settle on the bottom. According to Albion, the resulting water quality is of the lowest recognised grade, and Albion's supply agreement with Shotton Paper requires no particular quality. The bulk supply agreement between Albion Water and Dŵr Cymru dated 10 March 1999, referred to in the Decision as the "Second Bulk Supply Agreement" provides at paragraph 1.4 that:

> "No particular quality of water will be guaranteed but the source of supply will be River Dee water settled at Ashgrove Treatment Works with chemically assisted coagulation determined by raw water conditions."

79. In addition, a letter from Dŵr Cymru to Enviro-Logic dated 1 July 2002 indicates that "the raw water supplied to you by this company will frequently be fluid category 5". This is the lowest quality of water identified in the Water Supply (Water Fittings) Regulations 1999, SI 1999/1148[4].

80. The Director, however, considers that the water concerned is properly to be considered as "partially treated" water as distinct from "raw" water. According to the Director, the treatment at Ashgrove removes more of the smaller solids than would be the case with a reservoir.

[4] For the purposes of those regulations Fluid Category 5 is described as "fluid representing a serious health hazard because of the concentration of pathogenic organisms, radioactive or very toxic substances, including any fluid which contains (a) faecal material or other human waste; (b) butchery or other animal waste; or (c) pathogens from any other source".

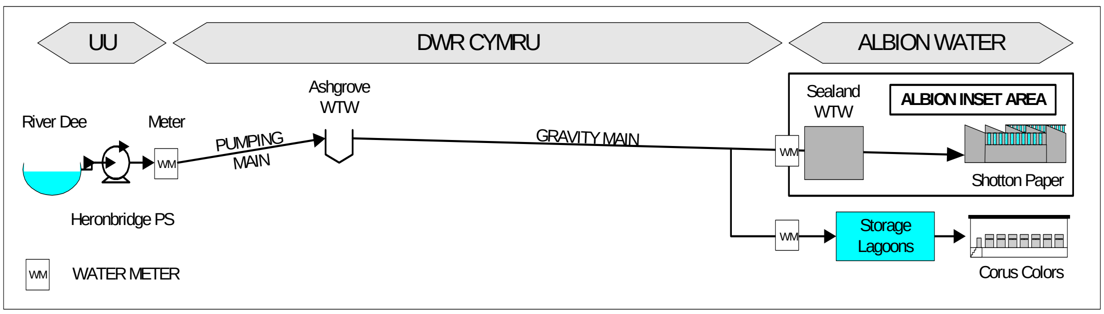
81. The operation of the flow through the Ashgrove pipeline is maintained and controlled telemetrically 24 hours a day through Dŵr Cymru's control room at Bretton[5]. Shortly before the Ashgrove pipeline reaches the Sealand site, it divides at a "retork" valve which controls the supply to Shotton Paper and Corus respectively. Shotton Paper's demand varies in accordance with the needs of its production process. When Shotton's demand is lower, Dŵr Cymru uses the retork valve, controlled telemetrically from Bretton, to divert more water into storage lagoons, owned by Corus. The Corus lagoons thus perform a flow-balancing function.

82. At present, Albion purchases the water in question under the Second Bulk Supply Agreement from Dŵr Cymru (which has in turn purchased the water from United Utilities) at the boundary of Albion's inset appointment area at the premises of Shotton Paper. The meter is situated at the disused Sealand treatment works.

83. The supply agreement between Albion and Shotton Paper is dated 19 March 1999. Albion understands that it is one of Dŵr Cymru's largest customers, Shotton Paper having previously been one of Dŵr Cymru's largest customers. The figures before the Tribunal suggest that Shotton Paper is the second largest industrial user of non-potable water in Wales.

84. According to Albion, the present supply arrangement may be shown in diagrammatic form as follows:

Figure 1 The Ashgrove System – current operation



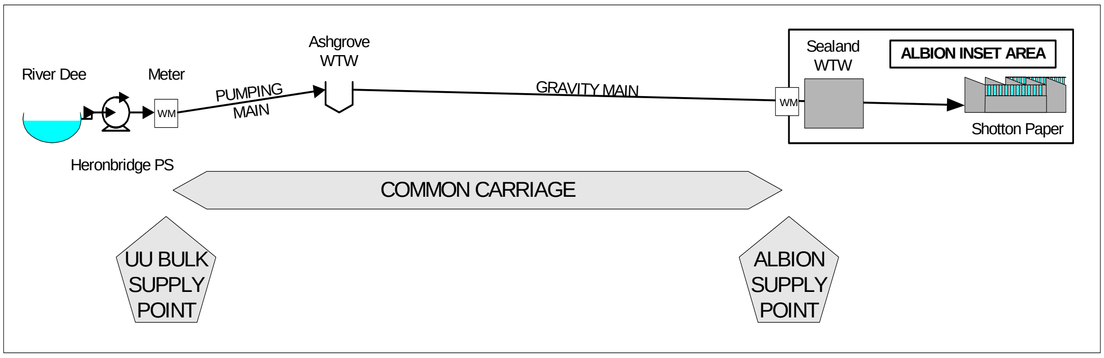
[5] The water treatment works at Bretton also supplies potable water to Albion, for onward supply to Shotton Paper. This supply is via a separate system. Under its inset appointment, Albion is the supplier to Shotton of both potable and non-potable water, but the issue in this case relates only to non-potable water.

The common carriage proposal

85. What Albion wishes to do, in broad terms, is to acquire the water in question directly from United Utilities at Heronbridge, and then resell the water to Shotton Paper, paying a common carriage charge to Dŵr Cymru for the transport of the water to Shotton Paper via the Ashgrove System. In effect, Albion wishes to replace Dŵr Cymru as the intermediate supplier between United Utilities and Shotton Paper to the potential benefit, says Albion, of Shotton Paper, United Utilities, and Albion itself.

86. Albion shows its proposal in diagrammatic form as follows:

Figure 2 Albion's proposal



87. Albion considers that, if the common carriage price is calculated on what Albion considers to be a reasonable basis, Albion should be able to negotiate to purchase the water from United Utilities, and resell the water to Shotton Paper at a price lower than the price that Shotton Paper is currently paying for its water, while at the same time earning a margin for Albion. According to Albion, such a margin would exist even if Albion were to pay United Utilities a price higher than the price United Utilities currently receives from Dŵr Cymru. This result, according to Albion, is achievable because of the allegedly extremely high margin which Dŵr Cymru presently receives between the price Dŵr Cymru pays United Utilities for the water under the First Bulk Supply Agreement, and the price which Dŵr Cymru receives from Albion for the water ultimately supplied to Shotton Paper: for the figures, see below.

88. The economic viability of Albion's proposal, however, is highly dependent on the level of the common carriage price to be charged by Dŵr Cymru for the transport of the water in question. That is also true of the continued survival of Albion's existing

business as an inset appointee (and thus a statutory water undertaker) and the water efficiency services which Albion supplies to Shotton, as described below.

89. It is the alleged failure of Dŵr Cymru to offer what Albion considers to be a reasonable common carriage price, and the Director's finding in the Decision that the common carriage price offered by Dŵr Cymru did not constitute an abuse of a dominant position within the meaning of the Chapter II prohibition, which form the subject matter of this appeal.

III HISTORY AND BACKGROUND

The original inset appointment

90. Inset appointments for large user customers were introduced by the Competition and Service (Utilities) Act 1992, as a means of introducing an element of competition in the supply of water. Albion applied to the Director for an inset appointment to supply Shotton Paper in February 1996. According to Albion, this was at Shotton Paper's request.

91. According to the Decision, Albion informed the Director at that time that it intended to develop an alternative source of water with which to supply Shotton Paper, at a site called the Milŵr Tunnel. The Milŵr Tunnel is a tunnel constructed many years ago running from Boot End, near Bagillt, on the Flintshire Coast ten miles inland towards the Halkyn Mountains. The original purpose of the tunnel was to lower the water table so that mining work could be carried out at greater depths. There is evidence before the Tribunal that the Milŵr Tunnel was used by Dŵr Cymru in the 1990s to supply water to a plant near Flint belonging to Kimberley Clark.

92. According to the Decision, a business plan submitted in connection with Albion's application for an inset appointment on 26 November 1997 envisaged the use of the Milŵr Tunnel for supply to Shotton Paper from the second half of the second year from Albion's inset appointment being granted. According to the Decision (at paragraph 36), Albion Water was granted its inset appointment in May 1999 on the understanding that it would develop and use its own source of water to supply Shotton. However, the

Decision also states that the notice periods under Albion's inset appointment were reduced because of uncertainty as to Albion's ability to acquire a cheaper resource (paragraphs 36 to 37).

93. According to Albion, it could not progress with the development of the Milŵr Tunnel as a result of difficulties in obtaining access to that source following the transfer of the land to Hyder Industrial, an associated company of Dŵr Cymru which was later transferred to United Utilities. However, the Decision suggests that, in the Director's view, Albion did not progress the Milŵr Tunnel option because it considered "the common carriage option" (i.e. buying the water from United Utilities and then having it conveyed by common carriage to Shotton Paper) to be a potentially more profitable option (Decision, paragraphs 39 to 49). Albion replies that, at the time the inset appointment was granted, the Director well knew that the Milŵr Tunnel was no longer in Dŵr Cymru's ownership, and that the inset appointment was granted unconditionally[6]. We note that Albion's inset appointment was not made subject to any condition relating to the use or development of any particular source of water. We can see no objection in principle to an inset appointment being made or operated on the basis of a bulk supply, not least where such an arrangement avoids the duplication of network infrastructure.

The various prices

94. The price which United Utilities has historically charged for the water supplied to Dŵr Cymru under the First Bulk Supply Agreement has been around $3p/m^3$, and was forecast to rise to approximately $4p/m^3$ in 2003/4 (Decision, paragraph 65).

95. Up to 1999 the price being charged by Dŵr Cymru to its then customer Shotton Paper for non-potable water was some $27.47p/m^3$. Looked at arithmetically, and taking this particular supply in isolation, Dŵr Cymru's gross margin between the buying and selling price of the water supplied to Shotton Paper was therefore around $24p/m^3$, being some 87 per cent of the price paid by Shotton Paper. This amount is paid in respect of the partial treatment and transportation of the water from Heronbridge to Shotton Paper.

[6] Apparently the Milwr Tunnel option would have required a new pipeline (Decision, paragraph 107)

96. As we have said, Albion took over the supply of water to Shotton Paper from Dŵr Cymru in March 1999. Pending the making of new supply arrangements with United Utilities, Albion needed to maintain the supply of water to Shotton Paper by purchasing the water from Dŵr Cymru. Negotiations between Albion and Dŵr Cymru had apparently begun well before this, in 1996, and these negotiations culminated in the Second Bulk Supply Agreement and the supply arrangements illustrated by Figure 1 above. During the course of these negotiations, Albion and Dŵr Cymru disagreed as to the price to be paid. Dŵr Cymru quoted a price of 26.16p/m^3 (i.e. only marginally lower than the price at which Dŵr Cymru had supplied the water to Shotton Paper). Albion made a counter offer of 11.92p/m^3.

97. No agreement having been reached, Albion asked the Director to determine a bulk supply price between the parties under the provisions of section 40 of the WIA91. The Director provisionally determined, in a letter dated 12 December 1996, that a price of 26p/m^3 for non-potable water should be communicated to the parties as indicative of the price the Director would determine formally. The Director stated:

> "The price for non-potable water is similar to prices charged by Dŵr Cymru for other bulk supplies."

98. The price for non-potable water of 26p/m^3 was subsequently agreed between Albion and Dŵr Cymru under the Second Bulk Supply Agreement entered into in March 1999.

99. It appears that around this time, Dŵr Cymru reduced the retail price it offered to Shotton for non-potable water from 27.47p/m^3 to approximately 26p/m^3. However, Shotton Paper preferred to enter into a supply agreement with Albion rather than Dŵr Cymru. The retail price then offered to Shotton by Dŵr Cymru – 26p/m^3 – was exactly the same as the bulk supply price offered to Albion. In the supply agreement between Albion and Shotton Paper of 19 March 1999, Shotton Paper agreed to pay Albion the same price for the water as it could have obtained from Dŵr Cymru – i.e. 26p/m^3.

100. This meant that, under the arrangements as initially set up, Albion was unable to earn a margin on the onward supply of water to Shotton Paper. It purchased the water from Dŵr Cymru at the boundary of its inset appointment area for 26p/m^3, and sold the water on to Shotton Paper at the same price of 26p/m^3. According to Albion, its then parent company, Enviro-Logic, agreed to accept this situation, at least temporarily, in

order to obtain the status of a water undertaker under the inset appointment, and in the belief that the matter would be open to challenge once the 1998 Act came into force on 1 March 2000.

101. Dŵr Cymru introduced a new Large Industrial Tariff (known as the "LIT") for large users of potable water for the charging year 1999/2000, which was approved by the Director on the basis of information supplied by Dŵr Cymru in a letter dated 2 December 1998. This tariff effectively lowered prices to Dŵr Cymru's largest industrial users and is said by Albion to have been introduced in response to the emerging threat of competition.

102. Meanwhile, Albion opened negotiations with United Utilities to be supplied directly with the water in question from Heronbridge. In November 2000 Albion agreed in principle to purchase water from United Utilities. In February 2001, United Utilities quoted a price of $9p/m^3$, as compared with the $3p/m^3$ United Utilities was then receiving from Dŵr Cymru. No agreement was in fact reached since Albion considered that the price of $9p/m^3$ sought by United Utilities was excessive. The Decision, however, is predicated on the basis that United Utilities is prepared to supply Albion (see paragraph 136 of the Decision). We understand that that is still the case.

The alternative pipeline

103. According to paragraphs 142 to 177 of the Decision, in around 2001 Albion and United Utilities discussed, at least in a preliminary and exploratory way, the alternative of building a duplicate pipeline from Heronbridge to Shotton Paper in order to bypass the Ashgrove system. A United Utilities study known as the Boulton Report, apparently prepared in about 2000, had rejected this option, not least on grounds of cost and inefficiency. Later emails between Albion and United Utilities of 6 and 19 December 2001 suggest that the latter may have considered the construction of a new pipeline to be a viable option, on the basis of a "fast and dirty look". Albion apparently did not want the Director to know that this option was being examined, since Albion was arguing that the Ashgrove pipeline was an "essential facility". It appears that neither Albion nor United Utilities took the matter any further although, in the Decision, the Director concluded that the construction of a duplicate pipeline could, on various

assumptions, be a viable option: see paragraphs 160 *et seq*, and Annex I of the Decision. In the course of these proceedings, Dŵr Cymru and the Director have produced a great deal of further evidence as to the high cost, difficulty and risk of constructing an alternative pipeline: see further below.

The First Access Price

104. Albion first asked Dŵr Cymru formally for a common carriage price on 28 September 2000. In a letter dated 20 October 2000, Enviro-Logic on behalf of Albion indicated that it considered 7p/m³ to be a fair cost-reflective price for common carriage through the Ashgrove system (a common carriage price excludes the price of water resources which must be supplied or purchased separately).

105. In a letter to the Director dated 11 December 2000, Albion lodged its first formal complaint under the 1998 Act, alleging that Dŵr Cymru had, among other things, persistently failed to negotiate a common carriage price.

106. On 16 January 2001 Dŵr Cymru provided Albion with an indicative "access" – i.e. common carriage – price to cover the partial treatment and transport of water through the Ashgrove system of around 20p/m³. Enviro-Logic sent an e-mail to the Director on 18 January 2001 indicating that this price was unacceptable to them.

107. In a letter dated 20 February 2001, Dŵr Cymru informed the Director that it was minded to charge Albion an access price of 23.2p/m³ for the common carriage services requested, for the year 2000/2001. This price is referred to in the Decision as the First Access Price. Albion was notified of this price on 2 March 2001. Albion considered that this price was also unacceptable.

108. The way in which the First Access Price was calculated is set out in Schedule B of Dŵr Cymru's letter of 20 February 2001, headed "Breakdown of Average Cost of Water Services". The methodology by which the calculations were carried out is further elaborated in the Decision, at paragraphs 250 to 307, as mentioned later in this judgment.

Albion's complaint of 8 March 2001 and subsequent events up to April 2003

109. On 8 March 2001 Albion complained to the Director that the First Access Price constituted an infringement of the Chapter II prohibition and reiterated its complaint about the delay in providing that price.

110. After apparently investigating the matter for a year, including sending a notice, dated 29 June 2001, to Dŵr Cymru requesting extensive information under section 26 of the 1998 Act, the Director wrote to Albion's solicitors on 4 March 2002 stating that the Director did not intend to take a decision and that he proposed to close the file.

111. According to Albion, at the May 2002 Board meeting of Enviro-Logic the Pennon directors indicated that no further funding would be provided to Enviro-Logic for capital projects. Albion contends that Pennon was concerned that an appeal to the Tribunal by Albion in relation to its dispute with Dŵr Cymru might adversely affect the interests of Pennon's subsidiary, South West Water. Pennon, in a letter to the Director dated 28 April 2004 and copied to the Tribunal, states that the Pennon directors said at this Board meeting that Pennon would be unable to continue to provide the same level of financial support to Enviro-Logic, given that the latter was not financially successful. Pennon also considered that every effort should be made to resolve Albion's complaint without legal action before the Tribunal.

112. On 14 May 2002 Albion's then solicitors requested the Director to reconsider his decision to close the file under the then section 47 of the 1998 Act. By letter of 21 June 2002 the Director agreed to reopen the case and to reach a decision as quickly as possible. Thereafter the Director sent a number of section 26 notices to various parties.

113. In July 2002 the Department for Environment, Food and Rural Affairs (DEFRA) and the Welsh Assembly Government published a Consultation Paper entitled *Extending Opportunities for Competition in the Water Industry in England and Wales*. We refer to this document as "the Consultation Paper".

114. At a meeting with Albion on 10 September 2002, it was apparently intimated to Albion that the Director would be unable to produce a "draft" decision before May 2003, and that a "final" decision would not be available before November 2003.

115. On 10 December 2002, Pennon gave notice, as it was entitled to do under the relevant joint venture agreement, to acquire all the shares in Enviro-Logic from the founding shareholders. According to Pennon, they wished Enviro-Logic to pursue other kinds of commercial opportunity. According to Albion, Pennon did not wish Enviro-Logic to pursue the activities with which this case is concerned, for fear of damaging the interests of South West Water and the relationship of the latter with the Director. We are told that from 1 January 2003 the working capital needs of Enviro-Logic were met by Dr Bryan personally. Dr Bryan told us that by April 2003 his financial resources were exhausted.

116. On 19 February 2003 the Government introduced the Water Bill in the House of Lords. That Bill subsequently became the Water Act 2003 ("the WA03").

117. In April 2003 Dŵr Cymru introduced, with the Director's approval, a new non-potable tariff, referred to in the Decision as "the New Tariff," for large users of non-potable water. At that time Dŵr Cymru had a small number of large users of non-potable water, all of whom were supplied under special agreements – i.e. non-standard agreements outside the tariff system, as permitted by sections 142(2)(b) and 143(5)(a) of the WIA91. Dŵr Cymru's stated intention was that the large users of non-potable water who had special agreements with Dŵr Cymru would migrate to the New Tariff when the relevant agreement expired. It is not clear whether at the time of the Decision, in June 2004, any non-potable large users, had agreed to pay the New Tariff[7]. The New Tariff did not exist when Dŵr Cymru quoted the First Access Price in March 2001. Corus, Dŵr Cymru's largest customer, has contested the price rises apparently implied by the New Tariff and is currently engaged in High Court litigation in that regard: see [2006] EWHC 1183 (Civ).

118. As already mentioned, for the charging year 2000/2001 Dŵr Cymru had already introduced a tariff for large industrial users of potable water known as the LIT. Our understanding is that the calculation of the distribution element in the New Tariff for non-potable users did not differ significantly in its result from the calculation of the

[7] The special agreements register suggests that two small customers' special agreements expired in March and September 2005 respectively.

distribution element in the LIT for potable users, although the methodology used by Dŵr Cymru differed slightly: Decision, paragraph 285.

The attitude of the customers

119. By May 2003, a decision had to be reached by the joint venture shareholders about the future of Enviro-Logic and its subsidiary, Albion. At the Enviro-Logic Board meeting of 1 May 2003 it was apparently agreed that Pennon would re-transfer at least 50 per cent of the shares in Albion to the founding shareholders (i.e. to Dr Bryan and his associates) if UPM preferred to have an independent water company, rather than a wholly owned subsidiary of Pennon, supplying the water to Shotton Paper.

120. A meeting apparently took place between Mr Baty, Managing Director of Pennon, and Mr Gale, Managing Director of UPM, on 22 May 2003. Mr Gale said that, if UPM had the choice of being served by Albion as a wholly owned subsidiary of Pennon, or being served by Albion as an independent water company, he (Mr Gale):

> "had no hesitation in making clear UPM's determination to be served by an independent water company. I was convinced that Pennon would not wish to antagonise Ofwat or its fellow water companies by fighting vigorously for greater supply security and fairer terms for Shotton Paper."
>
> (see Mr Gale's letter to the Director of 15 October 2003)

121. Following this exchange, and further contacts, in July 2003 Pennon agreed to transfer full control of Albion to Dr Bryan and his associates, through Waterlevel Limited. In the event, this transfer was not completed until February 2004.

122. Meanwhile, on 6 June 2003, the Director had supplied Albion with a "draft" decision. That document did not address the reasonableness or otherwise of the First Access Price but simply concluded that "the Ashgrove system is not an essential facility".

123. On 11 July 2003, the Purchasing Systems Manager for Corus in Wales wrote to Albion stating:

> "As I explained in our meeting on the 10 July 2003 we are very unhappy with the current situation in the water supply industry and the lack of any real competition in the established regions. Having raised this matter with OFWAT they suggested that your

> company offers a realistic alternative to the large established operators.
>
> Will you therefore please confirm that you are able to bid for the supply of water to three of our larger plants situated in Wales. Namely, Llanwern, Trostre and Shotton."

124. On 12 August 2003 Pennon (as the then owners of Albion) sent to the Director a detailed critique, prepared by Dr Bryan, of the "draft" decision sent on 6 June 2003.

125. On 20 October 2003 Mr Gale of UPM wrote to the Director in connection with Pennon's proposed transfer of the shares in Albion from Pennon to the team led by Dr Bryan. Mr Gale said:

> "I wrote to you last year underlining our support for Albion and the reasons why the partnership of UPM Kymmene and Albion Water is so important to our UK operations. I wish to reiterate that support. We are very conscious that Albion is still the only active competitor in the market and that Ofwat has consistently failed to address issues relating to the price and non-price terms of water. This gives us some serious concerns about potential conflicts of interest faced by Ofwat. An independent Albion Water under Jerry Bryan will continue to fight vigorously for a better, more competitive water industry. That will undoubtedly make Ofwat's life more difficult…
>
> I have seen the business plan for Albion Water created by Jerry Bryan and his responses to the 19 questions from Ofwat. I am very conscious that that plan is based, overwhelmingly, on the supply of regulated water services to the Shotton Paper site. I am also conscious that it assumes a continuation of the current level of support from UPM Kymmene that allows Albion Water to cover its costs whilst it fights for fairer terms from Dŵr Cymru. I wish to make it clear that UPM Kymmene is fully supportive of that plan."

126. As to "the current level of support from UPM Kymmene" referred to by Mr Gale, our understanding is that, from at least the latter part of 2003, UPM made a financial contribution to Albion of 3p/m³ to cover Albion's running costs, including the work necessary to bring its complaint under the 1998 Act against Dŵr Cymru to a conclusion. At that stage it was apparently anticipated that the Director would reach a decision in November 2003, and that any subsequent appeal to the Tribunal would be concluded by June 2004.

127. Under the arrangements between Albion and UPM, as further confirmed by letters to the Director from Mr Gale of 10 December 2003 and 18 February 2004, the level of support provided by UPM to Albion was to decrease from 3p/m^3 to 1.5p/m^3 in June 2004, and to expire in March 2005. In his letter to the Director of 10 December 2003 Mr Gale said:

> "I wish to state that I believe this level of support to be unprecedented in the water industry. UPM has been forced to accept that it is necessary as the only method of ensuring the continuation of an independent Albion Water, which is committed to support UPM's operations in the UK and is determined to fight to deliver the benefits of greater competition."

128. We add that in addition to supplying UPM with non-potable water, Albion also supplies UPM with water efficiency management and associated services, which according to Dr Bryan, has enabled the Shotton Paper plant to increase its efficiency in the use of water from 16m^3 per dry tonne of paper in 1999 to 13m^3 per dry tonne of paper currently. Albion is currently working with Shotton Paper to achieve 12m^3 per dry tonne. The "world class" standard is apparently 9m^3 per dry tonne of paper (Day 2, p. 24). Our understanding is that Shotton Paper has been able to increase its production without consuming more water.

The later stages of the Director's investigation

129. On 22 October 2003 the Director indicated to Albion that a "draft" decision would be available in December 2003, with a "final" decision at the end of February 2004.

130. On 20 November 2003 the WA03 received the Royal Assent. Although the WA03 did not come into force during the period relevant to these proceedings, the provisions of that Act, and in particular the "Costs Principle" referred to in the new section 66E inserted into the WIA91, played an important part in the Director's reasoning in the Decision, as explained below.

131. On 29 December 2003 the Director indicated to Albion that the revised "draft" decision would be issued in mid-January 2004.

132. On 7 January 2004 the Director wrote to Dŵr Cymru requesting Dŵr Cymru to state the current common carriage access price to Albion for the treatment and transport of non-potable water for onward supply to Shotton Paper. Dŵr Cymru replied on 16 January 2004 to the effect that its access price to Albion would be 17.74p/m³ excluding "administrative and associated costs". This price is referred to in the Decision as the "Second Access Price" (see paragraph 249 of the Decision). The Second Access Price was apparently derived from the New Tariff for large non-potable users introduced by Dŵr Cymru in April 2003. The correspondence about the Second Access Price was not supplied to Albion until 17 March 2004.

133. Following a further complaint by Albion on 13 January 2004 about the delay in reaching a decision, the Director indicated by letter of 20 January 2004 that the "draft" decision would be available in March 2004. On 29 March 2004 the Director indicated to Albion that the promise of a draft decision in March 2004 could not be honoured.

134. Following further proceedings referred to later in this judgment, the contested Decision was taken on 26 May 2004.

IV THE STATUTORY FRAMEWORK

[Omitted]

V DŴR CYMRU AND ITS CUSTOMERS

197. In 2000/2001 Dŵr Cymru's revenue was some £453 million from its appointed business, of which £230 million was from water services and some £223 million was for sewerage services. The figures for 2001/2002 and 2002/2003 are very similar. Dŵr Cymru tells us that it has some 1.2 million household customers, and some 110,000 non-household customers in Wales and some adjoining areas in England. Its total potable network of pipes is some 27,000 km, with associated works, pumping stations and reservoirs. Dŵr Cymru's non-potable systems are very much smaller, as described in detail below. Although the exact total length is unclear, the non-potable systems in question, which are each separate systems, do not appear to account for more than 200km of pipes in total.

198. Dŵr Cymru has stated that it has improved its efficiency, has recently rebated some £18 to each customer off water bills and expects to continue to rebate bills in the future. In 2006, Dŵr Cymru decided to rebate £19 annually off each customer's bill at a cost of some £24 million. Many of Dŵr Cymru's activities are contracted out. For example, the Ashgrove treatment plant is managed on Dŵr Cymru's behalf by United Utilities. It has not been suggested that Dŵr Cymru is not an undertaking for the purposes of the Chapter II prohibition, notwithstanding the "not for profit" status of its parent company, Glas Cymru Cyfyngedig.

Dŵr Cymru's network

199. In the further course of these proceedings, the Tribunal has received a good deal of information about Dŵr Cymru's water distribution network. Essentially, as Mr Jones, the Finance Director of Dŵr Cymru, points out, all water supply systems begin with the abstraction (or "harvesting") of water from the environment. This may entail pumping water directly from a river, pumping it from an underground aquifer through a borehole, or "catching" the water in a reservoir, which may itself have been created by damming a river. Water that is taken directly from the environment in this way is described as "raw water".

200. The vast majority of Dŵr Cymru's water supply systems produce "potable" water. In order to become "potable" the water has to be treated to potable standard at a water treatment works. A water treatment works may be located at or close to the point of abstraction, or some distance away, in which case the water has to be transported to the treatment works through a pipeline. Some supply systems feature reservoir storage between the point of abstraction and the treatment works, because the times when customers need the water are not necessarily the times when abstraction is possible or cost-effective.

201. After the water is treated and becomes potable, it has to be delivered to customers. This is achieved by means of a further network of pipes and, in many systems, network pumping or booster stations, and smaller (closed) storage facilities (known generally as "service reservoirs" or "water towers") which enable the significant hour-to-hour and

other fluctuations in the demands of customers to be managed without subjecting the water treatment works to unduly large variations in loads.

202. Potable water supply systems vary dramatically in terms of coverage because of factors such as population density and topography. For example, a single supply system served by multiple water sources, the South East Wales conjunctive use system, covers the heavily populated area of South East Wales, including the urban areas of Newport and Cardiff, and serves around 500,000 connections, including some large, non-household customers. A similarly complex conjunctive use system, the Tywi system, serves the densely populated areas of Swansea and Bridgend. With occasional exceptions, almost all Dŵr Cymru's large potable customers are supplied through conjunctive use systems[8]. Such systems include pipes of many different diameters, including large pipes of 600mm or above, medium sized pipes in the range of 150-450mm, and pipes of less than 150mm.

203. By contrast, a small number of Dŵr Cymru's high volume customers require non-potable water for industrial purposes. Such customers – of whom Shotton Paper was one – are served by dedicated supply systems which tend to serve only one customer, or sometimes two. The Ashgrove system serves two customers, Shotton Paper and Corus. In most cases – eight out of eleven among Dŵr Cymru's large non-potable customers – the water in question is delivered directly to the customer without treatment – i.e. in its "raw water" state. Partial treatment is carried out only at Ashgrove, and (it appears) in the system serving one of the Corus plants in South Wales.

204. Dŵr Cymru had at the time of these proceedings some nine discrete non-potable supply systems, apart from Ashgrove. Most of these systems supplied one customer, but in two cases two customers were supplied. Six of those systems were situated in South East Wales, serving, as we understand it, a works in Cardiff (S1)[9]; a power station near Barry (S2); a works at Sully, to the east of Barry (S3); a brewery in Magor (S4); two customers outside Bridgend (S5); and a steel works near Newport (S6). The three

[8] Eight out of ten of Dŵr Cymru's large potable customers are supplied by the South East or Tywi conjunctive use systems. However, "large" potable water customers tend to take a smaller volume than "large" non-potable customers.

[9] The designations S1, S2, etc. are those used by Mr Jones in his first witness statement.

further systems served an oil refinery in Pembroke Dock (S7); an oil refinery and LNG terminal at Milford Haven (S8); and a further steel plant at Llanelli (S9).

205. In broad terms, in 2001/02 water treated by Dŵr Cymru to potable standards appears to have been of the order of around 325,000 Ml per annum[10], whereas non-potable water supplied was around 33,000 Ml per annum[11]. Almost all this volume was supplied to the large users identified above.

206. Dŵr Cymru emphasises that a large number of industrial customers "self-supply" using their own boreholes. Mr Jones told us that, for every one industrial customer served by Dŵr Cymru, there could be as many as nine others who preferred to self-supply.

207. At the material time all non-potable water supplied by Dŵr Cymru to large users was delivered at non-standard rates, i.e. at non-tariff rates pursuant to special agreements. According to the register of special agreements maintained by the Director, Dŵr Cymru's revenue from non-potable customers in 2001/2002 and 2002/2003 was:

	Non-potable revenues – £M	
	2001/2002	2002/2003
Other non-potable customers	7.05	6.12
Albion	1.77	1.81
Total	8.82	7.93

208. Supplies of non-potable water, including supplies to Albion, therefore appear to have amounted to between 3 and 4 per cent of total water services revenue, and between 1 and 2 per cent of company revenue. The latest figures before the Tribunal suggest a decline in non-potable supplies.

209. According to the register of special agreements maintained by the Director, in 2001/2002 and 2002/2003 Dŵr Cymru's largest non-potable customers (including Albion) appear to have been as follows:

Ml

[10] This figure relates to the "distribution input" to Dŵr Cymru's systems. The figures before the Tribunal from Dŵr Cymru's "June Returns" suggest that there is substantial leakage of around 25 per cent of potable water between the treatment works and the customer.

[11] At paragraph 107 of the defence, the Director's figure for non-potable supplies is 27,000Ml. It has been difficult to substantiate this figure. The Tribunal's figure is based on the June return for 2001/02. It appears that the supply to Albion should be added.

	2001/2002	2002/2003
WSH NON POT 5	16,131	10,209
ALBION	6,715	6,807
WSH NON POT 9	4,910	5,527
WSH NON POT 11	2,829	2,697
WSH NON POT 12	2,201	2,427
WSH NON POT 6	2,467	2,258
WSH NON POT 13	1,709	2,202
WSH NON POT 8	898	1,080

210. Albion, supplying Shotton Paper, thus appears to be Dŵr Cymru's second largest industrial customer in Wales. It appears that Shotton Paper is one of the largest industrial customers for non-potable water in both England and Wales.

211. Taking Shotton and Corus together, the Ashgrove system appears to account for between one-quarter and one-third of the non-potable water supplied by Dŵr Cymru.

212. It appears from figures contained in RD 09/03 dated 29 March 2003 that in 2002/2003 there were only 28 special agreements in England and Wales relating to non-potable water, representing a total forecast revenue of some £14 million. It would therefore appear that Dŵr Cymru accounts for nearly half the small number of special agreements that exist in England and Wales in relation to non-potable water supplies. However, such supplies appear to account for less than 0.5 per cent of total water services revenue in England and Wales.

VI THE DECISION

[Omitted]

VII THE INTERIM JUDGMENT AND THE SUBSEQUENT PROCEEDINGS

[Omitted]

VIII SOME MATTERS RELEVANT TO THE TRIBUNAL'S ANALYSIS

A. THE TRIBUNAL'S POWERS AND DUTIES

286. Pursuant to Paragraph 3(1) of Schedule 8 to the 1998 Act, the Tribunal is required to decide this case "on the merits" by reference to the grounds set out in the notice of appeal. Despite Albion having been accorded a certain latitude to develop its case in the light of the disclosure which has emerged in the course of the proceedings, Albion's principal grounds of appeal are identifiable in the original notice of appeal.

287. In *Freeserve v Director General of Telecommunications* [2003] CAT 5, since confirmed in *JJ Burgess & Sons v OFT* [2005] CAT 25, the Tribunal said there was in principle no difference between an appeal against an infringement decision and an appeal against a non-infringement decision. The Tribunal considered that, in complainants' appeals, the complainant would normally need to persuade the Tribunal

> "that the decision is incorrect or, at the least, insufficient, from the point of view of (i) the reasons given; (ii) the facts and analysis relied on; (iii) the law applied; (iv) the investigation undertaken; or (v) the procedure followed" (*Freeserve* at paragraph 114).

288. That check list applies in our view in the present case where the Director has taken a formal non-infringement decision. The complainant, Albion, is not limited to the evidence that was before the Director (*Freeserve*, at paragraph 116).

289. Under paragraph 3 (2) of Schedule 8 of the 1998 Act, read with section 31(4A) of the WIA91 as amended, the Tribunal may "confirm or set aside the decision… or any part of it" and may (a) remit the matter to the Director … (d) give such directions, or take

such other steps, as the Director could himself have given or taken, or (e) make any other decision which the Director could himself have made". The circumstances in which the Tribunal may exercise its powers under paragraph 3(2)(e) of Schedule 8 were the subject of some discussion in *Burgess,* cited above, at paragraphs 128 to 139.

290. We accept that, in order to find an infringement of the Chapter II prohibition, the Director needed to be satisfied that each of the elements referred to in section 18 of the Act were established on the balance of probabilities. In the Decision, the Director (at paragraph 340) applied the approach of the Tribunal set out in *Napp Pharmaceutical Holdings v Director General of Fair Trading* [2002] CAT 1, at paragraphs 108 and 109. That passage has since been further commented on by the Tribunal in *JJB Sports and Allsports v OFT* [2004] CAT 17, at paragraphs 197 to 208. The latter passage makes clear that the balance of probabilities is the standard to be applied: see also *The Racecourse Association and others v OFT* [2005] CAT 29, at paragraph 131.

291. At the stage of an appeal to the Tribunal we accept that Albion bears the burden of persuading the Tribunal that it is necessary to set aside the Decision, in whole or part, on one or more of the grounds set out in *Freeserve*. We note, however, that in this particular case most of the relevant information is in the hands of the Director and Dŵr Cymru, and that Albion has had access only to information which is publicly available, or has been obtained by disclosure in these proceedings. Although Dr Bryan has considerable experience of the water industry, Albion is a company with limited resources, in part as a result of the effect of the present dispute. While Dŵr Cymru has given some considerable disclosure, a troubling feature of the present case is that on a number of occasions information supplied has had to be corrected, and on other occasions assertions have been made that have proved difficult to verify. On important issues such as costs there is little by way of contemporaneous information or original documentation: see further below. We bear these points in mind when considering whether Albion has discharged the burden of proof.

292. If it is necessary for the Tribunal itself to make findings of fact in the course of this appeal, the relevant standard is the balance of probabilities, see *Burgess*, cited above, at paragraph 120.

B. SOME PRELIMINARY OBSERVATIONS

Features of the industry

293. As already set out in the interim judgment, the water industry has a number of special features. The industry has a large capital infrastructure with "sunk" costs. The cost of renewing and maintaining the infrastructure, much of it constructed many years ago, is considerable, particularly in the light of regulatory requirements to improve drinking water quality. We have been told – although it has proved difficult to establish the facts – that capital costs of one kind or another represent the major proportion of total costs. We have also been told that operating costs, generally speaking, represent a lower proportion of total costs, although the evidence before us suggests that there are significant costs for management and related overheads. There are various difficulties in allocating costs to particular customers, including the fact that many customers are served by a shared infrastructure. Prices, most notably in the "tariff basket" sector, have traditionally been averaged across customers. The industry has various universal service and social obligations, such as providing water for fire fighting, ensuring supplies in rural areas, and taking into account the interests of vulnerable customers. Again, however, no details of the costs of these obligations appear to be available so it is hard to know their significance. Water companies also have duties regulating the safety of the public drinking supply, the protection of the environment and the efficient use of water. The regulatory system established by WIA91 seeks, so far as it can, to encourage the companies' efficiency, but at the same time to ensure that adequate returns are obtained in order to encourage investment in the infrastructure needed to improve water quality and reduce leakage. An important consideration, according to the Director, has been to maintain a regulatory system that minimises the cost of the capital that it is said the industry needs to raise.

294. Suppliers have hitherto been vertically integrated, with the functions of abstraction, treatment, distribution and retailing of water being carried out within the same company. Unlike other network industries such as gas, electricity or telecommunications, there is no national grid for water, nor is there any clear functional separation of the various aspects of supply as has occurred in recent years in other network industries. Until comparatively recently, customers have had no possibility of

obtaining water supplies other than from the vertically integrated monopoly supplier in the local area. Even now it remains the case that the vast majority of customers still have no effective choice of supplier.

Attempts to introduce competition

295. For many years Governments of both main parties have sought to introduce a degree of effective competition in relation to the supply of water to large users. The first move in this direction was the introduction of inset appointments under the Competition and Service (Utilities) Act 1992. In the period with which this case is concerned inset appointments could be sought in respect of supplies above 100Ml per annum (250Ml in Wales). Although, according to DEFRA, the possibility of such appointments "has sharpened incentives for undertakers to introduce lower tariffs and better services for their larger users", the impact of inset appointments has been "muted" (Consultation Paper, paragraph 19). Although our attention has been drawn to 11 inset appointments altogether, the evidence we have confirms that the expression "muted" was aptly used in the Consultation Paper. Albion's inset appointment is the only appointment of a company that was not previously a statutory water undertaker.

296. The next attempt to introduce a degree of effective competition for large users was based on the coming into force of the 1998 Act in March 2000. In OFT 422, and in the successive MD Guidance Notices referred to above, the Director made it clear that he saw common carriage as an important means of introducing competition to the water industry. The Director's consistent efforts to encourage common carriage culminated in the issue of the Director's publication *Access Codes for Common Carriage – Guidance* in March 2002.

297. In fact, however, hardly any common carriage has occurred. Although the Tribunal asked in the course of these proceedings why that was so, no clear explanation has been put forward. The preparation of the various Access Codes by the statutory undertakers pursuant to the Director's *Guidance* seems to have been, in practice, an empty exercise.

298. Apart from this case and the Bath House case, there appear to have been few serious attempts to obtain common carriage, notwithstanding the Director's endorsement of

common carriage both in his *Guidance* in OFT 422 under the 1998 Act and in his MD Guidance letters between 1999 and 2002, in force at all material times.

299. The third effort to introduce competition for large users is illustrated by the Consultation Paper published in July 2002, cited above, which led to the WA03. The Consultation Paper continued to emphasise the importance of competition in the supply of water to large users, while doubting whether competition was as appropriate in the household sector. Relevant extracts have already been set out above. We repeat paragraphs 17 and 24:

> "[the regulatory system] lacks key features of market competition, most notably the threat of market entry and customer choice. The incentives to increase efficiency, improve the quality of service, introduce innovative practices and drive down prices may, therefore, be somewhat weaker than those provided by direct market competition."
>
> …
>
> "Extending competition is expected to deliver the following benefits:
>
> **Choice** – at present, customers cannot choose to remove their custom from an unsatisfactory supplier, as there is only one undertaker in their area. New entrants should bring wider choices of tariff and services to attract specific customers.
>
> **Keener prices** – from new entrants and through competitive pressure on incumbents.
>
> **Services** – there may be scope for niche marketing in other areas in which incumbents have not previously concentrated. Some new entrants may offer to provide multi-utility supply packages and other services. Competition provides an incentive to provide a service which matches customers' requirements, in order to obtain and keep customers.
>
> **Innovation** – new entrants may offer new ways of doing things, bringing ideas from other industries, which may bring service and environmental benefits. For example, there should be incentives to find ways to develop previously unusable/uneconomic water sources, and to use existing resources more efficiently.
>
> **Efficiencies** – competitive pressures on undertakers and the incentives on entrants should encourage greater efficiencies, which drive keener prices and better overall value for money."

300. As already explained, the WA03 has now introduced a licensing system whereby third parties can be licensed to supply water by retail to large users having an annual consumption of more than 50Ml. It seems clear that these provisions of the WA03 are notably intended to achieve the benefits of competition referred to in the Consultation Paper.

301. The working of the WA03, now in force since 1 November 2005, is not in issue in these proceedings save to the extent that the implementation of the Costs Principle under 66E of the WIA91, as amended, may indirectly throw light on the Director's ECPR approach in the Decision which also refers to, and relies on, the Costs Principle at paragraphs 317 to 331. We note however that, despite the Chairman of the Authority expressing concern as to the lack of progress under this legislation in MD 215 of 20 April 2006, Aquavitae informed us during the hearing that no arrangements had yet come into effect under this new legislation.

302. We also note that in cases before the Tribunal – the proceedings of which are publicly available on the Tribunal's website – a number of water companies supported by the Director, and now by the Authority, have resisted various attempts to introduce competition. These include the cases of *Aquavitae* [2003] CAT 17 (retail services, Northumbrian Water), *Aqua Resources*, unreported (common carriage, Severn Trent), the present case (Dŵr Cymru, United Utilities), the *Bath House* case [2006] CAT 7 (Thames Water, common carriage from boreholes), and the *Independent Water Company* case, not yet decided (greenfield site development, Bristol Water). While the facts of those cases are not relevant to the issues we have to decide, the general tenor of the stance taken by the Director, the Authority, and the incumbent companies alike before the Tribunal has been to resist the arguments put forward by potential entrants to the industry.

The effect of the Decision

303. The effect of the Decision in the present case is, broadly speaking, that Dŵr Cymru's common carriage price of 23.2p/m^3 would make it uneconomic for Albion to supply Shotton Paper on a common carriage basis, even assuming that Albion was able to acquire the water in question from United Utilities at the existing price of 3.2p/m^3,

since the resulting total cost to Albion of some 26.4p/m³ would be slightly above the price that Shotton Paper is presently paying (26p/m³), even without allowing for any contribution to Albion's own costs. Dŵr Cymru's retail tariff is also set at or close to this price of 26p/m³.

304. It is also apparently the case that the Decision would have, in practice, the effect of largely removing the viability of Albion's inset appointment, since both the existing terms of supply between Albion and Dŵr Cymru, and the terms envisaged by the Director for any common carriage arrangement, would equally render Albion's inset operations commercially uneconomic. Indeed, Albion has survived to this point only with the financial support of Shotton Paper, and latterly by virtue of the interim relief granted by the Tribunal.

305. While, of course, no competitor has an unqualified right to continued existence, the possible elimination of the only new inset appointee (outside of the statutory undertakers), and the consequent reduction of choice for Shotton Paper, despite the recent moves to encourage competition in the water industry, already described above, is a matter of serious concern.

C. EXCESSIVE PRICING – THE RELEVANT LAW

306. There is no doubt that the 1998 Act applies in this case. No provision of the WIA91, as amended, disapplies the 1998 Act, and several provisions confirm its continued application: see WIA91, sections 2(6A) (6B) and (7), section 39(7), section 66(D)(9) and 66(D)(10).

307. Section 18(1) of the 1998 Act prohibits "Any conduct on the part of one or more undertakings which amounts to an abuse of a dominant position in a market … if it may affect trade within the United Kingdom". Section 18(2)(a) of the 1998 Act gives, as an example of an abuse, "directly or indirectly imposing unfair selling prices".

308. Similar wording is found in Article 82 of the Treaty. It appears to be common ground that "unfair" can include "excessive". To determine whether a price is excessive, the

starting point is Case 27/76 *United Brands v Commission* [1978] ECR 207 where the Court said at paragraphs 248 to 253:

> "248 The imposition by an undertaking in a dominant position directly or indirectly of unfair purchase or selling prices is an abuse to which exception can be taken under Article [82] of the Treaty.
>
> 249 It is advisable therefore to ascertain whether the dominant undertaking has made use of the opportunities arising out of its dominant position in such a way as to reap trading benefits which it would not have reaped if there had been normal and sufficiently effective competition.
>
> 250 In this case charging a price which is excessive because it has no reasonable relation to the economic value of the product supplied would be such an abuse.
>
> 251 This excess could, *inter alia,* be determined objectively if it were possible for it to be calculated by making a comparison between the selling price of the product in question and its cost of production, which would disclose the amount of the profit margin; however the Commission has not done this since it has not analysed UBC's costs structure.
>
> 252 The questions therefore to be determined are whether the difference between the costs actually incurred and the price actually charged is excessive, and, if the answer to this question is in the affirmative, whether a price has been imposed which is either unfair in itself or when compared to competing products.
>
> 253 Other ways may be devised – and economic theorists have not failed to think up several – of selecting the rules for determining whether the price of a product is unfair".

309. The general principles were considered by the Tribunal in *Napp*, cited above, at paragraphs 386 *et seq*. In that case the Director General of Fair Trading attached importance to whether the price was above that which would exist in a competitive market, in circumstances where there was no effective pressure to bring prices down to competitive levels. The Tribunal in *Napp* did not dissent from that approach: see paragraphs 390 to 391, and 403 of the judgment. In accordance with *United Brands* the key issue, however, is whether the price in question

> "has no reasonable relation to the economic value of the product supplied."

310. Whether a given price bears "no reasonable relation" to its "economic value" is a matter of fact and degree, which in our judgment involves a considerable margin of appreciation, not least because the notion of the "economic value" and whether the price has a "reasonable" relation to that value are matters of judgment. It is particularly a matter of fact and degree to decide how far above "the economic value" a price has to be before it can be said to bear "no reasonable relation" to that economic value.

311. A number of previous European decisions have considered the question of excessive prices: e.g. Case 26/75 *General Motors v Commission* [1975] ECR 1367 (excessive charge for monopoly service); *Bodson* [1988] ECR 2479 (comparison of prices with other undertakings not enjoying exclusivity); Case 110/99 *Lucazeau v SACEM* [1989] ECR 2811 (Comparison of prices between Member States), *Ministère Public v Tournier* [1989] ECR 2521 (high prices cannot be justified by high costs if the latter are due to lack of competition and inefficiency); *Deutsche Post AG – Interception of cross-border mail* OJ 2001 L331/40 (comparison of domestic and international tariffs where costs difficult to ascertain); and the Commission's *Notice on the Application of the Competition Rules to Access Agreements in the Telecommunications Sector* OJ 1998 C265/2 (the "Telecommunications Notice").

312. In the Telecommunications Notice, referred to in the Decision at paragraph 233, the Commission said at paragraph 107:

> "It is necessary for the Commission to determine what the direct costs for the relevant product are. Appropriate cost allocation is therefore fundamental to determining whether a price is excessive. For example, where a company is engaged in a number of activities, it will be necessary to allocate relevant costs to the various activities, together with an appropriate contribution towards common costs. It may also be appropriate for the Commission to determine the proper cost allocation methodology where this is a subject of dispute."

313. Paragraph 4.9 of OFT 422, cited above, emphasises that the Director "will investigate the costs of providing the product or service in question".

314. In our judgment, it follows from *United Brands,* cited above, that a central element in determining whether a price is excessive is to determine "the costs actually incurred" (paragraph 252) by an analysis of the relevant cost structure (paragraph 251). In

accordance with the Telecommunications Notice, cited above, it is necessary to determine "the direct costs" and appropriate cost allocation is therefore fundamental. It is necessary to allocate relevant costs to the activity in question, together with an appropriate contribution towards common costs (paragraph 107).

IX TREATMENT COSTS

315. In its analysis of the First Access Price on the average accounting basis, the Decision at paragraphs 250 to 307 starts with two broad headings of costs, namely "Water Resources and Treatment" and "Distribution". The Decision then separates "Water Resources" (broadly speaking, the abstraction of raw water, any necessary pumping from source, and the transport of raw water to a treatment works) from "Treatment". At a later stage of the analysis, the Decision distinguishes between the cost of "Treatment" for potable and non-potable water respectively, and arrives at a figure for the treatment costs of non-potable water of 3.2p/m³. This figure is then added to what is considered to be the correct figure for "Distribution" costs (16p/m³) to arrive at an access price of 19.2p/m³ on an average accounting cost basis. Of the two elements of that price, "Treatment" (3.2p/m³) and "Distribution" (16p/m³), "Distribution" is by far the most material. We therefore deal only briefly with treatment costs.

316. Although it is not stated in the Decision that the figure of 3.2p/m³ for the cost of treatment contains both capital and operating costs[12], we infer that it does so from the fact that Annex A to the Decision indicates a figure of 2p/m³ for the operating costs of treatment (paragraph 17).

317. In Bryan 4, Dr Bryan re-calculated treatment costs on the basis of information that was by then available to him. He considers that the Director's methodology, properly applied, would give a figure of 2.413p/m³ for treatment costs, and that on his own calculations the current figure should be around 1.6p/m³ (Bryan 4, paragraphs 9 to 19 and Annex D). The Authority in response considers the approach in the Decision to have been reasonable. Both the Authority and Dŵr Cymru challenge Dr Bryan's calculations on a number of grounds, including his use of the "current cost valuation" (CCV) used by Dŵr Cymru in calculating the New Tariff as a proxy for the MEAV of

[12] Precisely what is included in the expression "operating costs" is not indicated.

the Ashgrove treatment works[13]. Dŵr Cymru also considers that in relative terms an increase in the ratio of potable treatment costs to non-potable (i.e. partial) treatment costs between 1996 and 2003 was to be expected, because of the considerable efforts made to raise potable water standards. Mr Jones also queries whether the figure of 3.2p/m³ used by the Director may have been an underestimate since it was based on a comparison of the relevant CCV values of a selection of treatment works. However, we are sceptical of this latter suggestion, since the Director's figure of 3.2p/m³ was based on work that Dŵr Cymru itself put forward to justify the New Tariff.

318. We note that in the Authority's and Dŵr Cymru's "stand-alone" calculations produced to the Tribunal (see below) it is suggested that direct operating costs for the Ashgrove system are some 2p/m³. Since that figure includes operating costs for both treatment and distribution, that calculation appears to contradict the figure of 2p/m³ for treatment operating costs alone given in Annex A to the Decision. We also note that, even assuming that the MEA values for the treatment works used by the Authority and Dŵr Cymru are correct at about £3 million, Dŵr Cymru's normal rate of return on MEAV would appear to result in an imputed cost for return on capital of around 0.4p/m³: see below. There is thus evidence before the Tribunal that the cost of treatment was overstated in the Decision.

319. We also note that the treatment at Ashgrove consists of the settlement of raw water and the addition of aluminium sulphate, a basic process. Dr Bryan contends that the purpose of this treatment is merely to prevent siltation of the pipeline, and that no particular quality of water is required by Shotton Paper. He points out that when the pipeline was built there was a potable treatment works at Sealand, now disused. While denying that the treatment works is simply there to prevent siltation, Dŵr Cymru did not provide to us a clear explanation of what it considered the function of the treatment works to be, other than referring to its contractual obligation to supply "River Dee water settled at Ashgrove with chemically assisted coagulation determined by raw water conditions" (e.g. Second Bulk Supply Agreement at 1.4).

[13] Dr Bryan was cross-examined at length on this secondary issue. In fairness to him, we point out that Dŵr Cymru does not maintain MEA values for the generality of its treatment works. Whether Dr Bryan's CCV approach produces a better proxy for the MEA value of the Ashgrove works than Mr Jones' "stand-alone" calculation is a point we leave open.

320. However, given the relative closeness of the parties on the issue of treatment costs, we are prepared to assume in this judgment, without deciding, that treatment costs are in the range of $1.6p/m^3$ to $3.2p/m^3$.

321. We therefore turn to the principal issue on this aspect of the case, which is the distribution cost of non-potable water.

X THE PARTIES' SUBMISSIONS ON THE AVERAGE ACCOUNTING COSTS OF DISTRIBUTION OF POTABLE AND NON-POTABLE WATER

[Omitted]

XI THE TRIBUNAL'S ANALYSIS AS REGARDS THE AVERAGE ACCOUNTING COSTS OF DISTRIBUTION OF POTABLE AND NON-POTABLE WATER

A. GENERAL

448. In this section the Tribunal is essentially addressing the correctness of the conclusion reached by the Director at paragraph 302 of the Decision, namely that it was not unreasonable for Dŵr Cymru to assume, on an average accounting basis, "that the cost of transporting non-potable water in bulk was the same as the cost of transporting potable water". At paragraph 300 of the Decision the Director identified "the main cost drivers" of transporting water through pipes as the size (diameter), material and smoothness of the pipe, required flow route, distance, direction and change in altitude between the points at which the water enters or leaves the pipe. According to the Director, these cost drivers did not differ as between potable and non-potable water.

449. Albion accepts that, for a given pipe of a particular diameter at a given location, the cost of laying that pipe will be the same whether it is transporting potable or non-potable (including raw) water. However, in Albion's view the Director's approach in paragraphs 300 to 302 of the Decision is much too narrow: in concentrating on the physical "transport" of the water in question the Director has overlooked other major cost differences between the distribution of potable and non-potable water, related in particular to the shorter average distances, predominantly more rural location, less use

of non-infrastructure assets, relatively less maintenance, renewals, and leakage expenditure, and certain other differences which typically, according to Albion, characterise Dŵr Cymru's non-potable systems as distinct from its potable systems. By contrast, the case made by the Authority and Dŵr Cymru is essentially that there are no *systematic* differences between the two types of system. Hence it is argued, the average distribution costs borne by large potable water users are a reasonable proxy for the average distribution costs of large non-potable water users such as Shotton Paper.

Some confusing terms

450. This case has been made more difficult by the confusing use of various terms, notably the expressions "bulk distribution main", "trunk main", "raw water aqueduct", and "non-potable main".

451. The terms "bulk distribution main" and "trunk main" appear to have been used by the parties both interchangeably and somewhat loosely, to denote broadly speaking the mains used for the transport of water in large quantities, as distinct from the smaller diameter pipes (less than 150mm) that are used to deliver water in the "local distribution" network, typically to household customers. Although there appears to be no clear-cut point at which a pipe can be definitively classified as forming part of "bulk" (or "trunk") distribution as distinct from "local" distribution, Mr Jones gives evidence that pipes over 300mm can be assumed to approximate to the "bulk" distribution network (Jones 1, p. 10). On the other hand Dŵr Cymru's LIT justification is based on a system of discounts for large potable users which begins with pipes above 100mm in diameter. Mr Jones also points out that such terms as "bulk" and "local" distribution are based on assumptions that are no more than "rules of thumb", since smaller users can be served by large mains, and vice versa. We also bear in mind that Dŵr Cymru's computerised database apparently uses the expression "trunk main" in a yet different sense, capable of including pipes as small as 150mm diameter. In our view appropriate caution is needed throughout this case in using the terms "bulk" or "trunk" distribution[14].

[14] It is at least clear that the parties' terminology is not consistent with the statutory definitions set out in s. 219 of the WIA91 which we have therefore disregarded. Note also that the expression "bulk supplies" is used in a different sense, to refer to the transfer of large quantities of water from one water company to another.

452. A more fundamental problem has, however, arisen regarding the use of the expressions "raw water aqueduct" and "non-potable distribution main".

453. Although the somewhat archaic expression "aqueduct" may conjure up visions of an open channel, the "raw water aqueducts" referred to in this case are in fact closed pipes, physically identical to the other pipes used by Dŵr Cymru. Ofwat's working definition of "raw water aqueducts" for the purpose of its reporting requirements is:

> "All mains or conveyors associated with the transfer of raw water either between sources or from source to treatment. Exclude mains carrying water of potable quality on entry to the main."

454. In the Authority's and Dŵr Cymru's submission, a pipe which transfers raw water to a customer (as distinct from transferring raw water from a source to a treatment works) is not to be regarded as a "raw water aqueduct" but as a "non-potable distribution main". Reference is made to two other definitions in Ofwat's reporting requirements:

> "Potable water mains
>
> The length of all potable water mains. Include all elements of trunk and distribution assets and system ancillaries. Include facilities intended for standby and emergency supplies."
>
> "Other mains
>
> The length of all raw and partially treated water mains. Exclude raw water mains classified as aqueducts under water resources. Include all partially treated industrial process water or fire-fighting mains."

455. Albion, however, says the distinction made between "raw water aqueducts" and "non-potable mains" is without substance since in both cases the *function* of the pipe is the same, namely the transfer of raw water from a source to a particular point. According to Albion, the cost of that function is the same whether the destination of the pipe is a customer or a treatment works. Most non-potable systems simply transfer raw water. Although in the case of Ashgrove there is partial treatment, that makes no difference to distribution costs. According to Albion, Dŵr Cymru's figures show that the cost of transporting raw water from source to treatment works is very much lower than the "distribution" element included in the First Access Price.

456. Dŵr Cymru and the Authority contest Albion's analysis, even though for the purposes of preparing its Asset Inventory required for the 1999 Business Plan Dŵr Cymru

reported figures for both raw water aqueducts, as defined above, and what it now describes as "non-potable distribution mains" together under the single heading "raw water aqueducts".

457. We return to these disputes later in this judgment. For present purposes it is sufficient to note that a "raw water aqueduct" of a given diameter is physically identical to what is regarded as a "non-potable distribution main" of that diameter, and is performing a function that is physically identical in the sense that in both cases the pipe in question transports raw water[15] from point A to point B. This physical identity needs to be kept in mind, notwithstanding the fact that in Dŵr Cymru's submission a "raw water aqueduct" is a pipe from a source which terminates at a treatment works, whereas a "non-potable distribution main" is a pipe from a source which terminates at a customer.

Potable and non-potable systems generally

458. In our view, the evidence before the Tribunal establishes that there are, generally speaking, significant differences between the non-potable and potable water supply systems under consideration in this case.

459. All the non-potable systems under consideration in the present case are simple, discrete supply systems through which very large quantities of raw water flow, typically in large diameter pipes, from a single source (sometimes two sources) to one or two large customers. In the case of two systems (Ashgrove and one other) the raw water is partially treated, but it is now common ground that that fact does not affect distribution costs, contrary to the position adopted by the Director in the defence and rejoinder. With what appear to be very limited exceptions, these "point-to-point" systems do not seem to need distribution pumping or service reservoirs of the kind found in potable systems[16]. There is no interconnection between these systems and the generality of Dŵr Cymru's water supply networks.

460. By contrast, eight out of ten of Dŵr Cymru's large potable customers are served by either the South East Wales (five) or the Tywi conjunctive use systems (three), which

[15] In the case of Ashgrove and one other non-potable system "partially treated" water.
[16] For distribution pumping and service reservoirs, see below.

serve the densely populated areas of Cardiff, Newport, Swansea, Bridgend and their surroundings[17]. A potable conjunctive use system is a single water supply system serving multiple customers from multiple water sources. The South East system, for example, serves some 500,000 connections including a number of Dŵr Cymru's larger potable customers. According to Mr Jones, whose evidence we accept on this point, such potable conjunctive use systems serve households and large users alike: for example, a large pipe leaving a treatment works will typically carry both water that will be supplied to large customers and water that will be supplied through the 'local' distribution system to households. Similarly, potable conjunctive use systems link a variety of water sources of different types (e.g. boreholes, reservoirs, direct river abstraction) into a single distribution system for a large number of customers. This allows the system to take account of fluctuations in weather and demand, and ensures that the sources are used as effectively as possible. Thus, as Mr Jones emphasises in Jones 3, at paragraphs 18 and 22, large potable customers share the assets of the conjunctive use systems with household customers, and it is impossible to draw conclusions as to which pipes are "attributable" to large users, since such an exercise is "highly subjective" and "not very meaningful".

461. As Mr Jones also emphasises, in such systems the water to a customer could come from any source connected to the system, via any route, depending upon the configuration of the system, and how it is most efficiently managed at any point in time, including in particular the demands of the multitude of smaller household customers with which the large potable customers share the distribution system (Jones 3, paragraph 97). To balance those fluctuations in demand such systems typically need service reservoirs, storage facilities, and associated pumping, as well as control mechanisms to balance the flow of water through the system as a whole. In addition, and self-evidently, supplies of potable water are subject to the increasingly rigorous quality requirements of the Drinking Water Inspectorate, while supplies of non-potable water are not subject to such requirements. How far potable and non-potable systems differ in practice as regards maintenance, capital investment in renewals, and leakage control is discussed later in this judgment.

[17] The other two large potable customers, one in Hereford and one in Anglesey, appear to be served by smaller conjunctive use systems.

462. None of the above differences are explored, or even mentioned, in the Decision, and had not been explained to us by the Authority or Dŵr Cymru prior to our interim judgment. We deal below with the detailed implications of some of these differences.

463. We would make, however, one particular point. Since some of the non-potable systems here in question predominantly use the larger pipes of 600mm or over[18], the parties at times have understandably sought to focus their arguments on various comparisons between the non-potable systems using only pipes of 600mm or over (or only pipes over 600mm) and that part of the potable system which, it is said, comprises only those larger pipes. The Tribunal is not persuaded that it should go down that road. That is not the approach used in the Decision. Moreover, to use that approach would involve a move away from regional average costs, whereas at this stage of the judgment it is regional average costs which we are considering. In any event, we find it difficult, conceptually, to isolate the larger pipes in a potable conjunctive use system from the rest of the system of which they form an integral part, or to attribute those larger pipes to particular customers, for the reasons given by Mr Jones. Moreover, as already explained above, the boundaries of the "bulk" potable distribution system are not clearly defined, including as it may 600mm and above, 300mm and above, and quite possibly pipes of smaller sizes. Nor are we satisfied that the underlying information is itself reliable, given the different figures we have been quoted at different times for pipe lengths and sizes.

Lack of information on costs

464. A striking feature of the present case has been the lack of any detailed, or verifiable, break down of the components of the cost of "distribution" here in question. The Decision arrives at a figure of 16p/m³ for the "distribution" cost to non-potable users, but gives no details of what that figure comprises. Dŵr Cymru has produced no original accounting information to support the figure of 16p/m³.

465. In fact, the figure of 16p/m³ for distribution costs used in the Decision is not built up from specific cost elements but represents the figure that remains after starting from

[18] Many of Dŵr Cymru's pipes seem to have been originally laid in imperial sizes. A 24" pipe translates to 610mm.

Dŵr Cymru's *average revenue from all customers* (73.3p/m^3) and deducting from that figure estimates for the costs of water resources and treatment, and local distribution. Thus, taking the average revenue of 73.3p/m^3 as a starting point at Step 1, Dŵr Cymru then apportioned that figure between resources and treatment on the one hand (27.9p/m^3) and "distribution" on the other (Step 2). The figure for resources and treatment was then apportioned between "resources" and "treatment" respectively (Step 3). At Step 4 Dŵr Cymru then took the average price it charged large customers under the LIT introduced in 1999 (43.9p/m^3)[19], which was a figure which sought to exclude the costs of "local" distribution, on the basis that larger users did not use the smallest pipes supplying largely domestic customers. Dŵr Cymru then deducted from the figure 43.9p/m^3 for "bulk" distribution the cost of resources and treatment (27.9p/m^3) produced by Step 2, to give 16p/m^3. This figure of 16p/m^3 is thus essentially no more than a balancing figure, representing what is left once the costs for "resources and treatment" (27.9p/m^3) and "local distribution"[20] are taken out. Adding those elements back in takes one back to the original starting point of average revenue per customer (73.3p/m^3)[21].

466. This "top down" approach in the Decision does not identify what elements of costs are covered by "distribution". It is possible to infer from Annex A to the Decision that "operating costs" (an expression that is not defined) for distribution at Ashgrove comprise 1p/m^3. Assuming that that would be representative of average "operating costs", that still leaves 15p/m^3 – representing over £1,000,000 of revenue per annum from Shotton Paper and 94 per cent of "distribution" costs – as entirely unexplained. No documents to explain that figure have been produced to the Tribunal.

467. Given that, in accordance with *United Brands*, it is incumbent on the Tribunal to seek to ascertain "the actual costs of supply", taking into account relevant costs allocations, as the European Commission has emphasised in the *Telecommunications Notice*, cited

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[19] This calculation was not in fact derived from the "distribution" figure produced by Step 2, but from the cost calculation made by Dŵr Cymru for the Large Industrial Tariff. This approach, to our mind confusing, was accepted by the Director: paragraphs 286 and 287 of the Decision.

[20] The calculations seem to imply a figure of 29.4p/m^3 in 2000/01 as the costs of "local distribution". The Large Industrial Tariff calculation set out in Dŵr Cymru's letter to the Director of 2 December 1998 would seem to imply a figure for the costs of "local distribution" of 36.2p/m^3 in 1997/1998 (average revenue in 1997/1998 80.13p/m^3 minus 43.9p/m^3 = 36.2p/m^3). It is difficult to reconcile these figures, even making allowance for the different base years and different average revenues used.

[21] 16p/m^3 + 27.9p/m^3 + (by inference) 29.4p/m^3 = 73.3p/m^3.

above, the central problem in this part of the case has been to determine how the unparticularised figure of 16p/m³ is made up. It is a surprising feature of this case that no original management accounting information (other than in relation to the operating costs of the Ashgrove treatment plant) appears to exist which might throw light on the figure of 16p/m³. The Tribunal's Order of 23 January 2006 required the production of original documentation relevant to the matters set out in paragraph 302 of the interim judgment but almost no original documentation has been produced. Without reliable accounting information it is very difficult for the Tribunal to verify whether the figure of 16p/m³ is appropriate, and in particular whether relevant costs have been allocated to non-potable users on a reasonable basis.

468. The only internal document which throws light on the costs issues we have to decide is Dŵr Cymru's LIT justification sent to the Director on 2 December 1998. That document is not as far as we are aware audited, does not descend to much detail and represents, if we may say so, a somewhat crude attempt at cost apportionment between large and other potable users on a broad brush basis, using figures from 1997/1998[22]. While it may be that the present regulatory system does not require a water company to maintain management information that would enable the company to explain what were the constituent elements of a figure such as the 16p/m³ for distribution costs here in issue, as in our experience would be the case for most major companies operating in unregulated markets, we have nonetheless been surprised by the difficulties we have encountered in getting to the bottom of that figure, and by the paucity of accounting information that Dŵr Cymru has been able to supply in this regard.

469. The evidence before the Tribunal including the LIT justification produced during the disclosure process suggests, at least by inference, that the figure of 16p/m³ must include an apparently substantial management overhead for "general and support services" as well as heads of costs for the repair and maintenance of large mains and service reservoirs, distribution pumping, waste detection, retail customer services, scientific services, rates, an infrastructure renewals charge, current cost depreciation, doubtful debts and regulatory costs, although in what proportions it is difficult to say. In addition, the distribution cost apparently includes an element for return on capital,

[22] For example, the assumption in the LIT that there is a direct relationship between a customer's volume and the size of pipe used to supply the customer is not borne out by the evidence in this case.

but it is very difficult to determine what capital, and what rate of return, has been built into the calculation. Similarly, although the importance of the industry's universal service obligations has been emphasised, no costings of those obligations have been produced. Even after these extended proceedings, the Tribunal has not been able to identify from the evidence, let alone verify, the constituent elements of the 16p/m³ relied on in the Decision.

470. In our view, there is nothing intrinsically inappropriate in a "top-down" approach to establishing average accounting costs, assuming reliable information and proper accounting procedures. But any such "top-down" approach needs to be subject to appropriate verification. That, in our view, is especially so where, as here, the calculation involves a very long chain of allocations which starts with Dŵr Cymru's average revenue per customer raised from over 1.4 million almost entirely potable customers, and then seeks to derive, from that average revenue figure, the cost of serving about 10 or 12 large industrial non-potable customers, which cost is then used as a proxy for the cost of serving only one non-potable customer, here Shotton Paper. In our view, in a Chapter II context, such an approach is acceptable, if at all, only if the allocations in question can be properly verified. The obvious cross-check in such a context is a "bottom-up" calculation which starts with the activity in question and then identifies the costs properly attributable to that activity. As the Tribunal again said in the interim judgment at paragraph 311, a "top-down" and a "bottom-up" calculation properly done should meet in the middle provided that there is a sufficient link between the product or services in each calculation. However, in this case such "bottom-up" information as there is before the Tribunal, does not verify the "top-down" calculation to be found in the Decision.

Revenues as a proxy for costs

471. A further feature of the Decision, to our mind surprising, is the basic assumption made for the purposes of the average cost calculation that Dŵr Cymru's "costs" are equivalent to its overall "revenues". A more informative accounting approach would have been to identify various heads of expenditure, and deduct the total expenditure from revenue to give an operating profit (loss) before interest and tax. Even accepting that in economic terms one can consider the return on capital as "a cost", one would

then have been able to see, in a more transparent way, what was the profitability attributed to the activities in question and what were the costs attributed.

472. More importantly for present purposes, however, the Decision is predicated on the assumption that Dŵr Cymru's revenues and hence its profits are reasonable (paragraph 256), which implicitly assumes that its costs are reasonable also. Although that ought to be true at a general company level, as a result of the operation of the regulatory system (although the K factor applies to the water and sewerage businesses together), that assumption does not in our view necessarily hold for particular elements of cost. Nor does it necessarily hold for particular classes of customer, particularly if those customers have different cost characteristics, and the prices to those customers are much less regulated, in comparison with the generality of customers, as is the case for non-potable supplies. This, in our view, has been a central problem in the present case. The Director's own pleading accepted that his assumption that *overall* average revenue figures do not, together, represent excessive pricing *overall* does not, of course, mean that "a company is not grossly over- or under-charging particular customer(s)" (Defence, paragraph 68).

Disaggregating costs

473. According to a work, by Sir Ian Byatt, a former Director-General of Water Services, and Professors Reid and Ballance cited by Dr Marshall:

> "Water supply and sanitation services comprise the production of distinct multiple outputs, which could potentially be supplied by distinct markets. For example, the water supply process comprises: abstraction from underground sources and surface sources such as aquifers and rivers; storage (natural or artificial) in order to be able to maintain supplies during times of shortage (i.e. drought situations); treatment to remove natural or other pollutants; bulk transport before and/or after treatment; local storage (to cover diurnal variation in demand); and distribution via a network of mains to consumers. There is also the customer interface retailing, which deals with connections, billing and payment systems."

474. It is contended by the Authority, and we accept, that the transportation element of the water supply system (i.e. the distribution of water though pipes and mains) has strong natural monopoly characteristics, mainly as a result of the high cost of duplicating the

infrastructure. However, other activities such as water abstraction from underground or surface sources, or customer-facing services such as retailing do not exhibit the same "natural monopoly" characteristics.

475. In those circumstances, it seems to us that it is difficult properly to determine the costs attributable to using the "natural monopoly" element in the supply chain without making some attempt to disaggregate or separate those costs from the costs of other activities now potentially open to competition, such as retail activities. No attempt to do so was made in this case. Moreover, the Authority's present accounting guidelines have not been developed for that purpose, since part of the "natural monopoly" sector (i.e. the pipeline) is accounted for under the regulatory category of "Water Resources" (which includes the transfer of water from a source to a treatment works) and part is accounted for under "Distribution" (transportation from a treatment works to customers). This difficulty is made more acute by the fact that in most non-potable systems there is no treatment works in the chain of supply at all. These aspects have in our view complicated the analysis in this case.

Some difficulties with the data

476. We have also in this case encountered a number of difficulties with the underlying data. Although we were told that Dŵr Cymru's digitalised database could instantly identify the whereabouts of all its pipes, the figures we have been given for the lengths of the non-potable systems in question have varied from 158km in the rejoinder, to something around 200km in Jones 1 (paragraph 37), to 152km, 118km and finally around 110km, as seen in Dŵr Cymru's letters of 10 March 2006, 4 and 19 April 2006, partly depending on whether what Dŵr Cymru considers to be "raw water aqueducts" are included or not. Dŵr Cymru's Asset Inventory, which did not distinguish between "raw water aqueducts" and "non-potable mains", was not compiled in accordance with the Director's reporting requirements. Certain figures for raw water aqueducts/non-potable mains falling within various band-widths were incorrectly compiled in the relevant June return. More recently, in letters of 19 June and 21 July 2006, Dŵr Cymru has informed the Tribunal that in a sample of large treatment works, 6 out of 12 (representing 25 per cent of Dŵr Cymru's raw water volume) had no raw water aqueducts, a fact which has prompted Dŵr Cymru to recalculate what it says are the

costs of "raw water transfer" from around $2p/m^3$ to $4p/m^3$, although the former figure had not earlier been challenged. Incidents like this, when important factual allegations and new cost estimates suddenly appear at a late stage without any supporting documentation, confirm in our mind that the Tribunal should be cautious about relying on data provided by Dŵr Cymru which has not been appropriately verified.

B. CERTAIN COST DRIVERS

Distance

477. It is common ground that capital costs are influenced by the length and size of a mains. Albion submits that, in general, non-potable mains of large diameter are shorter in length than their equivalent potable counterparts. Albion compares the average length of non-potable systems on a per customer basis with the average distance of Dŵr Cymru's large potable customers from source to treatment works identifiable from the maps exhibited to Jones 1. The Authority and Dŵr Cymru submit that no useful conclusion can be drawn from this comparison, and that in any event pricing decisions could not be based on arguments of this kind.

478. In our view, this part of Albion's argument is difficult to establish on the facts of this case.

479. We accept that it should be possible to establish the length of a "non-potable main", although even that has proved difficult in this case: the figures we have been given for the total length of Dŵr Cymru's non-potable system have varied (see above) and even now the exact length of the Ashgrove pipeline is not wholly clear.

480. However, in our view the overriding consideration is that it is difficult to establish a meaningful "length" for the mains supplying Dŵr Cymru's large potable customers, so as to be able to make a meaningful comparison with Dŵr Cymru's non-potable customers.

481. As Mr Jones states in his evidence, Dŵr Cymru's large potable customers are typically served by conjunctive use systems, which serve multiple customers from multiple sources. In our view, for the reasons given by Mr Jones, it is difficult, if not

impossible, to attribute particular pipes to particular customers, or to identify the particular sources for the water in question. For this reason we also doubt whether "the nearest treatment works" is a reliable proxy for working out the average distance over which large volumes of water have to be transported to particular large potable customers. We are also conscious of the fact, that within non-potable systems, distances can vary quite markedly from 1 or 3 km to over 50 km (see Jones 1, p. 11 to 12), according to whether a particular plant just happens to be close to a source or not. In those circumstances an average "per customer" may not in our view be a useful figure. An average "per customer" will also be affected by whether a particular non-potable main happens to serve one, or more than one, customer, which again may simply be the result of historical accident.

482. In our view, therefore, Albion has not established a reliable basis for calculating the lengths of pipes serving potable and non-potable customers respectively. Accordingly it is not shown that "average length of pipe" would be a secure basis on which to base a cost allocation between large non-potable users as a class and large potable users as a class.

483. We add at this point that at the first hearing and also subsequently e.g. in its letter of 30 June 2006, weight has been placed by Albion on various calculations seeking to show that in terms of MEA values per unit of length (£ per km) non-potable systems are less costly than equivalent potable systems. We were concerned about this argument at the stage of the interim judgment (paragraph 296).

484. Dŵr Cymru's evidence on this point (e.g. Jones 1, pp. 14 to 20) is that MEA values of potable and non-potable mains of equivalent diameter and length will, by definition, always be identical, except to the extent that they would be expected to be laid predominantly in different types of terrain. This point is accepted by Albion. Dŵr Cymru further argues that the comparison relied on by Albion at the first hearing was flawed, because the apparently lower MEA values shown for raw water aqueducts/non-potable mains were caused simply by the fact that a higher proportion of raw water aqueducts consisted of pipes of smaller sizes.

485. We note that the latter point made by Dŵr Cymru was partly obscured because the relevant entry in Dŵr Cymru's 2004 Asset Inventory had been wrongly compiled. However, in the light of these arguments, it seems to us that a comparison based on MEA values per km is unlikely to throw much light on the issue we have to resolve, since a pipe of the same diameter will have the same MEA value per km whether it carries potable or non-potable water. Any difference in overall average MEA values as between non-potable and potable systems will simply be a result of differences in the "mix" of pipes[23]. We do not think it useful to pursue this argument further.

486. Similarly, we are not persuaded that we should base firm conclusions on what became known as Albion's methodology no. 3, which sought to show that, at 16p/m³, Dŵr Cymru's cost recovery per kilometre from non-potable customers was much greater than its cost recovery from large potable customers. In this methodology Albion argues, on the basis of what the Authority considers to be the length of Dŵr Cymru's bulk potable system (1834km, including 300mm and 600mm pipes) and what Dŵr Cymru considers to be the length of its "non-potable mains" (89km of mains over 300mm), that at 16p/m³ Dŵr Cymru's cost recovery per kilometre for non-potable users was between 2 and 3 times its cost recovery per km from potable users in the period 2000/01 to 2002/03 (see Day 5, pp. 4 to 5 and Albion's letter of 30 June 2006), contrary to the position taken by the Director in the rejoinder.

487. This calculation is attractive from Albion's point of view, because it appears to be the logical result of certain positions taken by the Authority and Dŵr Cymru. However, in our view, it is not appropriate to try to identify the precise length of the "bulk" potable system, since what size of pipe can properly be described as constituting part of the "bulk" potable distribution system is insufficiently clear in the evidence. Similarly, the length of "non-potable mains" relied on depends on the distinction that Dŵr Cymru draws between a "non-potable main" and a "raw water aqueduct", about which the Tribunal has serious reservations, for the reasons given below. We do not therefore rely on the methodology advanced by Albion of "cost recovery per kilometre."

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[23] Thus the point made by Mr Jones on p. 20 of Jones 1 that the MEA values for the larger raw water aqueducts/non-potable mains taken together are slightly higher than the equivalent MEA values for the larger potable mains seems to us simply to reflect the fact that the raw/non-potable average MEA value is driven up by the large (>900mm) diameter raw water aqueducts that carry raw water to the potable, as distinct from the non-potable, systems: see Albion's letter of 30 June 2006, p. 7

Geographic location

488. It is common ground that whether a pipe is laid in an urban or rural location is a cost driver, since the construction costs associated with rural locations are lower than those associated with urban locations. Ofwat publishes various benchmarks indicating what these costs would be. For example, the cost of laying a 600mm main in a rural location is approximately half the cost of laying an equivalent main in an urban location (Authority's skeleton, p. 135). One implication of this is that the infrastructure renewals expenditure attributable to renewing pipes in urban locations is presumably substantially greater than that attributable to renewing pipes in rural locations.

489. Albion's essential argument is that non-potable systems are to be found to a greater extent in rural locations than are potable systems. The Authority and Dŵr Cymru submit in response that although there is some evidence that, to some extent, a greater proportion of non-potable mains are laid in rural locations, there is no systematic reason, other than historical accident, for supposing that large potable users should be situated in more urban locations than are large non-potable users.

490. We understand that in publishing its various benchmarks for construction costs, Ofwat uses the terms "urban", "semi-urban" and "rural", but we have not been told the exact definitions used. We use the terms "urban" and "rural" in their normal meaning, to denote "a town or city" and "countryside" respectively, and the terms "semi-urban", or "semi-rural" to indicate landscape that is somewhere in-between. The evidence the Tribunal has on this aspect is mainly contained in the maps annexed to Jones 1 and 3.

491. Taking first the maps exhibited to Jones 1, those maps at exhibit CJ8 seek to show the pipes over 300mm serving Dŵr Cymru's large potable customers. Eight out of the ten customers shown are served by the South East and Tywi conjunctive use systems. It is apparent from a simple visual examination of the maps that a significant proportion of the pipes shown are concentrated in urban areas particularly, as one might expect in Cardiff, Newport, Swansea, Bridgend and so on. The urban centres of Cardiff, Newport and Swansea seem to contain particularly concentrated systems of large pipes, all interconnected with one another. These are large, primarily urban, networks.

492. If one then compares that with the more detailed maps at CJ8 which show Dŵr Cymru's non-potable customers individually, it is apparent that system S1 (9km) passes through a built up area in Cardiff. However, S2 (19km) appears to pass largely through rural landscape, although the first part, on the outskirts of Cardiff, appears to be semi-rural. S5 (5km) appears to be partly rural and partly semi-urban, terminating on the outskirts of Barry. S4 (10km) goes from the River Severn to the edge of Magor, through what appears to be mainly semi-rural landscape. S5 (2.5km) appears to be at least semi-urban, on the outskirts of Bridgend. S6 (63km)[24] appears to be almost entirely rural, as does S7 (24km)[25] apart from a short length at Pembroke. S8 (which is apparently 34km in total)[26] is also almost entirely rural. S9 (7km) begins as rural then seems to be largely semi-urban/urban on the eastern side of Llanelli. S10 (about 16km) is Ashgrove, which is predominantly rural.

493. This map evidence, although admittedly subjective to some extent, seems to show that, proportionately speaking, fewer non-potable mains are laid in urban areas than is the case with potable mains. It also appears to be the case that where a non-potable main is in an urban area, with one or two exceptions it appears to be laid somewhat on the fringe rather than mainly under streets. Unlike non-potable systems, large potable mains of 300mm or above appear to a significant extent to criss-cross under the streets of city centres and other densely populated areas. It is perhaps not surprising that large potable mains are found in urban locations, since the systems in question are serving large urban populations.

494. In Jones 3, Mr Jones appeared to be concerned to correct the impression given by the maps in Jones 1. He points out that while the maps in Jones 1 showed a large proportion of mains over 300mm in urban areas, these mains were not in any meaningful sense "attributable" to particular large potable users, but were serving the

[24] S6 is considered by Dŵr Cymru to be 8km, apparently on the basis that the 55km of mains upstream of the treatment works in this system is to be regarded as a "raw water aqueduct". The figure of 8km was corrected from 16km in Dŵr Cymru's letter of 19 April 2006.

[25] S7 corrected by letter of 4 April from 58km to 24km. The original map of S7 is apparently incorrect: the pipe shown as running from the north of Haverfordwest and the part of the pipe shown as running west from the Eastern Cleddau are apparently part of S8.

[26] S8 is considered by Dŵr Cymru to be 10km, apparently on the basis that this is the distance from a treatment works (which apparently does not treat the water in question) to the customers. There is 24km of "raw water aqueduct" upstream of the treatment works. S8 includes not only the pipe shown on the map as running from the north of Haverfordwest but also the pipe shown on the map of S7 as running from the Eastern Cleddau.

South East and Tywi conjunctive use systems generally. We agree, and accept Mr Jones' analysis.

495. For that reason it seems to us that it is not useful, as the Authority and Dŵr Cymru seek to do, to rely on the location of *individual* potable users, since it is very difficult to identify particular mains or sources serving those *individual* customers: they are served by the conjunctive use systems as a whole.

496. If it is to be made, in our view the comparison should be between the whereabouts of the relevant non-potable systems *as a whole* and the whereabouts of the potable mains over 300mm taken *as a whole* (assuming for argument's sake, that such mains are representative of "bulk" potable distribution).

497. Dŵr Cymru's non-potable systems do not appear to contain anything closely comparable to the large potable mains networks over 300mm which run through densely built up cities and other urban areas in South Wales. The cost of those systems is borne by all potable customers. The issue at this stage is whether those costs should be borne in equal measure by large non-potable users whose systems lie predominantly in more rural areas.

498. Dŵr Cymru, through Mr Jones, has produced further maps annexed to Jones 3 (exhibit CAJ-II). These maps seek to show the whereabouts of Dŵr Cymru's large potable mains and non-potable systems mapped in accordance with the Ordnance Survey's definition of "urban" and "rural". On that basis, according to Dŵr Cymru, some 78.8 per cent of non-potable systems are laid in rural areas, as compared with 60.5 per cent in the case of large potable mains. That, according to Dŵr Cymru, is not a significant difference.

499. It emerged during the proceedings that the maps attached to Jones 3 distinguish between "urban" and "rural" on the basis of the Ordnance Survey's definition of "Developed land use area" which is "an area containing a concentration of buildings and other structures". This definition of "urban" tends to capture quite small settlements in predominantly rural locations. As illustrated in Dŵr Cymru's letter of 2 June 2006, the village of Sealand, near which the Ashgrove system runs at one point, is

shown as “urban”, although in ordinary language the situation of that village appears from the map to be predominantly “rural” – it is surrounded by countryside and does not appear to have houses on both sides of the road. It seems to us unlikely that the construction costs of laying a pipe in the vicinity of Sealand are the same as laying an equivalent pipe through the centre of Cardiff or Swansea. In our view, the maps exhibited to Jones 3 are likely to overstate the proportion of mains that can properly be described as “urban”.

500. Another limitation on these latter maps exhibited to Jones 3 is that they show only what Dŵr Cymru considers to be “non-potable mains” i.e. excluding that part of the non-potable systems in question “upstream of a treatment works” which Dŵr Cymru considers to be “raw water aqueducts”. On the basis that the non-potable mains shown on these maps amount to some 112km (Dŵr Cymru’s letters of 4 and 19 April 2006), the figure given by Mr Jones that some 79 per cent of non-potable mains are to be found in rural areas would imply a rural length of some 88km out of 112km. However, if one adds back lengths (76km) which Dŵr Cymru has excluded on the grounds that they are “raw water aqueducts”, the total length of the discrete non-potable systems here in question is approximately 186km. It is apparent from the maps at Jones 1 that the excluded lengths are almost entirely in rural areas. That would give a total rural length of about 164km out of 186km – i.e. 88 per cent. For the reasons given in relation to our discussion of the “raw water comparison” below, we think that that would be an appropriate adjustment to make. That would confirm that a significantly higher proportion of non-potable systems are in rural areas compared with “bulk” potable systems.

501. In our view, the balance of the evidence shows that on average, in Dŵr Cymru’s operational area, non-potable systems appear to be situated more in rural locations than is the case, on average, with Dŵr Cymru’s large potable mains. That is not, in our view, pure chance or accident, since large potable systems are necessarily found in urban areas serving large populations, whereas non-potable mains are less likely to be laid in densely populated areas. Since it is accepted that urban/rural location is a cost driver, it seems to us that this is a potentially relevant factor to which the Director ought to have given consideration before reaching his conclusion, at paragraph 302 of

the Decision, that the cost drivers for large potable mains and non-potable systems are, on average, the same.

502. We appreciate that, had he considered it, the Director would have been confronted with the problem that, in the water industry, the fact that particular customers are in urban or rural locations has traditionally not been regarded as a basis on which charges should be differentiated. A similar problem would have arisen had we considered length of pipe to be a relevant factor, since charging on the basis of length of pipe has not been the traditional practice in the water industry either. However, these are separate points to which we revert in our discussion of "regional average pricing" for the non-potable systems in question later in this judgment.

Aspects of complexity

503. Albion argues that potable systems are considerably more complex than non-potable systems: the latter are simple point-to-point systems while the former are typically conjunctive use systems which need a much more complex network of valves and interconnections (so that potable water can flow throughout the system according to the demand at any particular time), and which require service reservoirs or water towers (i.e. typically closed storage facilities that are used in balancing supply and demand) as well as "distribution pumping", i.e. the pumping that is required to move potable water around the system, typically to a service reservoir, once the water has been treated, as well as booster pumping within the distribution system "downstream" of the treatment works. These systems of valves, service reservoirs and distribution pumping, argues Albion, are hardly needed at all in non-potable systems.

504. The Authority and Dŵr Cymru reply that water supply systems differ for reasons of topography and geography: there is nothing intrinsic about non-potable systems which distinguishes them from potable systems: whether pumping is required will, for example, depend on whether the customer is situated uphill or downhill from the relevant source or treatment works. In any event, there is a service reservoir on non-potable system S7 and pumping near to the start of system S4 (see Jones 1, paragraphs 17, 18, 102, and Jones 3, paragraphs 54 to 56).

505. The Tribunal, in a letter of 7 August 2006, asked for further information as to the generally accepted meaning of the term “distribution pumping” as used in the LIT, and how the “service reservoirs” and “pumping stations” referred to on Dŵr Cymru’s website description of its activities relate to its non-potable supplies. The Authority and Dŵr Cymru replied on 22 August 2006. Albion commented on those replies on 25 August 2006.

506. To take, first, service reservoirs, it appears to us from the information before the Tribunal that Dŵr Cymru’s network comprises some 700 service reservoirs (and 15 water towers). We understand from Dŵr Cymru’s letter of 22 August 2006 that those assets are used in the supply of potable rather than non-potable water. Indeed, as we understand it, the expression “service reservoir” as normally defined refers to a reservoir holding potable water, which necessarily has to maintain the integrity of that water for human consumption. However, Dŵr Cymru maintains in its letter of 22 August 2006 that there are a number of assets equivalent to “service reservoirs” on the non-potable systems here in question, apparently on the basis that these are “break pressure tanks” that would be classified as “service reservoirs” but for the fact that the water is non-potable[27]. The suggestion in Dŵr Cymru’s letter of 22 August 2006 that there are “service reservoirs” on systems S2, S5, S7, S8 and S9 seems to us to mis-use the term “service reservoirs” as that term is normally understood in the industry (i.e. as referring to potable systems). We are not satisfied on the evidence that these few storage facilities or tanks are in any realistic sense comparable to Dŵr Cymru’s wide network of 715 service reservoirs for its potable supplies. The Authority’s letter of 22 August 2006 did not in our view take matters any further.

507. The evidence suggests to us a systematic difference, in the sense that whereas a system of service reservoirs constructed to potable water standards is intrinsic to a conjunctive use potable system serving large and small potable customers alike, it is not necessarily the case that the few storage facilities and tanks found on some non-potable systems can automatically be equated to “service reservoirs” as that term is understood in potable systems, or, *a fortiori*, that the costs incurred in respect of such tanks are the same as the costs of service reservoirs on potable systems.

[27] These contentions were not referred to in Jones 1

508. We note, however, that in Dŵr Cymru's LIT justification, submitted at the end of 1998, a discount was applied to the costs of service reservoirs in respect of certain large potable users (over 500Ml per annum[28]) apparently to reflect the argument that such large users made less use of Dŵr Cymru's network of service reservoirs. The first question that arises, therefore, is whether the residual cost attributable to large potable users as regards service reservoirs (and the return on capital thereon) is equally attributable, on average, to the non-potable systems here in question. On Albion's figures, these costs in respect of service reservoirs would account for only some 0.32p/m³ out of the distribution cost of 16.3p/m³ for large potable users which, says Albion, can be derived from Dŵr Cymru's LIT justification. On the basis of those figures, assuming them to be approximately correct, these costs of service reservoirs, notionally attributable to large non-potable and potable users alike, seem to us of only marginal importance in the context of this case.

509. However, of more substantial relevance, at least potentially, is the amount attributed by Dŵr Cymru in its LIT justification to "current cost depreciation". According to Albion's figures, "current cost depreciation" would account for some 4.36p/m³ out of Albion's figure for distribution costs for large potable users of some 16.3p/m³ derived from the LIT justification – i.e. around 26 per cent of total distribution costs. No discount on this item is allowed to large potable users in the LIT justification. Current cost depreciation, as the Tribunal understands it, is chargeable only on "above ground" assets and is not charged on the "below ground" infrastructure (mains etc.), the latter being subject instead to an "infrastructure renewals charge". The phrase "non-infrastructure assets" is used to describe these assets above ground[29]. As service reservoirs, together with other "above ground" assets such as pumping stations, bear a current cost depreciation charge it appears that all potable users (including large potable users) bear this charge in respect of the whole 700 or so service reservoirs. On the assumption in the Decision that the cost drivers for potable and non-potable systems are the same, it would appear that non-potable users are bearing this current cost depreciation charge in equal measure, not-withstanding that service reservoirs in that sense do not occur in non-potable systems. Even if some storage facilities or tanks occur on non-potable systems, on the evidence presently available to the Tribunal,

[28] Apparently some 11 potable customers were in this category at the time.
[29] See e.g. RAG 2.03 for 2002/03, at 1.1 to 1.3.

there appears to be a significant question mark over whether the current cost depreciation charged to large potable users in respect of service reservoirs is properly attributable in equal measure to the non-potable systems here in question. In any event, this issue does not appear to have been addressed in the Decision.

510. As regards "distribution pumping", our understanding is that this item of cost, as referred to in the LIT justification, relates to pumping of potable water, typically to a service reservoir, once it has been treated, as well as to the booster pumping as necessary of potable water through the conjunctive use systems in question. According to the figures Albion has derived from the LIT justification, distribution pumping accounts for 1.8p/m^3 (about 11 per cent) of the costs attributable to large potable customers, to which should be added the relevant current cost depreciation charge.

511. In its letter of 7 August 2006 the Tribunal sought clarification of the expression "distribution pumping" as used in the LIT justification and, more generally, whether that expression could normally comprise pumping at source which, as the Tribunal understood it, would normally be regarded as part of the Water Resources function.

512. In reply to the Tribunal's letter of 7 August 2006 Dŵr Cymru said that although the term "distribution pumping" was not an expression used in the regulatory accounts (it was not suggested by the Tribunal that it was) it refers to an activity equivalent to "high lift pumping" described by the Director in RAG 4 (p. 23) as:

> "Operation, maintenance and power costs of pumps, buildings and equipment used for the transfer of water from treatment to service reservoirs or for boosting to/within the distribution system."

513. According to Dŵr Cymru, this is to be distinguished from "low lift pumping" defined as:

> "Operation, maintenance and power costs of pumps, buildings and equipment used for abstraction, conveyance to treatment and treatment (i.e. excludes high lift pumping used to transfer to service reservoirs or boosting to/within that distribution system.)" (RAG 4, p. 22)

514. According to a footnote to RAG 4:

> “Where pumps serve a dual low lift/high lift function an assessment must be made of the costs of each function based on relative pumping head”.

515. According to the Authority, who also referred us to the same definitions, whether pumping costs are allocated to “Water Resources” or to “Distribution” depends on the function of the pipe in question.

516. Dŵr Cymru further argued that there was “high lift” pumping at source in many non-potable systems, e.g. on non-potable systems S3, S4, S7 and S8 and “high lift” pumping to/from a service reservoir on e.g. S2, S5, and S6.

517. In our view neither the Authority nor Dŵr Cymru answered the question we asked, which was the meaning to be attributed, in normal circumstances, to the phrase “distribution pumping” as used in the LIT justification.

518. On the evidence, it does not seem to be the case that “distribution pumping” in the sense used in the LIT justification (Appendix 3 and Appendix 4) occurs in non-potable systems. As we understand it, for large potable users the costs attributable to pumping at source are not normally allocated to “Distribution” but are accounted for under “Water Resources”. “Distribution pumping” occurs downstream of a treatment works, and does not normally include pumping at source in potable systems.

519. On some systems including Ashgrove there is no distribution pumping at all. Where pumping does occur on non-potable systems, it is mostly pumping at source. Apart from the misuse (in terms of the standard definition) of the term “service reservoir”, we are not satisfied with Dŵr Cymru’s suggestion that pumping at source should be treated as equivalent to “distribution pumping” on non-potable systems, when it is not so treated on potable systems. Moreover, it is common ground that Dŵr Cymru has 532 booster pumping stations which do not relate to non-potable supplies at all. In those circumstances it does not appear to us that there has been any adequate investigation of whether the pumping costs incurred as part of the distribution function in potable systems as regards large potable users should automatically be transposed to non-potable users.

520. Moreover, what we are considering here is a common carriage charge for the use of the Ashgrove system. As Albion envisages it, the water in question would be supplied by United Utilities, and Albion would have to pay United Utilities for the pumping facilities at Heronbridge: in that scenario, the pumping at source would be part of the acquisition cost of the water, not its subsequent distribution. In those circumstances, to include "pumping at source" as part of the "distribution charge" for common carriage would apparently be requiring Albion to pay twice over, once to United Utilities and again to Dŵr Cymru in the "distribution charge" (although the Ashgrove system is, in fact, a "gravity main" without any pumping after the water in question passes from United Utilities to Dŵr Cymru).

521. In any event, given that Dŵr Cymru has some 532 pumping stations, it seems likely on the evidence that the vast majority of pumping costs are not incurred in respect of non-potable systems.

522. In the LIT justification, the price to large potable users is discounted because of the "reduced use" by them of distribution pumping. In the light of the above, it seems to us that the question whether this element of distribution cost should have been further reduced for non-potable users on the ground that such customers make less use of "distribution pumping" was a matter that ought to have been considered in the Decision but apparently was not.

523. As to the other arguments advanced by Albion under this heading, it seems to us likely that a conjunctive use system will require more central control systems and valves than a more simple point-to-point system, but we have not been able in these proceedings to investigate this point in more detail.

524. Similarly, on the evidence before us we are unable to reach a concluded view on the issue of pressure.

Renewals, maintenance and leakage

525. Albion submits that the infrastructure renewals expenditure, maintenance costs and expenditure on leakage control are substantially less on non-potable, as distinct from

potable, systems not least because of the regulatory requirements which apply to the latter but not the former.

526. The Authority and Dŵr Cymru reject those arguments. Although they accept that in recent years Dŵr Cymru has prioritised its investment in potable mains in order to meet regulatory requirements, they submit that fact arises merely because of an issue of timing, and reflects an exceptional circumstance. With very long lived assets such as a water main it is not appropriate to take a snapshot over a relatively short, five year, period. In any event, most of Dŵr Cymru's investment relates to the local network, rather than to the bulk distribution pipes here in question. As regards maintenance and leakage expenditures, again it is impossible to say that there is a systematic difference between potable and non-potable systems, according to Dŵr Cymru and the Authority.

527. We note the figures relating to renewals and maintenance costs respectively set out in Bryan 4 and taken from Dŵr Cymru's official returns:

A. Mains renewed or refurbished

June Return, Table 11, lines 5 and 6 and
Table 32, lines 3 and 20

	2000/01	2001/02	2002/03	2003/04	2004/05	TOTAL
Raw water aqueducts	0	0	0	0	0	0
Potable mains km	312	525	493	675	550	2,555
Potable mains £m	£46.7	£60.8	£65.6	£64.0	£61.9	£299m

B. Infrastructure renewals expenditure

June Return, Table 21, lines 25 and 26

	1998	1999	2000	2001	2002	2003	2004	2005
WR&T assets	0.0	0.2	0.0	0.1	0.3	0.7	0.6	0.6
Potable mains	15.6	21.0	21.9	22.4	24.0	29.8	62.9	30.5

C. Reactive and planned maintenance (infrastructure)

June Return, Table 21, line 23

	1998	1999	2000	2001	2002	2003	2004	2005

Raw water aqueducts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Potable mains £m	25.5	25.5	23.1	23.9	26.3	26.5	29.9	28.5

528. We assume, in the absence of any evidence to the contrary from Dŵr Cymru, that in Table A above the figures for raw water aqueducts accurately represent the position for what Dŵr Cymru describes as "non-potable mains". It appears from Table A that in the years 2000/01 to 2004/05 there has been no renewal or refurbishment of such mains, in contrast to approximately £60 million per annum that Dŵr Cymru has been spending on potable mains[30].

529. As regards Table B, which shows the provision for infrastructure renewals expenditure made in Dŵr Cymru's accounting system, the provisions for potable mains are much higher than the figures for "WR&T" (i.e. resources and treatment) assets. Although it is not entirely clear in this table where any provision for infrastructure renewals would fall in relation to non-potable systems, any such provision is not likely to be included under the heading "potable mains". We appear to have no evidence as to what, if any, infrastructure renewals expenditure is allocated to non-potable systems.

530. Similarly, it appears from Table C above that in the period 1998 to 2005 there has been no reactive or planned maintenance on the non-potable systems in question in this case, in contrast to about £25 million per annum that Dŵr Cymru has been spending on potable mains. Despite arguing that Ofwat only requires certain investment to be recorded in its returns, Dŵr Cymru has had the opportunity to produce to the Tribunal evidence of its investment in, or maintenance expenditure on, its non-potable systems, but no such evidence has been produced.

531. As to renewals and refurbishment expenditure, it appears to be the case that the need to improve the quality of potable water dates back to privatisation, and derives among other things from tougher European drinking water quality standards (Dŵr Cymru's response of 20 March 2006, p.11). According to Mr Jones, whose evidence we again accept, Dŵr Cymru's mains renewals programme over the last ten years has been

[30] It appears from Dŵr Cymru's 1999 Business Plan that Dŵr Cymru planned to spend considerably more on its systems.

dominated by legal requirements related to drinking water quality; 2,295km out of the 2,555km of mains replaced were replaced as a result of the requirements of the Drinking Water Inspectorate (Jones 3, paragraph 46). Since no equivalent requirements apply to non-potable systems, this appears to be a cost driver that applies to potable systems but not to non-potable systems.

532. It is contended by Dŵr Cymru that the bulk of this expenditure relates to mains of smaller sizes within the 'local' distribution system, but we are unable to verify this suggestion, and no breakdown of this expenditure has been provided. It would seem, at first sight, that the necessary drinking water quality would need to be assured throughout the potable system. In addition, there is the difficulty, already referred to, of identifying what part of Dŵr Cymru's conjunctive use systems are properly attributable to bulk, as distinct from local, distribution.

533. As to Dŵr Cymru's argument that this expenditure constitutes an 'exceptional circumstance,' the circumstance in question seems to have existed for the past ten years, and the Director's Final Determinations for 2004 envisage the continuation of a similar programme of quality improvement, including the relining or replacement of mains over the period 2005 to 2010 (see e.g. Final Determinations 2004, pp. 68 to 69 and 197 to 198). In our view a cost driver that has been and will be a permanent feature of the service for upwards of 15 years is not one that can be ignored.

534. We understand Dŵr Cymru's point that over the life of assets that may last for 100 years renewal expenditure is likely to be lumpy, perhaps occurring once and then not again for many years. However, in this particular case the permanent need to invest in upgrading the quality of the potable system does seem to us to be likely to have increased distribution costs of potable systems relative to the costs of non-potable systems. Dŵr Cymru makes a similar point in relation to treatment costs (response of 20 March 2006, p.11). To what extent this was so, and what conclusions to draw, was in our view a matter that should have been taken into account in the Decision.

535. As to maintenance expenditure, a similar picture emerges, with no or very little planned or reactive maintenance being carried out for "raw water aqueducts" and thus, we assume "non-potable mains". Although Albion asked Dŵr Cymru for figures on

maintenance costs for potable, non-potable and raw water mains respectively, no figures have been provided. On the evidence we have it is difficult to resist the conclusion that, over a 5-year period, systematically less planned or reactive maintenance is carried out on non-potable systems as compared to potable systems.

536. Some evidence in support of this conclusion is to be found in Lynette Cross' statement on behalf of Dŵr Cymru dated 19 October 2004. Although Ms Cross produces evidence of maintenance (including logs) as regards the Ashgrove treatment works, no documentary evidence is produced as regards maintenance of the Ashgrove main, which is what we are here concerned with. It appears from paragraph 21 of Ms Cross' statement that what is there described as "the annual planned maintenance programme" in fact consists of the length of the pipeline being walked twice a year which, it is said, includes a "visual assessment", repair of minor leaks and valve testing. That appears to us to be a minimal level of maintenance. Leakage from the pipeline appears to be about 1 million cubic metres (220,000 gallons) a year. If the Ashgrove main is typical of other non-potable systems, in the absence of any evidence to the contrary it appears to us likely that minimal maintenance is in fact carried out on the non-potable systems here in question.

537. Finally on this aspect of the case, we note that in the LIT justification there is a substantial item for "waste detection" expenditure which, according to Dr Bryan, would equate to some 1.63p/m^3 out of the attributed distribution cost of 16.3p/m^3 for large potable users (almost 10 per cent). We have been provided with no evidence of any equivalent activity or expenditure associated with waste detection on the non-potable systems here in question. Although the Decision finds, at paragraph 289, that there is likely to be a minimal difference in relevant leakage expenditure as between bulk potable and bulk non-potable supplies, it seems to us unlikely that walking the Ashgrove system twice a year could cost as anything like the amount attributed to "waste detection" in Dr Bryan's figures.

Summary on cost drivers

538. In summary, the conclusion in paragraph 302 of the Decision to the effect that the cost drivers for non-potable and potable water are the same, when assessing the matter on

an average accounting basis, in our view did not take into account: (i) that, on average, non-potable systems are predominantly sited in more rural locations than potable systems; (ii) whether distribution pumping occurs to the same extent on non-potable systems as on potable systems; (iii) how far current cost depreciation on non-infrastructure assets such as service reservoirs and distribution pumping not typically found, or found to a much lesser extent, in non-potable systems should be charged to non-potable users; and (iv) potential differences in costs as regards levels of investment, infrastructure renewals expenditure, maintenance costs and leakage expenditure as between potable and non-potable systems, largely as a result of regulatory requirements which apply to the former but not the latter.

C. THE LIT JUSTIFICATION

539. Albion argues essentially that the principle behind the LIT justification, namely that large potable users should pay less because they do not use certain elements of the potable system (e.g. local distribution and the customer call centre) should be extended so that non-potable users should not pay, or should pay only a reduced amount, for identified elements of cost which do not apply to non-potable systems or do so only to a reduced extent.

540. Albion identifies many heads of costs to which it says this approach should apply. The position of Dŵr Cymru and the Authority is, essentially, that there are no heads of costs which should not be attributable to non-potable customers.

541. We have already identified above certain question marks as to what extent current cost depreciation, distribution pumping, waste detection, and infrastructure renewals expenditure should be charged to non-potable customers. On Dr Bryan's derived figures those heads of costs amount to 4.36p/m^3, 1.84p/m^3, 1.64p/m^3 and 0.44p/m^3 respectively, making a total of 8.28p/m^3, or some 58 per cent of the notional 16.3p/m^3 calculated by Dr Bryan for distribution costs.

542. According to Dr Bryan, overheads (0.48p/m^3), rates (2.22p/m^3), customer services (1.05p/m^3) and return on capital on the mains (2.11p/m^3) account for a further 5.9p/m^3

out of the 16.3p/m³ in question (about 36 per cent). We return to some of these items in our discussion below of costs attributable to Ashgrove.

543. As regards scientific services (0.82p/m³, or about 5 per cent of attributed distribution costs according to Dr Bryan) it appears to us that a case could be made for non-potable users paying a reduced contribution, given the fact that these services appear to relate to a significant extent to the quality of potable water.

544. As to a number of smaller items identified by Dr Bryan such as R&M service reservoirs (0.11p/m³), bye-laws inspection (0.20p/m³), ships' water (0.003p/m³), regulation (0.09p/m³), ROCE services (0.07p/m³) and ROCE service reservoirs (0.210p/m³), those items collectively come to less than 0.7p/m³). There is a limit, in our view, as to how much "fine tuning" is appropriate in an exercise such as this. Ships' water for example is *de minimis* and the evidence we have does not really support drawing a distinction between potable and non-potable users as regards regulatory costs.

545. As regards the further item of doubtful debts, it seems to us that there is a real issue as to whether doubtful debts, which apparently relate mainly to retail household customers, should be attributed, without qualification, to the transportation of large quantities of non-potable water to an industrial customer. This aspect was not investigated in the Decision.

546. On the above basis, it seems to us that, read with our findings above on cost drivers, Albion's submissions on the LIT justification have put in issue – in the sense of raising significant uncertainties are – about 50 per cent of the distribution cost of 16p/m³ for non-potable distribution on the basis of Dr Bryan's notional figures. The cost items in relation to which such question marks mainly arise are current cost depreciation, distribution pumping, waste detection, infrastructure renewals charge and scientific services. A number of further items accounted for in the LIT justification – management overheads, rates, retail customer services, doubtful debts and return on capital – which according to Albion represent a further 36 per cent of costs – are also in issue.

D. THE RAW WATER COMPARISON

547. Albion's essential argument is that, rather than seeking to compare non-potable systems with potable systems, a much more suitable comparator is what Dŵr Cymru calls "raw water transfer", the cost of which, according to Albion, is some 2.2p/m³ on the Director's figures. Raw water transfer is typically the transport of raw water from a source to a treatment works, from where potable water is then distributed onwards to customers. According to Albion there is no relevant physical difference between the transport of raw water in this sense and the distribution of "non-potable" water.

548. The Authority and Dŵr Cymru reply that the distribution of non-potable water and what Dŵr Cymru considers to be "raw water transfer" are not comparable. According to the Authority, the fact that the raw water is partially treated at Ashgrove is a fundamental distinction. In any event, "raw water aqueducts" tend to be of shorter length, smaller diameter and to be found in more rural locations. The comparison relied on by Albion is simply a product of regional averaging. Dŵr Cymru adds that Albion's calculation overlooks the difference in the relative volumes passing through the "non-potable mains" here in question and Dŵr Cymru's raw water aqueduct system. Dŵr Cymru also argues that distribution pumping and service reservoirs occur on non-potable systems but not on raw water aqueducts. Both the Authority and Dŵr Cymru produce calculations to show that if one takes a "subset" of mains of 600mm Albion's calculation is unfounded. Dŵr Cymru also produces calculations to show that the cost of raw water transfer is around 4p/m³, not the 2.2p/m³ assumed by Albion.

549. To take the latter point first, Dŵr Cymru's calculation in a letter to the Tribunal dated 19 June 2006 to the effect that the cost of what Dŵr Cymru describes as raw water transfer is around 4.0p/m³ rather than the 2.2p/m³ assumed during the hearing is apparently based on the discovery, late in the day, that 6 out of a recent sample of some 12 major treatment works (i.e. 50 per cent), accounting for 25 per cent of Dŵr Cymru's raw water volume, had no associated raw water aqueduct. We are again somewhat surprised that Dŵr Cymru does not seem to have been aware of this previously.

550. However, whether the cost of "raw water transfer" is 2p/m³ or 4p/m³, or somewhere in between, does not affect the underlying question of whether "raw water transfer" is an appropriate comparator for determining the cost of non-potable systems. On any view 2p/m³ or 4p/m³ is markedly different from 16p/m³. Indeed, the entire "Water Resources" function has a total cost of only 6.8p/m³, according to paragraph 305 of the Decision, and that figure includes the costs of abstraction, pumping at source, and the costs of dams and reservoirs. It is clear that, on any view, the cost of "raw water transfer", looked at in isolation, must be very much less than 6.8p/m³.

551. Turning to the issue of substance, in this case systems S1, S2, S3, S4, S5, S7, S8 and S9 convey raw water from source to the customer, with no treatment. That operation is, as far as we can see, virtually identical to the conveyance of raw water from source to a treatment works in a potable system. In the case of a potable customer, his price will include up to 4p/m³ on a regional average basis (accepting Dŵr Cymru's revised figure for argument's sake) for this raw water transfer. In the case of the above non-potable customers, the price for exactly the same operation will be 16p/m³. It is difficult at first sight to see how this difference is entirely explained by differences in costs.

552. Dŵr Cymru argues that, in the first case, what is involved is a "raw water transfer", whereas in the second case what is involved is "the non-potable bulk distribution service". This approach is illustrated by the cross-examination of Mr Jones' Day 3 pp. 29 to 30, in relation to customer S2, who is supplied with raw water by Dŵr Cymru:

> "Q If S2 said "What am I paying for?", on the face of it the only answer you could give would be "raw water distribution", is it not? A. No, they are paying – if they are taking raw water then they are paying for water resources' function, and then ----
>
> Q As far as distribution is concerned? A. As far as distribution they are paying the non-potable bulk distribution service.
>
> Q I know what they are paying, but what are they getting? A. They are getting the distribution of service, the distribution of water from the source, A2, to the point of the customer which is S2.
>
> Q That is right, and that is raw water distribution in fact, is not? A. No, it is non-potable bulk distribution.

Q Let us just be clear. If you go back to your witness statement and what they are getting, you describe it at para. 37. You say on p.11: "System 2 draws water from a borehole located in a suburb of Cardiff and transports it some 19 kms through urban, semi-urban and rural landscape, crossing a major dual carriageway to customer S2, a power station located close to the coast to the west of Barry. The supply system is comprised predominantly of 250 mm pipes." So there is no treatment involved, is there? A. That is correct.

Q So it is, in fact, a 250 mm raw water distribution pipe? A. It is a 250 mm non-potable distribution pipe.

Q You can call it that but what it is actually doing is carrying raw water is it not? A. Well, it is a matter of terminology.

Q No, no, it is not a matter of terminology. The water in it is raw, is it not? A. It is also non-potable.

Q Yes, I think you know what I am saying, Mr Jones – we can play about – it is carrying raw water from one place to another, is it not? A. It is a distribution activity, yes, that is correct.

Q And it is raw water? A. The water is untreated, it is raw, yes.

Q Yes. So if they then said "Well that is all right, I have got the raw water distribution bit, that is 2p, but funnily enough on my bill it says 16p as well. What is that for?" A. That is for the distribution service that they are receiving, the taking of the water from the source, distributing it to the location of the customer.

Q What is that beyond the raw water distribution? What non-potable distribution do they get beyond the raw? A. Well it is the distribution of the water of the quality they require to their site, that is a distribution activity."

553. It may be that, commercially speaking, Dŵr Cymru views an operation which ends in the sale of raw water to a customer as different from the internal transfer of raw water to a treatment works. Nonetheless, the activity in question, namely the conveyance of raw water from point A to point B, appears to be the same whether or not point B consists of a treatment works or a customer. If the notional cost to Dŵr Cymru, on a regional average basis, is 4p/m^3 when the distribution of the raw water is to a treatment works, then it is somewhat difficult to see why the cost is 16p/m^3 when the distribution of the raw water is to a customer, when the two operations are physically identical.

554. In the case of systems S6 and S10 (the latter being Ashgrove) the water in question is partially treated. Until a relatively late stage of this case both the Director and Dŵr Cymru relied on this feature as the principal point of distinction between “raw water transfer” and “non-potable distribution”. However, it appears that that approach is no longer maintained. It appears now to be common ground that the fact that the raw water has been partially treated has no impact on the costs of distribution. We do not therefore need to decide on Albion’s contention, disputed by Dŵr Cymru, that the treatment at Ashgrove is of a very basic kind, and carried out only to prevent siltation in the pipeline. Once it is accepted that the treatment activity at S6 and S10 does not affect distribution costs, those systems appear to us to be in the same position as the other eight non-potable systems delivering raw water, namely that the attributed distribution cost of these non-potable systems is some 4 to 8 times greater, on a regional average basis, than the cost attributed internally by Dŵr Cymru to the transport of raw water as regards potable customers, even though there is no essential physical difference between the two operations.

555. We comment at this stage that, as already indicated, we have found the distinction of nomenclature between “raw water aqueducts” and “non-potable mains” used by Dŵr Cymru to be artificial and confusing, given the evidence that the pipes in question perform the same function whatever label is attached to them. For example, on system S6, it does not seem to us useful to describe that system as a “non-potable main” of 8km, when in fact the total system is 63km in length, the eight kilometres in question simply being downstream of the treatment works. The presence of the treatment works on S6 does not affect the cost of distribution, which is still 16p/m^3 whether or not there is a treatment works on the system. An even more extreme example relates to system S8 where what is in fact a non-potable system carrying raw water for 34kms, was claimed by Dŵr Cymru to be a “non-potable main” of only 10km, on the basis that the remaining 24km was upstream of a treatment works, *even though the raw water in question was not treated at the works in question*.

556. These linguistic contortions seemed to us to be directed to trying to assimilate the non-potable systems here in question to the accounting system used for potable systems which is based on three main stages: (i) abstraction and raw water transport; (ii) treatment; and (iii) distribution of potable water. But in our view the non-potable

systems here in issue cannot be so assimilated to any close extent, particularly because in such systems there is no distinction, or in the case of S6 and S10 no relevant distinction, between “raw water transport” and “distribution”, because they are one and the same thing. Similar, and in our view equally unconvincing, arguments were put forward by Dŵr Cymru in its letter of 22 August 2006 in attempting to equate such pumping as there is in non-potable systems to the distribution pumping occurring after potable water has passed through the treatment works.

557. As to the various reasons suggested by the Authority and Dŵr Cymru as to why Albion’s comparison with raw water is in any event incorrect, the Authority argues first that the apparent cost difference is explained by the fact that raw water aqueducts tend to be of shorter average length from source than are “non-potable mains”. This argument apparently depends on bringing into the calculation all Dŵr Cymru’s sources which, according to Dr Bryan, include a large number of small boreholes accounting for only a small volume. In our view we do not have sufficient hard data to verify the correctness of this argument, especially since Dŵr Cymru has been producing changing information as to the extent to which major treatment works are served by raw water aqueducts.

558. We also doubt, on the evidence, whether there is much difference in the average diameter of the pipes used to transport raw water in the non-potable and potable systems respectively, which is a further argument relied on by the Authority. We note that in the potable system there are considerable lengths of 900mm + pipes transferring raw water, larger than any pipes in the non-potable systems at issue. As seen above, non-potable systems, like raw water aqueducts, are also largely in rural areas, so we doubt whether such difference as there is in location can explain the cost difference in question. Nor do we consider on the evidence that the difference in costs is explicable by any difference in pumping requirements or the presence of the storage facility on S7, as Dŵr Cymru has suggested. On the evidence before us, therefore, none of these factors significantly undermines the raw water comparator relied on by Albion.

559. As to Dŵr Cymru’s argument, which formed the centrepiece of its submission on this aspect at the hearing, that Albion’s comparison with raw water failed to take account of the relative volumes concerned, the calculation set out in paragraph 17 of Dŵr Cymru’s

skeleton argument is in our view fallacious. Dŵr Cymru's calculation of the imputed distribution cost per m^3 of non-potable water appears to depend on the assumption that the cost associated with the entire raw water aqueduct system is recovered only from the volume delivered to non-potable customers. That assumption is, in our view, fallacious, since noone would construct or use the entire raw water aqueduct network simply for the purpose of transporting the much smaller non-potable volumes here in question. In other words Dŵr Cymru's arithmetic assumes that a system which carries over 1,000Ml/day is used to carry only some 120Ml/day, which is an entirely unrealistic assumption. The fact that, on that assumption, the cost per cubic metre increases approximately eightfold is simply the arithmetical consequence of assuming that the system of raw water aqueducts is carrying one-eighth of the volume that it in fact carries. As we see it, that is not a sensible assumption to make.

560. As to the various arguments and counter-arguments advanced by the parties concerning various comparisons between "subsets" of "raw water" or "non-potable" mains, quite apart from the problems of nomenclature already mentioned, and the fact that it is difficult to be confident of the correctness of the various "lengths" relied on, the fundamental problem with all these calculations is that they appear to involve "de-averaging" to some extent. But at this stage of the analysis what is relevant is regional averaging, not some "de-averaged" calculations. On a regional average basis, it is difficult to get away from the fact that the average cost of "raw water transfer" appears to be some 4 to 8 times less than the average distribution cost attributed to "non-potable distribution" although in physical terms the activities are in most material respects identical. The Authority concedes that this is "simply" a product of regional averaging; but Dŵr Cymru having espoused regional averaging in the first place, this is an instance where in our view the Authority and Dŵr Cymru have to accept the logical consequences.

561. We conclude on the evidence that the differential between the average cost of raw water transfer to a treatment works and the attributed "Distribution" cost of raw water to a non-potable customer has not been explained on costs grounds in the context of Dŵr Cymru's average accounting systems. Since the latter cost is calculated at 4 to 8 times the former cost, this lends weight to Albion's contention that the figure of 16p/m^3 for the latter cost is excessive.

562. However, we are conscious here that the cost of "raw water transfer" on which Albion relies is derived from the Authority's standard allocation system which essentially allocates costs to "Water Resource and Treatment" and "Distribution", respectively. That system, in turn, is based on the classic pattern of potable supply, which is essentially abstraction → raw water transport → treatment → distribution → retail customer. The "customer end", as it were, falls within "Distribution" rather than "Resources", to which latter function the cost of "raw water transfer" is customarily allocated. A typical non-potable system does not fit that pattern, since it essentially involves abstraction → raw water transport → customer. If the relevant allocations had been done on the basis that the customer was interposed at a different point in the supply chain – i.e. at the "raw water transfer" stage – then, at least in theory, some of the allocations e.g. of "customer facing costs" might have been different. For example, in non-potable systems there is nowhere to allocate customer billing except to raw water transfer, whereas that function would not, as we understand it, be allocated to raw water transfer in a potable system.

563. Although it seems unlikely that these considerations of cost allocation could account for the whole gap between 2p/m³ to 4p/m³ and 16p/m³, we accept that there is not necessarily a direct "read across" from Albion's raw water comparator to an appropriate distribution charge to non-potable customers.

E. THE COSTS ATTRIBUTABLE TO THE ASHGROVE SYSTEM

564. In the reply and during the first hearing of this case Albion supported its submissions under what became known as Albion's fourth methodology, which was to the effect that an assessment of the "local" costs attributable to the Ashgrove system would show that the "distribution cost" was very much less than the 16p/m³ found in the Decision. Albion relied among other things on document D21 annexed to its reply which was disclosed in these proceedings and included calculations submitted by Dŵr Cymru to the Director in answer to a section 26 Notice of 29 June 2001 which had posed the following question:

> "14. Please provide a breakdown of the actual costs incurred by Dŵr Cymru in providing the services requested by Albion Water. How do these actual costs compare to costs calculated on a whole company average basis?"

565. At paragraphs 311 to 336 of the interim judgment the Tribunal considered that this approach was potentially relevant to the issues to be decided, in particular as a "cross-check" on the Director's "top-down" calculation in the Decision (paragraphs 316 and 317). The Tribunal did not at that stage consider that an approach based on the assessment of the actual costs of the Ashgrove system was precluded, in the particular circumstances of this case, by the Director's submissions based on "regional average prices": paragraphs 318 to 335 of the interim judgment. At paragraph 336, the Tribunal said this:

> "However, we accept the Director's submissions that any "bottom-up costs", whether for the Ashgrove system or for supplies to non-potable users generally, would have to be reliable and verifiable. At present, document D21, on its face, would appear to lend some support to the Director's case. However to determine whether Albion's challenge to those figures was correct would seem to us to require further evidence, including possible accounting evidence. The same would be true of any "bottom up" calculation for non-potable users generally. In our view we now need to hear the parties on whether the Tribunal should seek any further evidence on these points, or whether for practical purposes it is sufficient to investigate further the Director's calculation of average non-potable bulk distribution costs, along the lines already indicated."

566. In consequence, at paragraph 427(b) of the interim judgment the Tribunal stated that it regarded it as necessary:

> "to consider whether it is necessary or practicable as a cross-check to consider the stand-alone costs of the supply of non-potable water on a bottom-up basis, either in relation to non-potable users generally or the Ashgrove system in particular."

The calculations produced by Dŵr Cymru and the Authority

567. What has now happened is that both Dŵr Cymru and the Authority have seized on the word "stand-alone" used in paragraph 429(b) of the interim judgment which, they say, bears a narrow technical meaning in a competition law context, and have produced calculations showing what they say it would have cost a hypothetical new entrant to build and operate a new system equivalent to the Ashgrove system from scratch in 2000/01. The calculations proceed on a "new build" basis, recovering the new entrant's investment at the new entrant's likely required rate of return over the assumed life of the new asset (100 years for the mains, 20 to 60 years for the treatment works).

568. In those calculations, the assumed capital costs of the "new build" are calculated and expressed as an "equivalent annual cost". According to Dŵr Cymru:

> "The equivalent annual cost of a capital project, analogous to an "annuity" or a "repayment mortgage", is that constant amount which, over the expected life of the asset, would be just sufficient to pay for the asset in full (the assumption being that at the end of the expected life a replacement asset is needed) and to reward investors and creditors at their hurdle rate of return on their outstanding investment each year."
> (Jones 2, p.10)

569. The "equivalent annual cost" is then added to an assessment of "operating costs" to give a total annual cost of the Ashgrove system on a "new build" basis. It is not clear to us how this calculation takes account of reducing capital over the life of the notional loan, or of the different asset lives in question.

570. However, on that basis, Dŵr Cymru and the Authority arrive at what they consider to be the "stand-alone" cost of Ashgrove expressed in p/m³. Dŵr Cymru's figures are as follows:

Dŵr Cymru stand-alone calculations

Capital costs	Cost £m (MEA value)	Equivalent annual cost at 17.5% £m	p/m³
Ashgrove main	9.4	1.65	18.9
Ashgrove works	3.3	0.58	6.8
Total capital costs	£12.7m	£2.24m	25.6p/m³
Operating costs		£0.58m	5.8p/m³
		£2.82m	32.4p/m³

571. The Authority's calculations are not as clearly presented. To the extent that they are disclosed, they appear to be as follows:

The Authority's stand-alone calculations

Capital costs	Cost £m (MEA value)	Equivalent annual cost at 15% £m	p/m³
Ashgrove main	5.6		
Ashgrove works	3.0		
Total capital costs	£8.6m		14.9p/m³
Operating costs[31]			10.1p/m³
			25.0p/m³

[31] The Authority divides this between 'operating costs' of 2 p/m³ and 'common costs' of 8.1p/m³.

572. The difference between these two calculations is mainly due to the fact that: (i) the Authority assumes a hurdle rate of return on a high risk basis of the “new build” investment of 15 per cent, rather than the rate of 17.5 per cent which is assumed by Dŵr Cymru; (ii) the Authority assumes a lower capital value for the Ashgrove main, as a result of a 35 per cent fall in bench mark prices for 600mm rural mains-laying between 1999 and 2004, whereas Dŵr Cymru had uplifted construction costs by 15 per cent to arrive at a 2000/01 value from a 1997/1998 base; and (iii) the Authority’s figure for “common costs” (rates, insurance, customer service, general administration support and marketing/bidding costs) is assumed to be 8.1p/m^3 on a “stand-alone” basis, rather than the 4.8 p/m^3 allowed by Dŵr Cymru.

573. These calculations were not what the Tribunal was looking for, and in our view have little relevance to the determination of the issues in the present case. What the Tribunal was looking for was more detailed information on the actual cost attributable to the Ashgrove system *as it was at the material time*, the period 2001 to 2004, not the cost that would be incurred on a venture capital basis by a new entrant seeking to replicate the Ashgrove system from scratch as a “new build”.

574. OFT 422 refers at paragraph 4.14 to the “stand-alone” costs of an activity, and paragraph 107 of the Telecommunications Notice, cited above, refers to the importance of allocating relevant costs where a company is engaged in a number of activities. In OFT 414, September 1999 version, not cited to the Tribunal at the previous hearing, reference is made to the “stand-alone” cost in the context of an assessment of supra-normal profits “as being the least cost which would be incurred by a hypothesised efficient undertaking supplying only that product or service from a fully utilised plant of optimum size”. OFT 414a, a more recent version of OFT 414, refers to stand-alone costs as “those costs that would be incurred if the company undertook only the line of business in question”. A discussion paper by Oxera, an economic consultancy, published as OFT 657 in July 2003, defines “stand-alone” cost as:

> “The costs of an activity or line of business that would be incurred if the company undertook that activity only. All common costs are attributed to the activity in question.”

575. These definitions aim to identify the costs of the activity under investigation, disentangled from other associated activities. In our view none of these definitions

state, or suggest, that the expression "stand-alone" cost necessarily implies that the calculation is to be carried out on a "new build" basis. Moreover, the proper approach to "stand- alone" costs depends on the context and circumstances. None of the above definitions were given in the context of an access charge for common carriage, which is the present context.

576. In any event, in our view it is clear from paragraphs 310 to 338 of the interim judgment what information the Tribunal considered was required, namely a more considered picture of the existing costs attributable to the Ashgrove system, viewed as a self-standing system, which is the calculation referred to in document D21. That document was prepared in answer to the Director's section 26 notice of 29 June 2001 which, in effect, sought an answer to the same question. Had there been any doubt about what the Tribunal was looking for, a simple letter to the Tribunal would have cleared up any such doubt. The Tribunal further made it clear in the case management conference of 24 April 2006 (transcript, p.12) that the stand-alone calculations produced by Dŵr Cymru were not what it was expecting.

577. We find it hard to accept that there could have been a misunderstanding as to what the Tribunal was seeking in view of the following exchange at the case management conference on 23 January 2006 (p.8):

> "THE PRESIDENT: To give you a "for instance", our understanding, which may be completely imperfect, is that when doing the work necessary for the regulatory accounting guidelines it is necessary to take out some of the non-potable costs, for example. So, presumably one might suppose that there are already in existence some documents that illustrate how that is done which begin to throw some light on some of the background cost issues, for example. So, as I say, we are not particularly enthusiastic about embarking on new worked up material now rather than seeing what there is in terms of historical data already existing, both from a point of view of saving costs, and from a point of view getting, as far as we can, a feel for what the situation was at the time.
>
> MR ROBERTSON: Yes, that was our understanding that we are carrying on this exercise looking at it historically."

Findings on the calculations produced by Dŵr Cymru and the Authority

578. The failure of Dŵr Cymru to produce any historical information showing a cost-related basis for the prices it has been charging is a major weakness in the company's case, reinforcing Albion's contention that those prices are not, in fact, cost-based.

579. In any event, in our view the stand-alone calculations produced by Dŵr Cymru and the Authority do not support their case, but rather reinforce Albion's case, for several reasons.

580. First, what is in issue in the present case is a common carriage charge. Such a charge presupposes the existence of the assets (pipes, treatment works) over or through which common carriage is sought. The calculation of that charge is intended fairly to remunerate the incumbent for the use of the existing assets. To calculate that charge on the basis that the assets do not exist, but have to be created at a "high risk" rate of return of 15 to 17.5 per cent on a "new build" basis, would in our view be wholly illogical, since it is the use of the existing assets that is in contemplation.

581. Secondly, to assess a common carriage charge on the basis of what it would cost a new entrant hypothetically to build for himself the asset to which it seeks access, would largely defeat the whole object of the exercise. If the common carriage price is to be calculated on a "new build" basis, the entrant might just as well replicate the system for himself. But that would imply that the new entrant should build another facility, although there is an equivalent facility already in existence. This in turn would cause a wholly unnecessary duplication of resources, leading to the stranding of the original asset: and would, it seems to us, be contrary to the policy behind common carriage and the licensing provisions of the WA03. In many cases the replication of the existing asset would be wholly impracticable in any event, as confirmed by the emphasis on common carriage in the Director's MD Guidance Notices and now by the WA03.

582. Thirdly, as the Decision rightly presupposes, a common carriage charge ought to be calculated in a manner that is not inconsistent with the principles generally applicable to the charges made to customers. In the water industry, customers are not charged at a high risk rate of return on a supposed repayment mortgage basis based on the entire

recovery of the capital cost of a "new build" project over a period of 60 to 100 years. We accept Albion's submissions that it would be discriminatory to adopt such an approach in calculating a common carriage charge vis-à-vis a new entrant when the approach in question is not used by Dŵr Cymru for charging purposes.

583. Fourthly, Dŵr Cymru itself accepts that the calculation put forward could not be used as a basis for charging. At Jones 3, paragraph 94(a), Mr Jones accepted that the exercise was hypothetical, and would lead to over-recovery of revenue if all customers were charged on that basis. In answer to the question "It is not a charging basis?" Mr Jones replied: "It is not a charging basis" (Day 3, p.32). Similarly, at Day 3, pp. 32 to 33, Mr Jones accepted, in relation to "stand-alone" costs:

> "we would not advocate that as a method for us to set our tariffs for a regulated water business, that is correct"
> (p.33; see also pp. 30-31).

584. Fifthly, the fact that the calculations produced by the Authority and Dŵr Cymru are capable of supporting access prices in the region of the First Access Price only by assuming rates of return around 15 times Dŵr Cymru's normal rate of return – even assuming the capital values used to be correct – is itself strong evidence that the First Access Price was not cost based and/or was excessive.

585. In our view the above points may be illustrated by reference to the rates of return used in their calculations by Dŵr Cymru and the Authority. The rate of return sought on what on any view would be the high risk investment of building a new pipeline and treatment works is assumed in those calculations to be either 15 per cent or 17.5 per cent. If that rate were then applied to calculate the charge for using the existing assets, which have already been in use for some 50 years, then the returns earned by Dŵr Cymru would be excessive, as Mr Jones accepts. The following discussion illustrates, in more detail, why this is so[32].

586. Strictly speaking, the price limits set by the Director relate to Dŵr Cymru's rate of return on its whole company RCV, which is in turn based on the company's value at

[32] The Tribunal takes no position on how "actual" or "local" capital costs could be derived. Dr Marshall's view was that it is unnecessary to work out the capital values of individual assets. This part of the judgment is simply to illustrate, in broad order of magnitude, the difference that is made to the calculations if one assumes a different rate of return.

privatisation, upon which the Director allows a return of around 6 per cent. The RCV is much lower than MEA values. However, no separate RCV is apparently available for the water service alone, and it appears to be the industry's practice to use the returns on MEA values as a proxy for calculating the rate of return allowed in the context of the regulated activities: see, e.g. Dŵr Cymru's letter of 2 December 1998 where the return on capital built into the justification for the LIT is 1.05 per cent on MEA values. According to figures published by Ofwat in its 2004-5 Report on Financial Performance and Expenditure by the Water Companies in England and Wales, average returns on MEA values for the water service are around 1 per cent, although Dŵr Cymru's returns are slightly below that figure. We assume, as a broad rule of thumb, that Dŵr Cymru's regulated water business earns the equivalent of around 1 per cent of the MEA value of its assets.

587. Accepting (for argument's sake although they are contested by Albion) the capital values for the Ashgrove mains and treatment works calculated by Dŵr Cymru and the Authority, the following picture emerges:

Estimates by the Authority and Dŵr Cymru of Capital Values for the Ashgrove System

	Dŵr Cymru	Authority
MEA Values £m		
Main	£9.4m	£5.6m
Treatment works	£3.3m	£3.0m
	£12.7m	£8.6m
Rate of return at 1% of MEA Value	£127,000	£86,000
Rate of return in p/m^3[33]	1.46 p/m^3	1.0p/m^3

588. Thus, on the MEA values assumed by the Authority and Dŵr Cymru, the element in the price normally charged by Dŵr Cymru represented by the return on capital would be in the range of 1 p/m^3 to 1.5 p/m^3, depending on the MEA value assumed. That calculation uses the rate of return used by Dŵr Cymru in the LIT justification, which led to the Large Industrial Tariff. Since that tariff was approved by the Director, and underpins the reasoning in the Decision on "distribution" cost, it seems to us a reasonable basis on which to proceed.

[33] Volume assumed 8,676,000m^3, which is the volume applicable to both Shotton Paper and Corus combined.

589. According to the submissions of Dŵr Cymru and the Authority, those calculations then give rise to the following comparison in p/m³:

	Dŵr Cymru	Authority
Annual cost of capital calculated at risk rate of return for a new build on a "repayment mortgage" basis	25.6p/m³	14.9p/m³
Normal rate of return earned by Dŵr Cymru on MEA values as estimated for Ashgrove	1.5p/m³	1.0p/m³

590. The "stand-alone" calculations relied on before the Tribunal thus show that, if Dŵr Cymru were to set its common carriage charges on that basis for the use of its existing assets, it would earn profits of the order of 15 to 17 times higher than it would normally earn on its regulated water business. The difference is accounted for by the fact that, on its regulated water business, Dŵr Cymru is allowed to earn a rate of return deemed compatible with its financing requirements but taking into account its position as a monopoly supplier. In our view there is no reason why a common carriage charge should be calculated any differently. On that basis, Dŵr Cymru would still be earning the return on MEA value that it would have earned had it been supplying the water itself, instead of hiring out its facilities to Albion for the latter to supply Shotton Paper via common carriage.

591. Although Mr Jones suggested that in some way its industrial customers were 'higher risk', we have received no evidence of the relative risk of industrial customers as compared to household customers. In any event it has never, as far as we know, been suggested that Dŵr Cymru is entitled on that basis to earn a higher rate of return in respect of assets used to supply some customers rather than others. Dŵr Cymru is effectively a monopoly supplier with a secure and stable revenue stream. In the case of Ashgrove, Dŵr Cymru has enjoyed a substantial revenue stream of apparently over £2 million per annum for the last 20 years, from a pipeline that is 50 years old and has apparently required minimum maintenance and capital investment[34]. The "notional" investment must by now have been recovered many times over[35].

[56] According to Lynette Cross' witness statement the automation of valves etc that was carried out in 1990 was jointly funded by Dŵr Cymru, Shotton Paper and Corus. There appears to have been little or no other investment in the pipeline apart from a replacement of 1km in 1995 due to road improvements on the A550.

[35] In fact Dŵr Cymru originally acquired the Ashgrove system for a nominal sum, but we disregard that historical circumstance.

592. If one then looks at the Ashgrove main separately, the return on capital elements of the calculation appear to be as follows:

Ashgrove main	Dŵr Cymru	Authority
Capital value MEA	£9.4 million	£5.6 million
Cost of capital at a risk rate of return for a new build on a repayment mortgage basis	18.9p/m³	9.7 p/m³[36]
Normal return at 1 per cent of MEA value	1 p/m³	0.65p/m³

593. As far as the Ashgrove main is concerned - and without deciding that the MEA values used are correct – on the above basis the return on capital element is some 0.65p/m³ to 1p/m³, rather than some 9.7p/m³ to 18p/m³ shown in the stand-alone calculations submitted by Dŵr Cymru and the Authority. That more normal rate of return is consistent with Dŵr Cymru's own calculations under the LIT justification.

594. If one were to attempt to calculate the actual distribution costs attributable to the Ashgrove main, as it existed in 2000/01, it would be necessary also to take into account any direct operating expenses, as well as an infrastructure renewals charge, rates, general and support overheads, customer service costs and possibly some contribution to other expenses such as regulation and, to some extent, possibly scientific services.

595. In the LIT justification, according to Dr Bryan's figures, those latter items come to some 6p/m³ for large potable users. In Albion's submission most of those items would need to be further discounted for non-potable users. Even making all allowances for a margin of error within the figures, on the information before the Tribunal it is difficult to see how a cross-check carried out on the basis of the costs attributable to Ashgrove could give rise to a "distribution" element of 16p/m³.

596. Turning to the treatment works, the return on capital element may be analysed as follows:

Ashgrove treatment works	Dŵr Cymru	Authority
Capital value MEA	£3.3 million	£3.0 million
Cost of capital at a risk rate of return for a new build on a repayment mortgage basis	6.8p/m³	5.2p/m³
Normal return at 1 per cent of MEA value	0.38p/m³	0.35p/m³

[36] The Authority's total figure of 14.9p/m³ is allocated here between mains and treatment works on the ratio of MEA values 65:35.

597. Again, it can be seen that a normal return on capital for Dŵr Cymru would give rise to a return on capital element for the treatment works very much less than that assumed in the stand-alone calculations.

598. Those considerations confirm our view that the calculations put forward by Dŵr Cymru and the Authority are in themselves strong evidence that the First Access Price was not cost-based and/or was excessive.

Summary on the costs attributable to Ashgrove

599. Because of the way Dŵr Cymru and the Authority have dealt with this part of the case, the Tribunal has no verified figures that enable the actual costs of common carriage through the Ashgrove system in 2000/2001 to be authoritively determined. There could also, no doubt, be debate about the methodology of any such exercise. However, such information as the Tribunal does have suggests that, on the average accounting basis used in the Decision, the return on capital element as regards the Ashgrove system (main and treatment works together) would be in the range of roughly 1.0p/m³ to 1.5p/m³, even accepting for argument's sake the disputed MEA values relied on. We have no reason to doubt the estimates put forward by Dŵr Cymru that direct operating costs (chemicals, manpower, system management, etc.) for the main and treatment works together are around 2p/m³.

600. However, those figures would give rise to a total average accounting cost of around 3.5p/m³ for the mains and treatment works together, as compared with the average accounting cost found by the Director in the Decision of 19.2p/m³ and the First Access Price quoted by Dŵr Cymru of 23.2p/m³. We would be sceptical of any suggestion that the difference between the figures in the Decision and the figures supported by the evidence before the Tribunal could be validly accounted for by a large allocation for "general and support overheads," although the Authority's calculations (which are hypothetical "stand-alone" as distinct from actual) appear to assume an apparently high level of general overhead.

601. It is true that in an "actual costs" calculation, allowance would also have to be made for an infrastructure renewals charge (the main), current cost depreciation (the treatment

works), rates, possibly some doubtful debts, regulatory and perhaps some scientific services and other costs, but the evidence before the Tribunal does not suggest that those elements would be sufficient to bridge the "gap" between around 3.5p/m³ and the average accounting figure in the Decision of 19.6p/m³, still less the First Access Price of 23.2p/m³. It is unfortunate that, although given the opportunity, neither the Authority nor Dŵr Cymru have given the Tribunal any clear and coherent explanation as to what elements account for the "missing" costs, whether on a regional average basis, or any other basis.

602. As for document D21, where this aspect of the case started, Dŵr Cymru itself submits that that document did not offer "incremental insight", so the Tribunal is unable to rely on it, notwithstanding that it is a statutory document prepared in response to a formal section 26 notice under the Act.

603. For the reasons given above, the evidence before the Tribunal regarding actual costs incurred or attributable, strongly supports Albion's contention that a calculation of the actual costs attributable to the Ashgrove system would show that both the distribution cost of 16p/m³, and the total cost of 19.2p/m³, found in the Decision on an average accounting basis, were not related to "the costs actually incurred" by Dŵr Cymru and accordingly were excessive.

F. REGIONAL AVERAGING

604. The Authority argues that it is impermissible for the Tribunal to consider the actual costs attributable to the Ashgrove system, even as a cross-check, because of the principle of "regional averaging" on a geographic basis. According to the Authority, "regional averaging" is the practice whereby a water company sets its prices by reference to the average cost of supplying all customers in its water supply area, although different charges can be applied to different classes of customer if there is a cost-based justification for such a difference. However, according to the Authority, the essence of geographic regional averaging is that no account is taken of the location of a particular customer: a customer that is close to a water source or treatment works is charged the same price as a customer further away; a customer who is further up a hill is charged the same price as the customer in a valley. There is thus no "location-

related" or "distance-related" charging for water. In a detailed argument, summarised above, the Authority argues that it would be fundamentally wrong for the Tribunal to go down a path that might lead to "de-averaging".

605. The "regional averaging" approach of the Authority is often contrasted with a "local" or "actual" costs approach, such as that considered above. However, the terms "local" or "actual" costs, in our view, may obscure the fact that in arriving at the costs of supply as regards a particular system such as Ashgrove it will still in most cases be necessary to use assumptions that to a large extent reflect company-wide average costs and accounting information – for example in calculating MEA values, the rate of return, the infrastructure renewals charge, current cost depreciation, an allocation for overheads and so on. Thus document D21, which was Dŵr Cymru's answer to the Director's question seeking to establish "the actual costs" of the Ashgrove system, depended to a large extent on "regional and generic assumptions" (rejoinder, p. 76). That will be the case particularly as regards supplies using conjunctive use systems where it will be very difficult to identify particular assets as serving particular customers. In addition, we have no difficulty in accepting that under a "local" or "actual" costs approach, the price to be charged should bear an appropriate proportion of the company's general overheads and common costs. Viewed from this perspective, a "local" or "actual" costs approach and a "regional average costs" approach may not be quite as different as may sometimes be supposed.

606. Similarly, in the present context, the difference between "regional average" and "actual" costs will only be significant for the resulting common carriage charge if the costs of the Ashgrove system differ in some way from the average for non-potable systems generally. We have no evidence that such is the case. Albion's acceptance of regional average costs was in large measure predicated on the assumption that the costs of Ashgrove would be representative of the regional average, and would thus be a legitimate means of testing the Director's "regional average" calculations (reply, p. 19).

607. In any event, the question whether "regional averaging" on a geographic basis is appropriate or not is only indirectly relevant in this case. We are concerned with a specific non-potable system in Wales. What is really in issue in that context is the failure of either Dŵr Cymru or the Authority to "disaggregate" the figure of 16p/m^3

into its component parts, so as to enable the Tribunal to ascertain whether or not costs had been properly attributed to non-potable users. The Tribunal's attempt to acquire a better understanding of the "actual" costs of the Ashgrove system was directed to establishing a more "disaggregated" picture of the costs of non-potable distribution. What is important, in our view, is that the heads of cost should be properly identified and quantified. Whether the figures used are "local" or "average" is less significant.

608. At this stage of the judgment we need only to consider, in response to the Authority's submissions, whether there is some rule of law or economic principle based on "regional averaging" which would preclude the Tribunal from considering, in the present specific context of large non-potable users in Wales, the components making up the actual costs of the Ashgrove system, at least as a cross-check, in seeking to ascertain "the costs actually incurred" in accordance with *United Brands*, cited above.

609. There are three different classes of customer that could be relevant to the question of "geographic regional averaging": (i) tariff basket customers; (ii) large potable users using more than 50Ml per annum; and (iii) large non-potable users.

610. By definition, tariff basket customers use less than 50Ml per annum. None of Dŵr Cymru's relevant non-potable customers are "tariff basket" customers. This case is not concerned with the tariff basket sector which accounts for over 90 per cent of the water industry's water service revenues. The situation of household customers and most businesses is thus not in issue in this case. Further, the Consultation Paper made it clear at paragraphs 26 to 28, and 176, cited above, that the tariff basket sector should not be affected by the opening of the market to competition as regards large industrial users above 50Ml per annum. At paragraph 320 of the interim judgment, the Tribunal said:

> "We accept that within the sector of largely household customers it would be extremely difficult to determine different costs of supply for differently situated customers, and that for social and practical reasons the principle that tariff customers should pay the same charges irrespective of their precise location is well established and long standing. It has long been accepted, for example, that the rural customer should pay the same as his urban counterpart, or vice-versa, even if different costs of supply could be identified."

611. As regards large potable users whose consumption is above 50Ml per annum, there is now the possibility of competition in water supplies either through an inset appointment (although the threshold for this is still 250Ml in Wales) or through the licensing provisions of the WA03. The Authority's submissions, summarised above, seemed to be largely directed towards preserving "regional averaging" in relation to these large potable customers, notwithstanding the advent of competition.

612. The present case is not, however, dealing with an infringement of the Chapter II prohibition as regards *potable* customers. Although it is necessary to revert to the Authority's submissions concerning "regional averaging" for large potable customers when we come to deal below with the issues arising under ECPR, we do not think those arguments are relevant at this stage of the judgment, where we are dealing only with the narrow issue of ascertaining the components of the distribution costs for large *non-potable* customers in Dŵr Cymru's operational area.

613. As regards "regional averaging" in relation to large *non-potable* customers in Dŵr Cymru's area, in our view the practice of "regional averaging" cannot be invoked as a reason for not undertaking any more detailed inquiry as to what are the actual underlying components of the distribution costs attributable to non-potable users.

614. We observe, first, that although the Authority submits that regional average pricing is "essential", and Professor Armstrong's report, considered below in the context of ECPR, proceeds on the assumption that regional average pricing is "mandated", no provision has been cited to the effect that regional average pricing for large non-potable users (or indeed any users) is mandatory as a matter of law. The most that the Authority submits is that geographic regional average pricing in general is "in accordance with the Director's duties and government policy".

615. In that connection, the Authority relies heavily on the third indent to paragraph 187 of the Consultation Paper, which states that:

> "to the extent that undertakers' tariffs reflect a geographical averaging of costs, access… charges should generally be set to avoid the unwinding of the associated cross-subsidies."

616. We discuss this statement in more detail later in this judgment in the context of ECPR. But, at this stage, it suffices to note that it is difficult to see the relevance of this statement to the *non-potable* supplies here in question, since the New Tariff for non-potable users did not come into existence until 1 April 2003, some two years after Dŵr Cymru quoted the First Access Price, and over a year after the Consultation Paper had been published. The reference in the Consultation Paper to "undertakers' tariffs [which] reflect a geographical averaging of costs" in our view could not be referring to the facts of this case, since there was, at the time, no relevant tariff for non-potable users. Moreover, even by the time of the Decision, few non-potable users had moved to the New Tariff and Corus, a major user of non-potable water, has gone so far as to resist the price increases implicit in doing so through High Court litigation.

617. Furthermore, historically speaking, the large non-potable users here in question have been supplied on special agreements pursuant to section 142(2)(b) of the WIA91, and not on a tariff. Special agreements enable the water company to negotiate prices to take into account the particular circumstances of the customer, and are to that extent a form of "de-averaging". Although the Authority submits that the special agreements in question date back to pre-privatisation, Albion submits, correctly it seems to us, that a significant proportion of Dŵr Cymru's special agreements date from the mid-1990's and later, well post-privatisation in 1989. We also note that the special agreements in question seem to contain a number of different prices and terms, including one agreement where the non-potable supplies are priced at some 4p/m^3.

618. The widespread use of special agreements in this sector, and the fact that the New Tariff was only recently introduced, in our view significantly weakens the Authority's submissions as to the importance of "geographic regional average" pricing for large non-potable users in Dŵr Cymru's operational area.

619. The Authority, however, submits that even in the context of special agreements, price differences based on the "location-related costs" of the customer would be contrary to the non-discrimination provisions of Condition E as set out in RD 09/03. However, RD 09/03, to which unfortunately we were not taken in the course of argument, expressly provides:

> "An exception to this is when infrastructure is exclusive to the customer(s) being charged and we count this situation as a special circumstance."

620. All the agreements here in question fall within this exception, since in every case the infrastructure is exclusive to the customer(s) being charged. There is thus, in fact, no basis that we can detect for asserting that "location-based" charging is impermissible for the non-potable systems here in issue.

621. The exception in RD 09/03, which applies where infrastructure is exclusive to a customer or customers, seems to us to be a very sensible exception, since customers with such bespoke requirements are very likely to be better accommodated under a special agreement than under a tariff. Moreover for large non-potable users with high volumes, a freely negotiated individual contract, rather than a 'tariff', seems to us an entirely natural commercial arrangement.

622. Furthermore, the fact that, contrary to the position of large potable users served by conjunctive use systems, the non-potable systems here in question are discrete systems is of particular importance in this case. Each system has its own cost structure and is dedicated to particular customers. It is therefore easier to identify actual costs than it is with the generality of potable users, and thus to ascertain the "actual costs of the service" in accordance with the first indent of paragraph 187 of the Consultation Paper, and *United Brands*, cited above.

623. Moreover, as seen above, the characteristics of non-potable systems are significantly different from the costs of potable systems. In our view, it is less than ideal, in any system of average pricing, to bundle into "the average" different services where the costs are likely to be different. In the present case, the Ashgrove system is a discrete non-potable system which is physically different, and situated some 200 miles away from the large potable conjunctive use systems serving the South Wales conurbations. The economic rationale for directly linking a common carriage price for the non-potable Ashgrove system to a costs calculation which includes the costs of the large potable conjunctive use systems far away in South Wales does not seem to us to have been established.

624. Moreover, the use of the very broad "regional average" approach adopted by Dŵr Cymru, without detailed enquiry as to the components of the average figure of 16p/m³, in this case seems to us to run the risk of producing market distortions and, potentially, discrimination. If the actual costs of Ashgrove were lower than the average, then Shotton Paper would be paying a price that was too high relative to the costs of supply, which would in turn make it more difficult for Shotton Paper to remain in business in the international markets in which it competes; yet if, as a result, Shotton Paper went out of business that would be a dis-benefit to Dŵr Cymru and to the Welsh economy. On the other hand, if the actual costs of Ashgrove were higher than the average, then Shotton Paper would be paying a price that was too low relative to costs. This would not promote the efficient use of water by Shotton Paper and would mean that Shotton Paper was being subsidised by Dŵr Cymru's other customers.

625. As to discrimination, this can arise by charging the same price to customers who are not in the same position, for example because the respective costs of supply are different, or charging different prices to customers who are in the same position, for example because the costs of supply are similar. In our view, the risk of market distortion or discrimination is likely to persist so long as there is little detailed examination of the underlying components of the various elements of "regional average" costs. It is also of concern to the Tribunal whether an approach which accepts that a paper mill in North Wales should subsidise a steel mill in South Wales, or vice versa, is itself compatible with Condition E, or with domestic or European competition law more generally, if both users are supplied by discrete systems and their supply costs are different.

626. We are considering only whether the suggested existence of the practice of "regional averaging" precludes any more detailed inquiry into what are the constituent elements of the "distribution" charge of 16p/m³ relied on in the Decision. One way of testing the reliability of that figure is to examine the actual costs of the Ashgrove system, as the Director did in his section 26 notice at the administrative stage. In our view, the suggestion that "geographic regional averaging" precludes any such inquiry is unfounded, either in law or otherwise, in the specific case of the non-potable system here under consideration.

627. In our judgment it follows from *United Brands*, and from the approach of the Commission in the Telecommunications Notice, that in ascertaining the "actual costs of supply" for the purposes of the Chapter II prohibition one should, so far as possible, seek to establish what the elements of costs are, and to disentangle the costs of the line of business under enquiry from the costs attributable to other businesses carried on by the allegedly dominant company. We do not think that "geographic regional averaging" can be put forward as a reason for not undertaking such an exercise in a Chapter II case in circumstances where non-potable systems generally, and the Ashgrove system in particular, are discrete entities separate from the generality of Dŵr Cymru's potable systems.

628. What conclusions should be drawn from such an exercise, once it has been carried out, are another matter. In the present case, as already set out above, such information as the Tribunal has in relation to Ashgrove suggests that there is a large gap between the distribution costs actually incurred or attributable to Ashgrove, and the figure of 16p/m³ for distribution costs found in the Decision. Unless there is some reason to think that the Ashgrove system is significantly different from Dŵr Cymru's non-potable systems generally, that gap in our view requires an explanation. The fact that no explanation has been forthcoming further undermines, in our view, the reliability of the "regional average" calculation relied on in the Decision.

G. CONCLUSION ON AVERAGE ACCOUNTING COSTS OF DISTRIBUTION OF POTABLE AND NON-POTABLE WATER

629. In this section the Tribunal has considered the conclusion at paragraph 302 of the Decision that:

> "We do not believe that Dŵr Cymru was unreasonable to assume that the cost of transporting non-potable water in bulk was the same as the cost of transporting potable water."

630. On the basis of that conclusion the Director accepted Dŵr Cymru's approach of treating the distribution cost for non-potable water as being the same as the distribution cost for potable water, namely 16p/m³.

631. The Tribunal's examination has been made under four different heads namely: (1) certain costs drivers; (2) the LIT justification; (3) the raw water comparison; and (4)

the costs attributable to Ashgrove. The first three of those approaches uses "average" figures and the fourth assumes that the costs of Ashgrove are similar to the average. Each of those lines of analysis demonstrates, in our view, serious factual weaknesses in the conclusion reached at paragraph 302 of the Decision. In our judgment, the evidence we have referred to above, taken as a whole, shows on the balance of probabilities that it was not reasonable for Dŵr Cymru to assume that the costs of "distribution" of non-potable and potable water were the same at 16p/m³. The essential error, in our view, was to rely on the approach that "a pipe is a pipe" (paragraphs 299 to 301 of the Decision) without considering more widely the different characteristics and cost components attributable to non-potable as distinct from potable supply systems.

632. By various routes, Albion arrives at a figure of no more than around 2p/m³ for distribution costs. Dr Bryan was not cross-examined on the various calculations set out in Bryan 4, although he was cross-examined at length on what we would regard as the entirely subsidiary issue of how far a CCV calculation could be used as a proxy for the MEA value of the Ashgrove treatment works. The Authority did not adduce any evidence to show what the component elements of the cost structure of a typical non-potable system might be, even indicatively, on an average cost accounting basis. Apart from one document relating to the operating costs of the treatment works, no original or contemporaneous accounting material was produced by Dŵr Cymru. The only document the Tribunal has to go on, the LIT justification, was disclosed after the defence and rejoinder.

633. It must, in our view, have been obvious from the interim judgment that the Tribunal was seeking evidence in order to ascertain how, on an average accounting cost basis, the distribution cost of 16p/m³ could be justified, in its component elements, even indicatively. Instead of responding to the opportunity given to them by the Tribunal, Dŵr Cymru, and later the Authority, produced quite different "stand-alone" calculations on a "new build" basis, even though it was accepted, rightly, in evidence that those calculations did not, and could not, form any basis for charging. Those "stand-alone" calculations are not, in our view, useable for calculating the costs of water distribution: for example, such calculations assume quite different rates of

return, do not include capital charges such as infrastructure renewals, and allocate the whole, instead of a proportion, of the company's general and support overheads.

634. We find it difficult to believe that Dŵr Cymru, and the Authority, would not have considered at an early stage of this case what accounting information was available that could be used to justify the average accounting cost figure of 16p/m³, even making various assumptions and estimates, but no such information has been produced. It is in our view significant that the only cost calculation produced by the respondent Authority, namely its "stand-alone" calculation of 25p/m³, comes within the "ball park" of the First Access Price of 23.2p/m³ only by assuming a rate of return some 15 times the rate that Dŵr Cymru normally earns on its existing assets, and allocating to the Ashgrove system the entire overheads of a self-standing water company. That in itself, in our view, is strong evidence that the First Access Price was excessive. Dŵr Cymru's higher figure of 32.4p/m³ is based on assuming an even higher rate of return, and inflating the MEA value of the pipeline at a time when, in our view, it must have known, or at least ought to have known, that the cost of mains laying was declining sharply.

635. This unfortunate history thus leaves the Tribunal, on the evidence, with a large unexplained gap between Albion's figure of 2p/m³ for distribution costs, which is supported by calculations on an average accounting cost basis, and the figure used in the Decision of 16p/m³, the components of which are not supported, even indicatively, by any calculations at all, either in the Decision or otherwise. We do not think that Dr Bryan could have been expected to do more, since all the information is or should be in the hands of Dŵr Cymru and the Authority.

636. In all those circumstances, and for the reasons given above, in our judgment the matter of the "distribution" cost of non-potable water on an average accounting cost basis was not sufficiently investigated. It follows, in our view, that on this aspect the Decision is incorrect, or at least insufficient, from the point of view of the reasons given, the facts and analysis relied on, and the investigation undertaken, as regards the conclusion set out in paragraph 302.

637. On the basis of Albion's estimate of distribution costs of around 2p/m³ and the range of some 1.6p/m³ to 3.2p/m³ for treatment costs, on Albion's figures the First Access Price should have been in round figures no more than 4p/m³ to 5p/m³ . Even doubling Albion's figures to take account of elements possibly understated or omitted would produce a price broadly in the range of 8p/m³ to 10p/m³, less than half the First Access Price of 23p/m³. The evidence taken as a whole strongly suggests to the Tribunal that the First Access Price was excessive, in relation to the economic value of the services to be supplied, applying the *United Brands* test, by reason of the absence of any convincing justification for the "distribution" costs included in the average accounting cost calculation.

XII ECPR

A. INTRODUCTION

General Background

638. At paragraphs 317 to 331 of the Decision, the Director applies an additional approach, known as the Efficient Component Pricing Rule[37] ("ECPR"), to determine whether Dŵr Cymru's First Access Price was an abuse under the Chapter II prohibition. The ECPR calculation relied on by the Director would give a First Access Price of 22.5p/m³ as against 19.2p/m³ arrived at by the Director on an average accounting cost basis, and the 23.2p/m³ First Access Price quoted to Albion by Dŵr Cymru.

639. ECPR was described by the Director in MD 163 in these terms:

> "[ECPR] can be summarised by a simple equation in which the access price is given by the incumbent's final product price less the costs it would avoid by providing access. For example, a new entrant wishing to access an incumbent's arterial and local distribution network would be charged the difference between the incumbent's final product price and the avoidable costs of resources, treatment and customer service."

640. ECPR is known in shorthand as a "retail-minus" approach. The theory of ECPR, as we understand it, is that if the final product price is £10, and the incumbent avoids costs of

[37] The use of the word "efficient" is somewhat controversial, since it is not immediately clear what kind of "efficiency" is being referred to, as further discussed below.

£3 by not supplying the final customer itself, then the access charge should be £7. In those circumstances, a more efficient entrant will enter the market if his other costs are less than £3 (say £2). This lower cost will then enable the new entrant to charge the final customer (say) £9. In these circumstances, so it is said, entry is "efficient", since the product in question is being supplied at the lowest total cost to society (£9 rather than £10), while at the same time the incumbent is recovering all his common and fixed costs, including "sunk" costs, as well as a return on capital. This theory was developed in the 1990s by Professors Baumol and Willig in the USA, and is sometimes known as the "Baumol-Willig rule".

641. An important feature of ECPR is that the incumbent makes the same profit irrespective of whether the new entrant enters the market or not. In effect, the entrant pays the incumbent in perpetuity for all the revenues (including profits) that the incumbent had previously received, less the costs which the incumbent has avoided as a result of the fact that it is the new entrant, rather than the incumbent, which is now supplying the customer. A further feature of ECPR is that the margin within which the new entrant has to operate is never higher than the incumbent's "avoidable" cost of supplying the customer in question. Out of the margin created by the incumbent's "avoidable" cost, the new entrant has to meet his own total costs, including any fixed costs.

642. A major difficulty in this case has been imprecision in the use of the term "avoidable costs". "Avoidable" costs are in simple cases equated to marginal or incremental costs, but this would not necessarily apply in all cases. "Avoidable costs" are normally assessed on a "forward looking" basis. Whether a cost is "avoidable" rather than fixed depends on the time period assumed and the proportion of the market no longer supplied.

643. The ECPR approach of the Director in the Decision was to take Dŵr Cymru's "retail" price to Albion under the Second Bulk Supply Agreement of 25.8p/m³ and to subtract the costs which Dŵr Cymru would avoid if Albion were to supply Shotton Paper with water obtained directly from United Utilities at Heronbridge. According to the Director, the only such "avoidable cost" was the direct cost to Dŵr Cymru of the water resources in question. Under the First Bulk Supply Agreement Dŵr Cymru paid United Utilities 3.3p/m³ for the relevant water in 2000/01. Under the Director's ECPR

calculation, the access price would be 22.5p/m³, i.e. Dŵr Cymru's retail price of 25.8p/m³ less 3.3p/m³ (paragraphs 329 to 331 of the Decision). Given that 22.5p/m³ is close to the First Access Price of 23.2p/m³, the Director felt unable to conclude that the latter was excessive (paragraphs 339 to 341).

644. Although paragraph 320 of the Decision states that ECPR has been part of regulatory literature for the past decade, the Decision at paragraphs 321 and 322 cites only the views of a well known private consultancy National Economic Research Associates (NERA), as set out in two reports commissioned on behalf of Northumberland Water, one of the statutory water undertakers. The Decision does not contain a discussion of the Director's own views as to the advantages or disadvantages of ECPR, nor does the Decision refer to any independent research undertaken by the Director, or to published consultation papers.

645. The only publication by the Director in which ECPR is addressed of which we have been made aware is MD 163 of 30 June 2000. MD163 was prepared on the advice of the distinguished members of a working group known as the "CCCWG", referred to in section IV above, and was the most recently published guidance on common carriage in the water industry at the time of Albion's complaint.

646. MD163 states that ECPR would encourage access only when to do so would reduce the costs of supply in the short run, and that ECPR requires reliable information as to avoidable costs. However, MD 163 also states that an infringement of the 1998 Act may occur if companies set access prices "to deter entry that would have reduced costs only in the long run". MD 163 further points out that an average accounting cost or LRMC approach would tend to produce lower access prices. Although the latter approaches may produce a temporary increase in total costs, according to MD 163 new entry could reduce costs over time, and the threat of new entry would provide a continuing incentive for incumbents to reduce their own costs. In our view, MD 163 does not suggest that ECPR is a preferred approach to setting access prices.

647. Paragraph 323 of the Decision states that:

> "Access prices calculated under an ECPR approach may be perceived as being more favourable to undertakers than prices derived from other approaches, including some alternative retail-

> minus approaches. This is because ECPR allows the undertaker to produce prices that fully compensate it for the net losses that it would incur when providing a common carriage or wholesale distribution service, as compared with continuing to supply the final customer itself…"

648. That is confirmed in the present case where the ECPR approach produces a higher access price than the average accounting cost approach, by some 17 per cent[38].

649. The Decision does not contain any real discussion as to how or why an approach that is more favourable to the incumbent than other approaches is consistent with the Chapter II prohibition, or is to be preferred to any of these other approaches. At the first hearing of this matter, the underlying effects on competition of an ECPR approach were not debated, nor was the Tribunal taken to the NERA reports referred to in the Decision. However, in the light of the submissions made at that hearing, including those of Aquavitae, the Tribunal felt it necessary to examine the NERA reports and the underlying cases and literature there referred to more closely, with a view to considering, in as informed a manner as possible, whether the particular ECPR approach adopted in this case was compatible with the Chapter II prohibition.

650. As the Tribunal then understood the various commentaries referred to in the NERA reports, and the various sources to which those commentaries in turn refer, the perceived advantages of ECPR were that entry will occur only when entrants have lower total costs than the incumbent's avoidable costs. It thus ensures that the incumbent's common costs continue to be fully funded, and that stranded assets are avoided. On the other hand, there appeared to the Tribunal to be some five features of an ECPR-based approach which gave rise to concern as to whether an ECPR approach is compatible with the introduction of effective competition: (i) the risk of entrenching monopoly rents or inefficiencies in the retail price; (ii) the possible lack of the dynamic effect of competition, resulting from the fact that, as the Director recognises, the dominant incumbent is indifferent as to who supplies the customer; (iii) the raising of barriers to entry; (iv) the risk of a price squeeze; and (v) difficulties in properly identifying the "minus" element in the retail-minus calculation.

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[38] In the *Bath House* case the quoted ECPR access price was 31.9p/m³ compared with the average accounting cost price of 13.6p/m³ i.e. about 150 per cent higher: [2006] CAT 7 at paragraph 125.

651. The Tribunal set out those concerns in more detail at paragraphs 348 to 358 of the interim judgment. At paragraphs 359 to 384 of that judgment, the Tribunal expressed reservations about two particular aspects of the ECPR calculations undertaken in this case, namely: (i) the use of the price under the Second Bulk Supply Agreement as the base for the "retail" price element in the retail-minus calculation; and (ii) the use of the price for the water resource under the First Bulk Supply Agreement between Dŵr Cymru and United Utilities as the "minus" element in that calculation.

652. In addition, the Tribunal expressed the provisional view, at paragraphs 386 to 419 of the interim judgment, that there was a potential conflict between the concept of ECPR as applied by the Director in the Decision, and Community law on margin squeeze, which conflict potentially arose on the facts of this case. In all these circumstances, the Tribunal considered it necessary to give more detailed consideration to the issues of ECPR and margin squeeze than had been possible up to that stage: see paragraph 427(c) of the interim judgment.

653. The Tribunal has now had the advantage of considerable additional evidence consisting principally of two reports dated March and May 2006 by Professor Mark Armstrong, Professor of Economics at University College, London, on behalf of the Authority; two reports dated April and May 2006 by Dr Eileen Marshall CBE, a former Managing Director of the Gas and Electricity Markets Authority and an experienced expert in regulatory matters, on behalf of Aquavitae; the witness statement of Mr Paul Hope, Head of Tariffs at Ofwat, who explained the chronological development of Ofwat's policy; and the oral evidence of those three witnesses.

654. In this section we propose, first, to summarise the evidence, and then briefly to summarise the parties' arguments before setting out our own analysis as regards ECPR on the facts of this case. We stress that the evidence we have received about ECPR is relevant only insofar as it bears on the validity of the Decision relating to the Chapter II prohibition, and the specific issues we have to decide. The Tribunal, as the Authority rightly points out, is not entitled to decide on any wider issues, and we do not intend to do so.

655. There is an overlap between the issues affecting ECPR and the issues affecting margin squeeze. So far as is necessary, we deal separately below with the legal arguments on the margin squeeze issue, after we have dealt with ECPR.

656. At paragraphs 318 to 319 and 324 to 327 of the Decision, the Director further states that his ECPR-based approach is also consistent with the Costs Principle set out in section 66E of the WIA91, introduced by the WA03 but not yet in force at the time of the Decision. We deal with that issue separately after we have dealt with ECPR and the margin squeeze issues.

Use of terms referring to "Efficiency"

657. We think it useful, before setting out the expert evidence, to mention the various senses in which the words "efficiency" or "efficient" have been used in the economic evidence in this case, although the terms in question are not always precise and sometimes overlap. The following is intended as a broad, non-technical, description of our understanding of the position.

658. In general, it seems to be accepted that a main purpose of the competition policy underlying Articles 81 and 82 of the Treaty and the 1998 Act is to foster lower costs and prices, better service, wider choice of goods and services, and more innovation than might normally be expected to occur under monopoly conditions, to the ultimate benefit of the consumer. The benefits are often judged to be achieved by a process of rivalry between suppliers, and may not be achieved if there is market dominance and no threat of potential competition through substitutes or new entry. Competition, in its broadest sense, leads not only to pricing and marketing initiatives, but also to innovation in products and processes.

659. In competitive markets, firms will have an incentive to produce goods or services at the lowest cost, since firms that have higher costs than their rivals are less likely to survive. In technical terms, this is said to lead to "productive efficiency", where goods are produced at the lowest possible cost to society.

660. A further benefit of competition is to make prices more closely reflective of costs. In competitive markets, this in turn signals to customers the costs of supply, achieving a more appropriate relationship between demand and supply. This is said to give rise to "allocative efficiency".

661. Even if few markets resemble the model of perfect competition, the general effect of competition can be said to bring about a closer relationship between prices and costs, and thus to ensure that resources are not mis-allocated – in particular that consumers do not pay more than the reasonable cost (including a reasonable profit) of producing the product or service in question, and suppliers do not supply goods or services at a higher cost than would be the case in a competitive market. As one report by the Monopolies and Mergers Commission[39], cited by Dr Marshall, stated:

> "In our view, a main and normal benefit of competition is to provide an incentive to relate the structure of prices to the structure of costs, and hence to reduce prices to users as a whole"

662. Professor Armstrong described "allocative" and "productive" efficiency in non-technical shorthand: "Allocative efficiency is obtained when you have prices close to cost – the actual cost of supply". "Productive efficiency is achieved when the particular pattern of supply is produced in the most efficient manner" (Day 3, p. 48).

663. To these concepts there is also to be added the idea of competition leading to "dynamic efficiency". This concept sees competition as taking the form of, and leading to, innovation in products and processes as part of the continual pursuit of customers' business – what Professor Armstrong called "the long run benefits of competition" (*ibid*). A closely related idea is that competition itself contains its own dynamic, the results of which cannot always be foreseen. According to this approach, the dynamism of the competitive process itself tends over time towards lower costs, lower prices and more innovation.

664. This latter dynamic approach may be contrasted with "static equilibrium analysis" which in economic theory assumes a given state of affairs in a market, but does not necessarily analyse the process by which a market may move from one "state of

[39] *Reports under the Fair Trading Act 1973 on the supply within Great Britain of gas through pipes to tariff and non-tariff customers, and the supply within Great Britain of the conveyance or storage of gas by public gas suppliers* (1993) (Cm 2314), para 2.108

affairs" to another "state of affairs". In our view, there was perhaps in this respect an important difference of emphasis between Professor Armstrong and Dr Marshall. Professor Armstrong advanced the theoretical justification for ECPR based on a "static" model, whereas Dr Marshall placed more weight on the practical adverse effects on the competitive process to which, in her view, ECPR gives rise.

665. As one particular example of their respective approaches, as we understood it, Professor Armstrong saw "efficient entry" in terms of the assumption that lay behind his model, and indeed the Authority's whole approach, which was that under ECPR market entry was only "efficient" if it could take place without increasing the water industry's total costs in the short run. In other words ECPR aimed for "productive efficiency" in the short run, but neither "allocative" nor "dynamic efficiency", even if entry might reduce costs over the longer run. Dr Marshall, on the other hand, saw ECPR as likely in practice to preclude entry by firms who would, by any normal standards, be regarded as "efficient". In her view, ECPR was unlikely to achieve even the theoretical "productive efficiency" relied on by the Authority. More importantly, according to Dr Marshall, ECPR was unlikely in practice to foster the competitive process, or lead to gains in terms of lower costs, lower prices, better service or more innovation. In other words, in technical terms, as Dr Marshall saw it, ECPR would not achieve "allocative" or "dynamic" efficiency either. Professor Armstrong, for his part, emphasised that ECPR was solely concerned to achieve "productive efficiency", emphasising the role of the regulatory process in controlling prices and thus achieving "allocative efficiency" by that route.

666. We add lastly that whatever the respective merits of "productive", "allocative" or "dynamic" efficiency in the abstract, in an industry such as the water industry those concepts need to be considered in the particular circumstances of that industry. Among the relevant considerations is the need to ensure that the infrastructure costs, and any costs arising from the public service obligations of the industry, are properly funded and, where appropriate, borne equitably by entrants as well as by incumbents: see paragraph 357 of the interim judgment.

B. SUMMARY OF THE EXPERT EVIDENCE

Professor Armstrong's first report, March 2006

667. Professor Armstrong points out that competition is only rarely feasible or desirable in network infrastructure. However, new entrants need access to that infrastructure in order to offer their own services to consumers in activities which are open to competition. Where, as here, there is vertical integration, the monopolist incumbent will set two kinds of prices: retail prices for services supplied to its customers, and access prices for the use of its monopoly infrastructure. A crucial element in determining an entrant's willingness to enter the market will be the *margin* between the two prices set by the incumbent. Wherever there is a monopoly which is not appropriately regulated there will be a danger of excessive prices. An unregulated, vertically integrated, firm will tend to set both excessive retail prices and excessive access prices.

668. Professor Armstrong distinguishes between "dynamic efficiency", "allocative efficiency" and "productive efficiency". ECPR aims to achieve "productive efficiency" by ensuring that only firms which can supply the service in question at or below the costs which the incumbent avoids by not supplying that service, can enter the market. In Professor Armstrong's view, this is "efficient" entry (i.e. the total costs of both the incumbent and the new entrant are no greater than the pre-entry costs of the incumbent alone).

669. According to Professor Armstrong, ECPR is particularly appropriate where an incumbent's regulated retail prices diverge from its marginal cost, for example because: (i) the incumbent has high fixed costs which must be recovered if the incumbent is to remain in business; (ii) the incumbent has invested in infrastructure, and the cost of this investment has to be compensated; or (iii) there are mandated cross-subsidies between different groups of users. If, in any of those circumstances, a new entrant were able to obtain access at the marginal cost of access, the entrant would easily be able to undercut the incumbent's retail price, because the entrant would be making no contribution to the incumbent's fixed costs, nor the costs of its investment

in infrastructure, nor to the cost of any mandated cross-subsidy required to be reflected in the retail price. The incumbent would then have to meet those costs out of its revenue from its remaining customers, which would mean that prices to those other customers would rise or, alternatively, service levels would fall, or the incumbent would earn an inadequate return. This kind of "cream-skimming" entry is unlikely to be socially desirable or economically efficient, in Professor Armstrong's view.

670. Professor Armstrong accepts NERA's view, set out in its 2001 report referred to in paragraph 322 of the Decision, that arguments for ECPR are strongest if the goal is to secure efficient entry into the industry and: (i) final prices are regulated; (ii) the services offered by the incumbent and the entrant are perfect substitutes for each other; and (iii) avoidable costs can be observed. If the services in question are not perfect substitutes for each other, then ECPR requires to be modified; similarly, if the entrant is offering a new service which does not displace the incumbent's service, the access charge should be based on the cost of providing access, not on ECPR. In Professor Armstrong's view, however, ECPR answers the following question: for a given retail price charged by the incumbent, which access price ensures "productive efficiency", so that entry occurs only when the entrant has lower costs than the incumbent, but does not occur when supply by the entrant results in higher industry costs? Professor Armstrong accepts that a by-product of ECPR is that the incumbent makes the same profit whether or not entry occurs, but regards that feature as ensuring that the incumbent's fixed and sunk costs, and any mandated cross-subsidies, are fully funded. In addition, the incumbent has less incentive to discourage entry by non-price means, since its profits are secure.

671. Professor Armstrong accepts that ECPR is only a "partial rule". ECPR takes the incumbent's existing retail price as a given, and has no role to play in determining the reasonableness or otherwise of that price. If the retail price is set at an inappropriate level, that is the fault of the regulatory system, not of the ECPR. However, Professor Armstrong accepts that ECPR maintains a monopoly profit where the retail price is not appropriately regulated.

672. As to the objection that ECPR is subject to cost-manipulation by the incumbent, in Professor Armstrong's view that applies to any access pricing policy. According to

Professor Armstrong, ECPR gives the incumbent incentives to reduce its costs in both the upstream and downstream layers.

673. As to the objection that ECPR does not take account of the long run dynamic benefits of entry, Professor Armstrong accepts that this argument "might sometimes be correct". However, it is difficult for policy makers to know when this argument is likely to be applicable, or to quantify the likely dynamic benefits of entry. In Professor Armstrong's view the water industry is not a good example of the kind of industry where "dynamic" considerations are likely to apply, so this aspect is likely to be of subsidiary importance.

674. Professor Armstrong also comments on paragraphs 337 to 384 of the Tribunal's interim judgment. Among the points he makes are the following: (i) the validity of ECPR does not depend on the contestable market framework originally relied on by Baumol-Willig; (ii) it is not a disadvantage of ECPR that the incumbent's profits are protected, for the reasons already given; (iii) if an entrant has significant fixed costs, it will need to have dramatically lower marginal costs than the incumbent if it is to be efficient to have this entry; (iv) it is a benefit of ECPR that it discourages entry which causes significant duplication of fixed costs; (v) if the incumbent's marginal costs vary significantly with volume, then a single "per unit" calculation of avoided cost will require some adjustment, and some forecast of the likely scale of entry will be required; and (vi) the logic of ECPR is that the actual avoided (i.e. local) costs should be used as the minus element in the calculation.

675. Professor Armstrong's report is accompanied by a paper prepared by Ofwat describing the characteristics of the water industry. The relevant features identified by Ofwat are that: (i) retail prices are regulated, with challenging efficiency assumptions built in, but allowing for a sufficient return on capital to enable the water company to finance its investment programme; (ii) retail tariffs reflect geographic averaging within each company's area for each customer class; (iii) water companies have environmental and other obligations; (iv) the water industry is highly capital intensive, so that an increase in the cost of capital has a relatively large effect on industry costs; (v) current capital investment cannot be funded entirely from revenues but has to be financed partly from borrowing; (vi) the costs of any assets "stranded" as a result of competition can be

recovered only from an entrant, or from other customers, or by an incumbent accepting a lower rate of return – which would increase the cost of capital; (vii) there are extensive common costs mainly arising from water distribution networks which customers share; (viii) water distribution exhibits strong natural monopoly characteristics; (ix) because of economies of scale, the incremental distribution cost of serving a new customer is typically lower than the average distribution costs of serving all customers; (x) the natural monopoly part of the water industry is larger than in other network industries because water distribution costs are higher, relative to the price of the product, than is the case in telecommunications, gas or electricity; (xi) water companies are vertically integrated, in accordance with Government policy; and (xii) there appears to be less scope for product variations in the provision of water services than for example in telecommunications, although there is scope for innovation outside the regulatory framework (e.g. competition for on-site water consulting services) or under the licensing provisions of the WA03.

676. In the above circumstances Ofwat considers that the water industry fulfils the key characteristics identified by Professor Armstrong as appropriate for the application of ECPR. In particular Ofwat states: (i) "given our extensive regulation of retail prices and focus on continuing efficiency improvements we do not think the concern about ECPR preserving monopoly profits or inefficiency is relevant to the water industry"; (ii) the Second Bulk Supply Agreement price used in the ECPR calculation was based on various price and cost comparisons and extensively consulted upon; (iii) tariffs in the water industry are based on geographic and social cross-subsidies which are preserved by ECPR; (iv) while avoidable costs are difficult to identify, the Authority has power to obtain information, and the work done in connection with the introduction of the licensing regime under the WA03 has enabled these costs to be identified to a large degree; (v) in the Decision, the avoidable costs of water resources were easily identifiable; (vi) ECPR ensures that the water industry avoids incurring the cost of stranded assets, which would otherwise raise the cost of capital; (vii) the dynamic efficiency argument is not forceful in the water industry because the short term cost increases resulting from inefficient entry are potentially large (as a result of stranded assets) whereas the longer term gains from innovation are less obvious; (viii) entry into the water industry is difficult for many reasons such as economies of scale, the natural monopoly of distribution, high distribution costs relative to the value of the product,

and a limited market for large industrial users; and (ix) ECPR ensures a margin for efficient entry, assuming there are some avoidable costs identifiable through regulation, the access price will be lower than the company's retail price, giving an acceptable margin to a new entrant.

Dr Marshall's first report, April 2006

677. Dr Marshall does not fundamentally disagree with Professor Armstrong's theoretical exposition of ECPR, but she points out that the academic debate about ECPR is generally conducted "within the terms of neo-classical static equilibrium analysis", that is to say a textbook approach which assumes that markets are already competitive, or at least contestable in the sense that there are no significant barriers to firms entering the market. The original exposition of ECPR by Professors Baumol and Willig was based on the theory of what would happen in a contestable market. In such a market, both the incumbent and its competitors will need to reduce their prices to the lowest level – incremental (avoided) cost – and a competitor will take custom from an incumbent only if its incremental cost is lower than the incumbent's. It is in these conditions that "productive efficiency" is achieved. However, according to Dr Marshall these theoretical conditions are rarely present in the real world where an incumbent monopolist has not previously faced competition.

678. Dr Marshall also argues that ECPR is significantly more controversial than the NERA reports imply. Dr Marshall stresses that ECPR has given rise to a great deal of controversy in the academic literature. In her view, the "static equilibrium' literature gives some support for ECPR, but only if market imperfections "can be regulated away by omniscient regulators". ECPR was banned in New Zealand in 2001 once it was realised that ECPR had to be accompanied by comprehensive price regulation in order to prevent any monopoly profits or inefficiencies in the incumbent's retail price being passed on by the incumbent to its competitors in the access price. ECPR has been rejected in the United States, and by Oftel/Ofcom in the United Kingdom in circumstances where the incumbent had persistent market power and effective competition had yet to emerge – the situation in the water industry. ECPR has never been used in the United Kingdom gas and electricity industries. According to Dr Marshall, national and international experience does not support the use of ECPR.

679. According to Dr Marshall there are at least two pre-conditions which need to be satisfied for ECPR to achieve "productive efficiency". First, the incumbent's retail prices need to be regulated to competitive standards to ensure they are efficient and contain no monopoly profits or excessive costs. If monopoly profits or inefficiencies are simply passed through by ECPR into access prices, then the "productive efficiency" prized by static equilibrium analysis will not be achieved. Secondly, according to Dr Marshall, if there are barriers to entry to productively efficient firms, ECPR will not achieve productive efficiency. The Baumol-Willig approach implicitly assumed that there were no such barriers to entry.

680. In Dr Marshall's opinion, the emphasis on "productive efficiency" in the static equilibrium model advanced by Professor Armstrong tends to overlook the "dynamic efficiency" which competition tends to produce. Dr Marshall places weight on the process of competition, which tends toward innovation, lower costs and lower prices, the outcome of which cannot be prejudged. According to Dr Marshall, a regulator cannot be blessed with perfect foresight so as to know in advance what the "efficient" outcome might be. To try to set "efficient" prices by regulation can inadvertently stop the competitive process in its tracks. Dr Marshall argues that the job of a regulator should be to foster the competitive process, rather than pre-judge the outcome.

681. Dr Marshall makes the point that it is difficult to tell in advance, on the basis of the existing experience of a monopoly industry, whether competition would result in the industry being more 'dynamic' than it appears. Similar arguments were advanced in relation to gas and electricity, but the outcomes demonstrated that there was considerable scope for dynamic effects and lower prices. The Consultation Paper envisaged dynamic effects at paragraph 24.

682. As to whether ECPR preserves monopoly power, Dr Marshall agrees with Professor Armstrong that, strictly speaking, if the retail price contains monopoly profits or inefficiencies, this is the fault of the regulatory system, not ECPR per se. But if such is the case, argues Dr Marshall, ECPR cannot achieve its stated purpose of achieving productive efficiency, because whatever excess profits or inefficiencies are present in the retail price are simply preserved in the access price. Dr Marshall considers that Professor Armstrong assumes too simplistically that regulation can solve this problem.

Even regulated prices may contain elements of monopoly profit or inefficiencies. Dr Marshall expresses surprise that Ofwat is so confident about the efficiency of the unregulated large user tariffs, and doubts whether such prices are likely to be set at levels excluding monopoly profits or inefficiencies. Dr Marshall also doubts whether prices to particular business users are cost-reflective as a result of regional averaging. According to Dr Marshall, virtually all commentators, including Professor Baumol, the originator of the theory, accept that ECPR also requires close and continuing regulation of retail prices to ensure that they are free of monopoly profits and inefficiencies.

683. Dr Marshall further considers that because the calculation of avoidable cost directly affects the access charge, under ECPR the risk of cost manipulation by the incumbent is significant. Yet, because avoidable costs are based on forward looking assumptions, they are inherently uncertain, depending on the time period used and the output increment assumed. Dr Marshall is also sceptical of Ofwat's ability to identify "avoidable costs". Incumbents have never had to identify avoidable costs in the potentially competitive sectors outside the pipeline business, and the exercise of doing so is subject to significant uncertainties. Furthermore, incumbents' profits are protected at whatever level avoided costs are set, because all costs not deemed to be "avoided" are passed through in access charges. Incumbents, however, still have an incentive to deter entry by non-price means, because staff would not wish to see a customer switching to a competitor.

684. According to Dr Marshall, ECPR fails to achieve the benefits of competition, because it tends to deter entry. Professor Armstrong's static model does not forecast whether entry will occur or not. In Dr Marshall's view, the fact that an entrant will need to cover its total costs within the avoidable cost of the incumbent is "too tough a test" and will itself tend to deter entry. But if entry does not occur, then even the "productive efficiency" which ECPR seeks in theory will not be achieved. The Authority's view, "from a perspective reminiscent of central planning", that significant duplication of fixed costs is undesirable does not take account of the fact that customers may value choice per se, and that higher total costs in the short term could bring greater benefits on a longer term view.

685. According to Dr Marshall, the fact that ECPR always requires the entrant to indemnify the incumbent means that the entrant and the incumbent can never be in a position of parity. The entrant has to take all the risks of operating within the incumbent's incremental costs and bear all the incumbent's other costs. In addition, because ECPR bankrolls all the incumbent's costs other than avoided cost, the incumbent is insulated from the normal disciplines of the market. ECPR cannot, therefore, create normal competitive conditions. Indeed, it creates a one-sided market in which the incumbent does not compete, and the entrant has to bear all the risks. In Dr Marshall's view, competition in these circumstances is fatally compromised, and any prospect of a dynamic market is lost.

686. Moreover, in Dr Marshall's view, ECPR is inherently likely to lead to a price squeeze. The incumbent could not, in the longer run, trade profitably in its downstream operations if it were operating at the level of avoided costs. Any entrant would have to be not just reasonably efficient but "super efficient" to trade profitably within the confines of the incumbent's avoided costs, "which is a very tough test". Moreover, if the "avoided costs" are calculated on a per customer basis, as appears to be the case here, the avoided costs are likely to be very small indeed. As to the 'minus' element in the retail-minus calculation, Dr Marshall considers that both elements of the calculation should be based as closely as possible on actual local costs.

687. According to Dr Marshall, there are already barriers to entry to the water industry such as the limited size of the market for large users, the lengthy process of negotiating access terms, additional charges levied by incumbents, and the ability of the latter to take pricing initiatives. In her view, it seems highly unlikely that any new entrants will be able to compete with incumbents on the basis of ECPR.

688. Dr Marshall illustrates the difficulties faced by new entrants by reference to Ofwat's *Guidance on Access Codes*, June 2005, and water companies' indicative access charges published in August 2005. According to Dr Marshall, these tend to show virtually no margins available to entrants for wholesale supplies and although the margins for common carriage appear somewhat higher, in that case the entrant has to bear the water resource cost. The quoted margins also vary significantly from year to year. These

facts, plus the time consuming, complex and expensive process of negotiating access seem to Dr Marshall to render competitive entry into the water industry very unlikely.

689. According to Dr Marshall, if the objective is to require competitors to contribute to the costs of stranded assets (although in her view it is debatable whether such costs would arise in practice) or to the costs of a cross-subsidy (such as a subsidy from business customers to household customers, although it is not clear what subsidies exist) such objectives can be achieved by other means. For example, the relevant costs could be separately identified and then added in to the access charge in a transparent way. This, according to Dr Marshall, is the approach in the gas and electricity industries. Dr Marshall describes in detail the approach used in the gas industry where the costs of the network operator were "unbundled" from other services and a charging structure developed whereby the network operator's financial viability and efficiency was assured, but competition could take place on an equal footing in ancillary activities such as metering, storage and gas connections.

Professor Armstrong's reply of May 2006

690. In his reply to Dr Marshall's evidence, Professor Armstrong makes, among others, the following points: (i) ECPR is the access price which ensures productive efficiency at any given regulated retail price; (ii) the validity of ECPR does not depend on the market being 'contestable', or the retail price being regulated to 'competitive standards'; (iii) Dr Marshall's alternative industry structures and policies, apparently based on some form of vertical separation, do not seem relevant to the case at hand; (iv) as to narrow margins, it is always open to entrants to offer a more innovative service commanding a higher price from the customer; (v) imperfect substitutability between the incumbent's and the new entrant's service, or the risk of by-pass of the pipeline, would require some modification to a simple retail-minus approach, but do not appear to arise on the facts of this case; (vi) as to margin squeeze, there is no obligation to offer a margin to a less efficient entrant; (vii) the ECPR margin corresponding to the incumbent's avoided costs marks the threshold between "fair" and "anti-competitive" conduct, with the consequence that there is no conflict between ECPR and the case law on margin squeeze; (viii) ECPR is not a cross-check for

excessive pricing, nor can ECPR be used to identify excessive retail pricing. But it can legitimately be used to identify whether an access price is excessive.

Dr Marshall's reply to Professor Armstrong, May 2006

691. Dr Marshall expresses surprise that Professor Armstrong is keen to divorce his advocacy of ECPR from retail price regulation. Although, strictly speaking, ECPR is separate from retail price regulation, in Dr Marshall's view in practice they go together, as recognised in the academic literature. Moreover, without effective retail price regulation, any theoretical 'productive efficiency' gained from the application of ECPR in the competitive segment could be offset by inefficiency and misallocation of resources in the monopoly bottleneck facility, hence the need for 'efficient' price regulation, according to most proponents of ECPR. Dr Marshall sees the need to maintain price regulation, as regards both retail prices and access prices, as an unfortunate and costly by-product of ECPR.

692. As to maintaining social obligations and cross-subsidies, in Dr Marshall's view ECPR conceals the cost of these elements. Dr Marshall's alternative approach would be to identify these costs transparently, if they exist, and share them openly between the incumbent and its competitors. Similarly, in Dr Marshall's view, regional averaging of prices could be retained by means other than ECPR, by calculating cost-reflective network charges and averaging them across customers. However, in Dr Marshall's view ECPR conceals cross-subsidies, and thus tends to conceal possible price discrimination against different customer groups resulting from differences in costs. The identification of costs does not require the formal separation of ownership, but it is desirable to identify the costs of the monopoly pipeline sector separately from the costs of the segments open to competition.

693. As regards dynamic efficiency, according to Dr Marshall it is common ground that ECPR is likely to have a detrimental effect on dynamic efficiency. In this case the very low or non-existent margins available to new entrants would in Dr Marshall's view hinder dynamic efficiency. Dr Marshall suggests that in earlier writings Professor Armstrong has stressed the inadequacy of a simple ECPR model of the type used by Ofwat.

694. As to margin squeeze, Dr Marshall expresses the view that ECPR is likely to fail the margin squeeze tests: (i) if the incumbent's avoidable costs are less than its fixed costs in the downstream market; or (ii) if a reasonably efficient service provider is unlikely to obtain a normal profit at the prices set by the incumbent. Dr Marshall also stresses that there is no parity between the incumbent and the entrant since the former is indifferent to the loss of business, whereas the latter is not. If, in addition, the incumbent imposes a connection charge which it does not impose on itself, that adds a further element of margin squeeze.

695. Dr Marshall also points out that the benchmark of 'avoided costs' is also the benchmark for predatory pricing under the *AKZO* test[40]. It is unlikely that a firm would set its prices indefinitely at that level unless it had predatory intent, because it would not be covering its fixed costs. But ECPR permits and encourages the incumbent to price at that level, without risking any losses because all its other costs are recovered in the access price. According to Dr Marshall, in competitive markets virtually all prices exceed avoided costs but are not normally regarded as "inefficient".

696. Finally, Dr Marshall comments that, contrary to the impression given by Annex IV to the Authority's skeleton argument, ECPR has in practice been little used internationally. Dr Marshall considers that the NERA report is misleading in this respect. Such isolated examples as there are do not resemble the circumstances of the water industry. The OECD reports to which the Authority itself refers, demonstrate how little ECPR is used in practice.

Mr Hope's witness statement of 27 March 2006

697. According to the Decision, the Director had apparently relied on ECPR as a result of a report prepared for an incumbent water company, which would no doubt have had a certain interest in the adoption of a pricing policy favourable to incumbents. Accordingly, we asked the Director whether he proposed to file evidence as to why he preferred ECPR to any other access pricing policy, particularly when his own still extant guidance in MD 163 expressed reservations about such an approach on the basis of the advice given to the Director by the CCCWG. It was only after being pressed by

[40] Case C-62/86 *AKZO Chemie v Commission* [1991] ECR I-3359

the Tribunal that the Director agreed to provide a witness statement setting out "the evolution of the Director's thinking" (case management conference of 2 March 2006, p.29). That statement was provided by Mr Paul Hope, Head of Tariffs at Ofwat. Mr Hope was involved in the drafting of the sections of the Decision relating to ECPR.

698. Mr Hope describes the initial guidance given by the Director on the subject of common carriage in OFT 422, MD 154 , MD 162 and latterly in MD 163, which was written with the advice of the CCCWG in July 2000. Mr Hope emphasised that the CCCWG considered it important that, if ECPR were to be applied successfully, undertakers' retail tariffs should not include an excessive profit element. Ofwat considered that, generally, they did not, through the use of Condition E. Mr Hope refers to an earlier consultation paper published by the Government in April 2000, and to an earlier paper Mr Hope himself had written in May 2001, pointing out that ECPR did not provide for future dynamic efficiencies. However, Ofwat also had doubts about other possible access pricing policies. When the NERA report of March 2001 was received, Ofwat considered that its arguments were credible. Following the publication of the Consultation Paper, cited above, in July 2002, Ofwat considered that the Government's policy was: (a) to ensure that access prices did not deter "efficient" entry; (b) that customers unable to benefit from competition should not have to bear extra costs, and that investment programmes should be funded; and (c) that there should be no undue discrimination. Ofwat considered that ECPR performed well against these objectives, and that actual avoidable costs should be used in the calculation. By the time of the Decision, the use of ECPR had been reinforced by the adoption of the Costs Principle in the WA03 and had been accepted, in Ofwat's view "as a perfectly credible methodology, and was well known within Ofwat and the industry".

699. We note, however, that both Aquavitae and Albion (the latter through the witness statement of Mr Jeffery which we do not need to summarise) deny that ECPR had ever been accepted by them as a credible methodology. According to Aquavitae and Albion, it is not surprising that incumbents have accepted ECPR since it is so favourable to them.

The oral evidence

700. We mention the oral evidence in our analysis below where it is helpful to do so. Our general comments are as follows.

701. Professor Armstrong is a distinguished academic economist, although he has, we understand, less direct experience of the practice of regulation than Dr Marshall. He gave his evidence openly, and was ready to debate the economic issues at a theoretical level. Understandably, he has not been immersed in the details of this case, and has had no first-hand experience of the water industry. While we could understand the logic of the conceptual position he adopted, even though it differed from the original theory as advanced by Professor Baumol, we found Professor Armstrong's willingness to accept some of the practical difficulties of ECPR refreshing and helpful.

702. Dr Marshall gave her evidence in a quiet, but authoritative, way drawing on her extensive regulatory experience of network industries, although admittedly not directly in water. In our view she gave convincing evidence as to the practical, as well as the theoretical, difficulties of seeking to use ECPR to introduce competition into an industry with entrenched local monopolies.

703. Much of Dŵr Cymru's cross-examination of Dr Marshall was directed to the fact that, in her survey of international experience, she had failed to mention a particular American case, *Iowa Utilities*, a decision of the US Federal Court of Appeals for the 8th Circuit of 18 July 2000. This case seems to us to turn largely on the construction of the US statute there in issue, and to be of little relevance in the present context. If this approach was intended to undermine Dr Marshall's credibility, it did not succeed. Although Dr Marshall bore this cross-examination stoically, it would have been more helpful had Dŵr Cymru concentrated on more important issues.

704. Mr Hope was a straightforward witness who helped to clarify the Ofwat viewpoint.

C. SUBMISSIONS OF THE PARTIES

Albion's submissions

705. Albion submits that ECPR is no more than a pricing rule i.e. a means of deriving an access price. If the application of the "rule" gives rise to a margin squeeze or to a price

which is excessive, contrary to Chapter II of the 1998 Act or to Article 82, then the price will not be saved from illegality merely because it is in conformity with the acronym.

706. Albion submits that the expert and factual evidence now before the Tribunal supports its position. Professor Armstrong's muted defence of ECPR must be viewed against the much more detailed and specific criticisms made by Dr Marshall. In Albion's submission Professor Armstrong's evidence was "devastating" for the Authority in relation to the potential conflict between ECPR and the law on margin squeeze, the possible "pass through", in the access price, of inefficiencies, monopoly rents and cost misallocations, and the skewing of competition against the entrant. Albion further submits that Mr Hope's evidence showed that the Authority had not considered a number of highly relevant matters relating in particular to the calculation of margins and avoidable costs. Albion invites the Tribunal to accept Dr Marshall's evidence, on all of which it relies.

707. According to Albion, Professor Armstrong does not seek to defend the use of ECPR as a "cross-check" for excessive pricing, as it was applied in the Decision, and it is obvious from his report that such use is misguided.

708. Albion further submits, in particular, that ECPR cannot be effectively used unless the avoidable costs of the service that is to be subject to competition are readily identifiable. As Dr Marshall demonstrates in her evidence, that is manifestly not the case in the water industry in England and Wales. The analysis of downstream costs in the Decision, where the Director did not identify any avoidable retail costs, is a striking example of the difficulties of using ECPR. Furthermore the avoidable upstream costs were uncritically assumed to be the very low price currently charged by United Utilities to Dŵr Cymru.

709. According to Albion, the effect of ECPR is that a new entrant is required to be *more* efficient than the incumbent to the extent that it must cover not only its own avoidable costs but also its fixed costs out of the margin based only on the incumbent's avoidable costs. Such a result is contrary to established principles under Article 82, according to which a dominant undertaking must not price at a margin at which its own downstream

arm (actual or hypothetical) could not compete. The Privy Council decision in *Telecom Corporation of New Zealand v Clear Communications*, 19 October 1994 ("the *Clear* case"), which was highly controversial, proceeded on a very different factual premise than the present case. Neither Albion nor Dŵr Cymru could provide the relevant service on the basis of a zero (or even negative) margin.

710. According to Albion, ECPR will discourage efficient entry where the level of fixed costs renders entry by an equally or more efficient competitor unprofitable. Moreover, ECPR is targeted exclusively at the superior efficiency of the entrant in respect of the avoidable costs of the downstream market. Contrary to the position adopted by Professor Armstrong, Albion submits that competitive entry at one level of the market may serve to enhance efficiency elsewhere in the supply chain: (i) where the new entrant is in part performing a brokerage role and may well impose competitive pressures on the upstream supplier; and (ii) where the new entrant is seeking to pursue entry at the downstream (or upstream) level as a lever with which to compete more generally in a vertically integrated market. The use of ECPR threatens to choke off this competitive entry and the development of more dynamic conditions of competition in the water industry.

711. Albion further relies on Dr Marshall's analysis of the substantial barriers to entry faced by entrants to the water industry and her explanation of the way ECPR aggravates those difficulties, leading to the striking lack of progress in introducing competition to the market. It is thus unsurprising that incumbents favour ECPR as a pricing rule and that very little has been achieved by the Authority in pursuing the objective of a more competitive water market.

Aquavitae's submissions

712. Aquavitae supports Albion's submissions and submits that Dr Marshall has expertise in the academic understanding of industrial economics, an appreciation of political/policy questions, and experience of the detailed implementation of competition in respect of regulated utilities. On the other hand, it is not clear that Professor Armstrong's report assists. Professor Armstrong's report is based on the premise that the "main goal" is to ensure what he describes as "efficient entry" to the water industry. However, in a case

such as the present, under the Chapter II prohibition, the "main goal" is to control the behaviour of the dominant firm (in this case Dŵr Cymru). The relevant question which Professor Armstrong should have been asked to address is: "is ECPR appropriate when the main goal is to avoid abuses by dominant undertakers?" That is the question before the Tribunal in this case.

713. Aquavitae further submits that the thrust of Professor Armstrong's arguments in support of ECPR is contrary to general margin squeeze jurisprudence. Professor Armstrong also fails to take account of the dynamics of the situation and his phrase referring to "the danger of inefficient entry" is wholly inapt. The "danger" is not a physical danger (all new entrants to the water industry must be licensed). The reference is apparently to a risk of affronting an economic principle. However, the "danger", if that word can be used, is not resolved by determining who is inefficient in advance, but by allowing entrants to compete so that market forces will force efficient outcomes.

714. With regard to the *Clear* case, Aquavitae refers to *Carter Holt Harvey v The Commerce Commission* [2004] UKPC 37. In that case the majority judgment of the Privy Council makes clear that it is unsafe to draw any parallels between New Zealand law and Community law, in particular Article 82. The minority judgment of Lord Scott of Foscote and Baroness Hale describes the approach based on *Clear* as "wholly unreal".

The Authority's submissions

715. The Authority's position is that ECPR is a legitimate pricing rule which prevents only inefficient entry, and that it was reasonable for the Authority to take into account the ECPR calculation in the Decision. ECPR can legitimately be used to check for excessive access prices. ECPR encourages entry where there are more avoidable costs and where entry would not raise total industry costs. The question of whether alternative pricing policies could have been adopted, or whether there should be vertical separation in the industry, is outside the scope of the appeal. The Authority argues that ECPR is particularly appropriate where public policy requires retail prices to include cross-subsidies and contributions to common costs. The Authority relies on

Professor Armstrong's evidence, the material prepared by Ofwat annexed to his report, and the evidence of Mr Hope.

716. As to the various concerns raised by the Tribunal in the interim judgment, the Authority argues, in reliance on Professor Armstrong's report, as follows: (i) if an incumbent is able to retain monopoly rents, that is the fault of the regulatory system, not the fault of ECPR but the problem does not arise in this case; (ii) the relevant retail price in this case is the Second Bulk Supply Agreement price, which was determined by the Authority and is not open to challenge in this case; (iii) ECPR encourages efficiencies in the retail layer by encouraging new entrants as efficient as the incumbent to enter the market; it also encourages the incumbent to be more efficient in the natural monopoly layer, since the incumbent does not have to pass on any efficiency savings to its rivals; (iv) in the water industry any benefits from dynamic competition are uncertain and speculative, while the effects of inefficient entry are plainly adverse, and likely to raise the cost of capital for future investments; (v) ECPR does not raise barriers to an equally or more efficient entrant; (vi) it is appropriate that any new entrant should have to compensate the incumbent for his existing investment, since otherwise those costs are simply borne by other customers; (vii) difficulties in assessing the minus element in the ECPR calculation are no worse than in any case of new entry; (viii) any forecast of future cost savings to which entry *might* give rise would be difficult to make, and would involve the incumbent subsidising new entrants; (ix) ECPR is a methodology which correctly balances the desire to introduce competition in the water industry with the need to ensure a return on investment and avoid an overall increase in costs; (x) ECPR is not unlawful merely because it may be less "entrant friendly" than other possible methodologies; and (xi) the Authority did not use ECPR to control Dŵr Cymru's retail price, but to assess whether Dŵr Cymru's access price was excessive: that was a legitimate approach.

717. As to the actual ECPR calculation in this case, the Authority's position is that: (i) both experts agree that actual avoided costs are used in the ECPR calculation; (ii) the Second Bulk Supply Agreement price was the same as the retail price offered by Dŵr Cymru: if the Authority had used Dŵr Cymru's former retail price of 27.47p/m^3, the access price would have been correspondingly higher; (iii) it is not necessary, as Professor Armstrong points out, for the retail price used as the starting point for the

ECPR calculation to be set at the "competitive level"; (iv) the Second Bulk Supply Agreement price of $26p/m^3$ was regulated in detail under section 40 of the WIA91; (v) the Second Bulk Supply Agreement price would not change as a result of the calculations associated with the introduction of the New Tariff; (vi) the price offered by Dŵr Cymru to Hyder Industrial in 1997 was not a comparable price; (vii) the general range of prices to non-potable customers of $15p/m^3$ to over $30p/m^3$, with the majority in the $20p/m^3$ to $30p/m^3$ range, shows that Albion's calculations are not credible; (viii) price competition would not necessarily lead to less dispersed prices; and (ix) there has been no challenge in this appeal to Dŵr Cymru's estimated LRMC of $26p/m^3$. As to this last point, the Authority considers that LRMC is more appropriately used when assessing whether a price is predatory, rather than whether it is excessive.

718. The Authority adds that retail-minus pricing has been used notably in the telecommunications and postal industries in Europe, the USA, Australia and New Zealand where network investment and geographical averaging have been considered important.

719. As regards cross-subsidies the Authority is unable to quantify the cross-subsidies between customers who are at different distances from a water treatment works or water source, but the fact that customers pay the same tariff indicates that cross-subsidies do exist. There is no regulatory benefit in collecting information on the cost of supply to individual customers, which would be difficult to identify because of common costs.

720. In its closing submissions (Day 5, pp. 54 to 56) the Authority argued that there were no unavoidable fixed costs in the retail sector over the medium to longer term, that all retail costs were avoidable, and that such costs would be deducted from the access price.

Dŵr Cymru's submissions

721. Dŵr Cymru supports the Authority's submissions. Dŵr Cymru's arguments are mainly directed to the legal issues affecting margin squeeze which we deal with below.

D. THE TRIBUNAL'S ANALYSIS

722. The Tribunal is not called upon to decide in the abstract on the main arguments for, and against, an ECPR approach to access pricing. The Tribunal's task is to decide whether *the particular use of ECPR in this case* supports the Director's conclusion, on the facts of this specific case, that the First Access Price of 23.2p/m³ was not an excessive price.

723. In our view the relevant analysis can be organised under the headings: (a) Comparative experience regarding ECPR; (b) Preservation of monopoly profits, inefficiencies or cost misallocations; (c) Elimination of competition and prevention of entry; (d) Difficulties regarding avoidable costs; (e) Dynamic effects of competition; (f) Justifications advanced for ECPR; and (g) Conclusions.

(a) Comparative experience regarding ECPR

724. We have been referred to various suggested examples of the use of ECPR in international and national contexts. The approach to determining an access price or determining its reasonableness in a particular case will depend on the wording of the local statute, the objectives of the legislator, the historical circumstances of the market in which use of ECPR is proposed, and the precise way the rule is implemented. In our view there can be no per se rule that a "retail-minus" approach to pricing is necessarily in all circumstances contrary to the Chapter II prohibition. Everything will depend on the circumstances of the particular case, and the details of the approach adopted.

725. Nonetheless, in our view the Authority, in its submissions, significantly understated the controversy surrounding ECPR and the practical difficulties of implementation to which that rule may give rise. The difficulty and controversy about ECPR is illustrated in the academic literature to which the Tribunal has been referred, but also by the following examples.

- *The New Zealand telecommunications litigation*

726. The New Zealand litigation relating to the liberalisation of the local telecommunications market, resulting in the decision of the Privy Council of 19 October 1994 in the *Clear* case already referred to, turned on section 36 of the New

Zealand Commerce Act 1986. In crucial respects that section is differently worded from the Chapter II prohibition or Article 82 of the Treaty: see *Carter Holt Harvey v The Commerce Commission*, cited above, per Lord Hope of Craighead at paragraphs 61 to 65.

727. In the *Clear* case what was referred to as the "Baumol-Willig rule" was advanced by Professor Baumol before the New Zealand High Court on the basis that the price to be charged by Telecom, then the monopoly supplier of telecommunications in New Zealand, for granting access to its network to Clear, a new entrant offering competing services to Telecom's business customers, should be based on what it was said Telecom would charge in a "contestable" market, namely the opportunity cost to Telecom of not supplying its own services to the business customers in question. This opportunity cost was said to be the existing revenue (i.e. Telecom's existing retail price) less the cost avoided by Telecom by not supplying the service in question, thus giving rise to the formula: access price = revenue minus avoidable cost. As the later judgment of the Privy Council makes clear (at p.7) the so-called the Baumol-Willig rule "is not a general rule of economic thinking but was coined for the purpose of this case".

728. In all events, Professor Baumol's argument was accepted by the High Court, (1992) 5 TCLR 167. However, the Baumol-Willig approach was rejected by the Court of Appeal (1992) 4 NZBC 103. Cooke P took the view that the Baumol-Willig rule was "obviously anti-competitive" in that it allowed new entry to the market only on the condition that the competitor indemnify the monopolist against any loss of custom (p.411), while Gault J took the view that the rule would cement any monopoly profits earned by Telecom, as Professor Baumol had conceded (pp. 433 to 436).

729. In the judgment of the Privy Council, Lord Browne-Wilkinson emphasised that the New Zealand statute required the court to consider how a hypothetical seller would act in a competitive market (p.21). Lord Browne-Wilkinson drew attention to what was referred to, inaccurately, as "Professor Baumol's recantation" in which Professor Baumol accepted that ECPR will perpetuate monopoly rents unless accompanied by appropriate price regulation (pp. 23 to 24). Lord Browne-Wilkinson then held: (i) in a competitive market a seller would not provide the use of an asset to another person at

any price less than the profit he could obtain by using the asset himself, and that Telecom was not acting in breach of section 36 of the Commerce Act by following a similar pricing policy (p.25); (ii) it was not shown on the evidence that Telecom was charging monopoly rents (p.26); (iii) it was not shown on the evidence that Clear would be prevented from entering the market at all (p.27); and (iv) on the facts, any monopoly rents would either be competed away, or could be controlled by regulation under Part IV of the New Zealand Act (pp. 25 to 29)[41].

730. However, the New Zealand Government was highly concerned by the reasoning of the Privy Council (Joint Press Release by the Director of Communication and the Director of Commerce, 9 November 1994) and a subsequent report by the Ministry of Commerce and Treasury of New Zealand published in August 1995 was critical of ECPR.

731. Various other reports and statements by the New Zealand Government in 1995 and 1996 about ECPR cited by Dr Marshall indicated their view that "the rule has the potential to limit competition…"; that "the Baumol-Willig rule does not facilitate the ability of the entrant to compete away any monopoly profits that may exist and may hinder some entry by an equally efficient competitor…"; and that "the Baumol-Willig rule fails to take into account the dynamic effects of competition": see Dr Marshall's report at pp. 71 to 72.

732. In 2001, the use of the Baumol-Willig rule was expressly banned under the New Zealand Telecommunications Act 2001, see paragraph 2(1) of Schedule 1, Part 1, Subpart 1 of that Act.

- *The United States*

[41] In our view, as Aquavitae points out, it is impossible to transpose Lord Browne-Wilkinson's economic reasoning to the present case, since: (i) in a competitive market, a seller could not guarantee that he could automatically recover his previous level of reserve and profit; that would depend on the competitive pressure he was under; (ii) the assumption of what would happen in a competitive market is not a plausible counterfactual in circumstances where there is entrenched monopoly; and (iii) the text of the New Zealand statute is quite different from that of the Chapter II prohibition. In *Clear* there was no evidence that the entrant would be prevented from entering the market at all. The Authority has not relied on the Privy Council's judgment in the *Clear* case.

733. As far as the United States is concerned, some examples of retail-minus pricing have been brought to our attention, but the leading case – and the only case to which we were referred which appears to contain some express discussion about the merits of ECPR – appears to be the proceedings which led to the decision of the Supreme Court in *Verizon Inc v Federal Communications Commission* 535 US 467 (2002). In that case the FCC had adopted an approach to setting access charges to telecommunication facilities known as TELRIC (Total Element Long-Run Incremental Cost) and had rejected, amongst other alternatives, ECPR. In rejecting ECPR the FCC stated:

> "We conclude that ECPR is an improper method for setting prices of interconnection and unbundled network elements because the existing retail prices that would be used to compute incremental opportunity cost under ECPR are not cost-based. Moreover, the ECPR does not provide any mechanism for moving prices towards competitive levels; it simply takes prices as given… We do not believe that Congress envisioned a pricing methodology for interconnection and network elements that would insulate incumbent LECs' retail prices from competition" (First Report and Order of 8 August 1996, paragraphs 709 to 710)

734. The Supreme Court held, in effect, that the FCC had not acted unreasonably in preferring TELRIC to the suggested alternatives including ECPR: see the opinion of Justice Souter at pp 17, 21 and 26.

- *The United Kingdom*

735. As far as the United Kingdom is concerned, in the telecommunications market there appears to have been a somewhat half-hearted attempt, soon abandoned, to use a form of ECPR in the early 1990s. However, on various occasions Oftel and its successor Ofcom seem to have rejected ECPR, for example:

> "-[ECPR] required too tough a test for entry- the entrant's full costs had to be lower than the incumbent's incremental costs (because use of the rule allows incumbents to recover their full costs but entrants will not necessarily do so)
>
> -using BT's tariff as a basis for setting the interconnection charge gave BT an advantage because it could take the initiative in setting tariffs
>
> -because charges are based on the incumbent's costs, the entrant can end up contributing to the incumbent's inefficiency."
>
> …

> "Entering a market like telecommunications which is costly and dominated by one operator is inevitably uncertain and risky. The ECPR would deter even competitors whose business, while less competitive than BT's in the short run, is equally or more competitive in the long run. If the major objective of a new interconnection framework is to move towards a competitive market for telecommunications services, the ECPR is too restrictive."
>
> (Consultation Document on the future of interconnection and related issues, 1994, paragraphs 4.23 to 4.27)

> "…the ECPR would require the setting of a separate charge for each fully unbundled local loop, to take account of the specific profits the dominant provider makes on each line. In addition, this charge would have to be changed whenever the profitability of that line varied, which would be impractical."
>
> (Review of the Wholesale Local Access Market, May 2004, paragraph 6.28)

> "…in this case [ECPR] is not a suitable approach to use because it is generally only appropriate either when market power is not entrenched and effective competition is likely to develop, or where the market is new or innovative and there could be risk of deterring investment. Neither of these conditions holds for local access."
>
> (Valuing Copper Access, 2005, paragraph 6.6)

736. Dr Marshall expressed the view that Oftel/Ofcom have accepted a retail-minus approach to pricing only in circumstances where a competitive market has been established, but not where a monopoly is entrenched and competition has yet to emerge. We have no reason to disagree with Dr Marshall's summary of the position of Oftel/Ofcom.

737. ECPR has not been used in the United Kingdom gas and electricity industries.

- *Conclusion on comparative experience*

738. Although, as the Authority argues, there are some instances around the world where some form of retail-minus pricing had been proposed (local calls and postal services in Australia are examples), Dr Marshall points out that the OECD Report to which the Authority refers hardly mentions ECPR. The evidence before the Tribunal is to the

general effect that ECPR is in fact a controversial methodology, both in the academic literature and as a matter of regulatory practice, a fact that is not referred to in the Decision. The NERA reports, referred to in paragraphs 321 and 322 of the Decision, and prepared for Northumbrian Water, do not in our view fully bring out the extent of that controversy. We have been provided with no examples or case studies of ECPR being successfully used.

739. In our view, against that background, a rule which has in various circumstances been rejected because of its adverse effects on competition, and has the unusual distinction of being actually banned in New Zealand, should not be accepted by the Tribunal under the Chapter II prohibition without careful scrutiny. As we have said, all will depend on the facts of each individual case.

(b) Preserving monopoly profits, inefficiencies or cost misallocations

740. It does not seem to be disputed in this case that an ECPR approach to access prices needs to be accompanied by a system for the regulation of retail prices which ensures a reasonable relationship between those prices and the costs of supply.

741. The essential reason is that if the retail price which forms the basis for the "retail-minus" calculation already contains excessive profits, or reflects inefficiencies, or reflects costs that have been misallocated, the risk with an ECPR approach is that all those "monopolistic" consequences are simply embedded in the access price and passed on to the new entrant in that price. As Dr Marshall points out, and we accept, if such is the case even the "productive efficiency" theoretically sought by ECPR will be compromised by the continuing misallocation of resources implicit in the retail price used in the ECPR calculation.

742. Although in his reports Professor Armstrong distinguished analytically between the regulation of retail prices and ECPR, a technical distinction with which Dr Marshall agreed, Professor Armstrong also accepted Dr Marshall's position that, in practice, ECPR must be accompanied by effective price regulation. He expressly accepted that ECPR is only "a partial rule". At Day 3, p.56, Professor Armstrong said in answer to counsel for the Authority:

> " [Q.] To what extent is the role then of price regulation relevant to the justification for ECPR that you are advancing? [A] Roughly speaking, there are at least two objectives – two important objectives. One is allocative efficiency, as I have said – trying to bring price down to whatever the … cost is, and the other is productive efficiency. The ECPR is targeted at the second one entirely, just as is margin squeeze regulation in my opinion. It does not do anything about controlling retail prices. It does not control market power in that segment – just as the margin squeeze test does not control the retail prices. So, to get maximum efficiency, to get both allocative and productive efficiency, you will need some other instrument to bring prices down to cost".

743. At Day 4, p.7, in answer to the President, Professor Armstrong said:

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

744. That position was accepted by the Authority, and is indeed made explicit in the 2001 NERA report. That report (at footnote 22) quotes Professor Armstrong and others as writing "allocative efficiency should be addressed by the regulator when setting the incumbent's retail prices". According to Mr Hope, the CCCWG took the same view.

745. Professor Armstrong further accepted that unless there was effective regulation of the retail price, any inefficiencies, misallocations or excess profits would simply be passed through to the new entrant. Thus, in answer to counsel for Albion, he said at Day 3, pp. 75-76:

> "Q …But, if the price includes, for example, costs inefficiencies on an upstream market, they would be passed through, would they not? A. Remember, it is the price. That is all. I don't know how the price is determined.

Q Exactly. Also, fixed costs inefficiencies on the downstream market. They would be passed through as well, would they not? A. Fixed cost inefficiencies?

Q Yes. Supposing the incumbent was in fact inefficient on the downstream market, ECPR would say, "Well, never mind" and would just pass them through, would it not? A. Yes, it would pass those on.

Q Costs mis-allocations between fixed and avoidable costs – they would be passed through too. A. Yes. Just like in costs based access pricing, it would, yes.

Q Costs mis-allocations between up and downstream markets would be passed through as well, would they not? A. Exactly the same.

Q And monopoly rents in relation to fixed costs on the downstream market would be passed through. A. Monopoly rents ---- Just say what you mean by that exactly.

Q Supposing the retail price includes a monopoly rent in relation to the fixed costs. A. Monopoly rent means what? Just so I know ----

Q I think you know what a monopoly rent is. A. No. In this segment is it price above marginal cost?

Q It is over-charging of whatever kind, but based on the fact that you are a monopoly. That is crudely it. A. If you have got price cost margins that cover fixed costs, does that count as a monopoly rent, or not – just so I know? Or, is the overall profit excessive?

Q All I am saying is that if there are excessive prices deriving from the monopoly – which I think is probably a crude layman's understanding of what a monopoly rent is – they would be passed through, would they not? A. It is a bit vague, but ----

Q And monopoly rents on the upstream market generally would be passed through. A. You mean cost inefficiencies?

Q Whatever. All those things, however defined, would be passed through, would they not? A. However defined -----

Q Inefficiencies and overcharging of all kinds are passed through. A. Well, remember, the regulator is controlling the price.

Q But as far as ECPR is concerned. A. The regulator's price is passed on to the entrant, that is right.

> THE PRESIDENT: You look to the regulator to make sure that what one can loosely call monopoly prices do not happen.
>
> A. That is their job, yes.
>
> Q That is their job – not the job of ECPR. A. It can't do that."

746. In our view it is thus relevant in this case under the Chapter II prohibition to consider whether the retail-minus calculation in the Decision was based on a retail price that was not itself reasonably related to costs, or was otherwise excessive. If there is good reason to believe that such was the case, in our view ECPR cannot safely be relied on for the purposes of the Decision.

747. In the present case, it follows from the extensive analysis set out in the first part of this judgment that the First Access Price of 23.2p/m³ has not, on the evidence, been shown to be related even approximately to the costs of supply. More specifically that price contains, by necessary inference, a cost for "distribution" which the evidence before the Tribunal does not support. Further, the evidence strongly suggests that that price was excessive.

748. It seems to us that if the First Access Price of 23.2p/m³ is not shown to be reasonably related to costs, it must equally be the case that the even higher price of 26p/m³ under the Second Bulk Supply Agreement, used as the basis of the ECPR calculation in the Decision, is not shown to be reasonably cost-based either. The only difference between the First Access Price and the Second Bulk Supply Agreement price is that the resource cost of water is included in the latter and not in the former. Similarly, if the evidence strongly suggests that the First Access Price of 23.2p/m³ was excessive, the same must be true of the price of 26 p/m³ under the Second Bulk Supply Agreement. Those facts in our view fatally undermine the ECPR calculation set out in the Decision.

749. The Authority's position is that "given our extensive regulation of retail prices and focus on continuing efficiency improvements we do not think the concern about ECPR preserving monopoly profits or inefficiency is relevant to the water industry" (Annex C

to Professor Armstrong's First Report). In our view, that optimistic statement does not focus on the specific facts of this particular case[42].

750. In this specific case, the evidence before the Tribunal is that there was, at the material time, no relevant regulation of the retail prices of non-potable water to large industrial customers in Wales using more than 250 Ml per annum. Costs and revenues for non-potable water are not reported to the Director in the normal regulatory process, but are included in the miscellaneous category of "Third Party Services" without, as we understand it, being required to be separately identified. The retail prices to the large non-potable industrial users here in question fall outside the tariff basket, and are not subject to the 'K' factor. Non-potable water does not figure in the various efficiency measures used by the Director. Indeed, as we understand it, only a few water companies supply non-potable water. There are apparently less than 30 major customers for non-potable water in the whole of England and Wales (other than those who "self-supply"). In those circumstances, it is unsurprising that non-potable water is, on the evidence, the "Cinderella" of the regulatory system.

751. The "retail" price upon which the ECPR calculation is based in the present case is the Second Bulk Supply Agreement price that the Director indicated in 1996 he would be minded to determine under section 40 of the WIA91. In a letter dated 12 December 1996, the Director said:

> "The price for non-potable water is similar to prices charged by Dŵr Cymru for other bulk supplies."

752. In paragraph 40 of the Decision the Director states:

> "On 12 December 1996 we provisionally decided that a price of 26p/m³ would be given to the parties as indicative of the price we would determine formally, if required to do so. In calculating this indicative figure, we had regard to the prices charged by Dŵr Cymru to an associate, Hyder Industrial, for non-potable water (an equivalent of 28.39p/m³), the prices charged by Dŵr Cymru to six non-potable large users including Shotton itself between approximately 26p/m³ and 29p/m³, and Dŵr Cymru's estimated LRMC (approximately 26p/m³)."

[42] We note also paragraph 68 of the defence:
"Clearly, this assumption [that overall average revenues are reasonable] does not, of itself, mean that a company is not grossly over- or under-charging particular customer(s)".

753. At that time, there was no tariff for large non-potable users, since the New Tariff was only introduced in 2003/2004. Nor had the LIT for large users of potable water yet been introduced, since that was only established for 1999/2000, on the basis of Dŵr Cymru's letter of 2 December 1998. There was therefore, in 1996, no approved tariff structure of which we are aware that might have been used by the Director as an established cost-based yardstick for determining the price under the Second Bulk Supply Agreement.

754. Although we are told that the Director "consulted" on, among other things, the price in the Second Bulk Supply Agreement, it appears, in the absence of any evidence to the contrary, that that price was essentially based on a comparison with the prices charged by Dŵr Cymru to an associate company – Hyder Industrial – and the retail prices paid to Dŵr Cymru by six other large non-potable customers. It has emerged that the comparison excluded four other customers who for various reasons (which we are unable to verify in these proceedings) were enjoying lower prices.

755. We doubt whether Dŵr Cymru's price to an associate company should normally be assumed to be a valid comparator, and there is no evidence that Dŵr Cymru's price to Hyder Industrial was cost-based.

756. As to the other six non-potable customers used as comparators, at that time those large non-potable customers would have been on special agreements. However, we have no evidence as to when, and the circumstances in which, these agreements were made. We understand from RD 09/03 that the Director did not start to compile the public register of special agreements until April 1997 so there was apparently no such register in existence in 1996.

757. In those circumstances, the central problem facing the Tribunal is that there is no evidence that the prices in these various special agreements relied on as comparators in setting the price in the Second Bulk Supply Agreement were related to the costs of supply, and if so in what way. To the extent that the non-potable customers in question were being charged prices similar to those charged to Shotton Paper, we have already shown in the first part of this judgment that the First Access price of 23p/m^3 is not shown to be reasonably related to costs, on the evidence before the Tribunal. *A fortiori*

that applies to the Second Bulk Supply Agreement price of the order of 26p/m³. If the price in the Second Bulk Supply Agreement of 26p/m³ is not cost-justified, and since the evidence strongly suggests that that price was excessive, it does not in our view assist that that price is based on a comparison with other prices which are not cost-justified either. We add that the only contemporary evidence we have which purported to give some cost justification for the price under the Second Bulk Supply Agreement (D21 to the Reply) has been abandoned by Dŵr Cymru, with the Authority's support, as not offering "incremental insight" (Jones 2, paragraph 16).

758. Mention was also made by the Authority of Condition E, which is apparently the only instrument available to the Authority for regulating prices to large users on special agreements. However, that provision is directed at undue discrimination or undue preference, rather than excessive prices, albeit that a discriminatory price may sometimes also be an excessive price. We have no evidence as to what, if any, use was made of Condition E in relation to the special agreements used as comparators in setting the Second Bulk Supply Agreement Price in 1996, or whether that condition was even relevant since, according to RD 09/03, Condition E only applies to agreements made since 1989. However, the existence of Condition E does not alter the fact that, on the evidence in this case, there is no underlying cost justification for the price in the Second Bulk Supply Agreement, and considerable evidence which strongly suggests that that price was excessive.

759. As to the reference in paragraph 40 of the Decision, to the effect that the price of 26p/m³ reflects Dŵr Cymru's "estimated LRMC", LRMC is not referred to in the letter of 12 December 1996 as regards non-potable water. The reference to LRMC introduces yet another method of calculating prices, in addition to the average accounting cost and ECPR, but the Decision does not use LRMC as a cost justification. In the absence of any evidence, we have no basis for taking into account in these proceedings any supposed calculations of Dŵr Cymru's LRMC.

760. The price in the Second Bulk Supply Agreement of 26p/m³ is not, as such, under challenge in these proceedings. What is, however, under challenge is whether that price can safely be used, in a Decision adopted eight years later, as the basis for an ECPR calculation. Albion could not have foreseen that the price under the Second

Bulk Supply Agreement indicated by the Director in 1996 would be used as the basis for an ECPR calculation in 2004. In our view, that price cannot be used for that purpose, essentially because that price has not been shown to be, even approximately, reasonably related to costs, as discussed in the earlier part of this judgment. The evidence also strongly suggests that that price is excessive in relation to costs as regards the distribution element. The same applies, by necessary implication, to Dŵr Cymru's earlier retail price to Shotton Paper of 27.2p/m³, and what we understand to be Dŵr Cymru's current offer price under the New Tariff of 26.6p/m³, to both of which the same objections apply.

761. For all those reasons, in our view the cross-check using the specific ECPR approach set out in paragraphs 317 to 331 of the Decision cannot safely be relied on to support the Director's conclusion that the First Access Price was not an excessive price for the purposes of the Chapter II prohibition. In effect, the price used as the "retail" element in the retail-minus calculation: (i) is not shown to have been reasonably related to costs; and (ii) the evidence strongly suggests that that price was excessive.

(c) Elimination of competition and prevention of entry

762. As the Tribunal indicated in the interim judgment at paragraphs 345 and 348, the theory of ECPR as developed by Professor Baumol and others was based on the assumption of a contestable market – i.e. a market which was open to competition in which there were no significant barriers to entry. Dr Marshall pointed out – and we have no reason to disagree with her – that in the academic literature the theoretical basis for ECPR was developed on the assumption that there were no significant barriers to entry (Dr Marshall's first report, pp. 4 to 6). Without disagreeing on the origins of the theory, Professor Armstrong took a different view: in his opinion ECPR was a valid pricing rule if the purpose was to signal that entry should take place only when the entrant was more "productively efficient" than the incumbent, even assuming that the entrant incurred a cost in surmounting entry barriers (Professor Armstrong's First Report at pp. 7–9, Second Report at pp. 2-3).

763. Whatever the theoretical arguments behind this part of the debate, it nonetheless seems important to us to determine whether, on the facts before the Tribunal, the particular

method of application of ECPR in this case will tend to eliminate competition or prevent entry into the market.

764. The sector of the water industry serving large industrial customers with a consumption of over 250Ml per annum in Wales is open to competition through common carriage and inset appointments, and the sector of large customers in England and Wales with a consumption of over 50Ml per annum is now also open to competition under the licensing provisions of the WA03. Even if, as we would accept, the application of the Chapter II prohibition in the sector open to competition should take into account relevant special circumstances applicable to the water industry, in our view the Chapter II prohibition may nonetheless apply if the adoption of a particular pricing policy would be expected to lead either to: (i) the elimination of existing competition; or (ii) the prevention of any, or virtually any, new entry in the future. It may be one thing to ensure that entry only takes place under certain pre-conditions, but if the pre-conditions are such that they can never, or hardly ever, be fulfilled, in our view that would simply maintain monopoly by the back door. Whether that is so or not depends upon an empirical examination of the facts of the case.

765. Dr Marshall expresses the view that the water industry is already difficult to enter and that the ECPR approach faces an entrant with "a very tough test", in that the latter has to meet all his fixed and direct costs out of the margin created by the incumbent's calculation of its avoidable costs only. If the incumbent has fixed costs which are not taken account of in that calculation, the incumbent could not trade profitability in its downstream business on the same basis, since it would not be covering its fixed costs. According to Dr Marshall, the entrant would have to be "super-efficient" in order to enter the market at all. We did not understand Professor Armstrong to disagree with Dr Marshall at the theoretical level. Professor Armstrong argued:

> "if the entrant has significant fixed costs of entry, it will have to have dramatically lower marginal costs than the incumbent if it is to be efficient to have this entry." (First Report, p. 14)

766. Dr Marshall considers that, on the basis of ECPR as applied by the Director, competitive entry into the water industry is very unlikely. Lengthy periods of negotiation, additional charges by incumbents, and the ability of the latter to change in the future the retail price upon which the calculation is based, adds to those difficulties,

as does the fact that the entrant is obliged to "hold harmless" the incumbent by effectively indemnifying the latter against any loss of profit. Dr Marshall points out that if no or only insufficient entry occurs, even the "productive efficiency" sought by ECPR will not be achieved: the status quo will simply be preserved.

767. These, it seems to us, are powerful arguments at the theoretical level which were not effectively challenged in cross-examination. Professor Armstrong's model does not predict whether entry will actually occur or not: it simply says that entry should not occur except in very narrowly defined circumstances. Mr Hope equally took the view that if the calculation of avoidable costs gave rise to no margin for a prospective entrant, that was because the entry was not reducing total costs, and such entry should not occur. Mr Hope expressed the Authority's position clearly:

> "Q. I think the position is if there was no competitive entry because of the deterrent effect of ECPR then nobody would benefit? A. Well if there was no competitive entry because of the deterrent effects of ECPR then our view was that any entry which would otherwise occur would actually have been harmful to customers as a whole." (Day 2, p. 53)

768. However, if the facts are that these arguments, however logical, lead to a situation in which entry never occurs, it seems to us that the Authority's position is self-defeating. Having, as it were, given with one hand by opening the market to competition, there is a risk of taking away with the other hand if the conditions of entry are drawn so tightly that competition never occurs. In such circumstances the benefits of opening the market to competition would never be realised.

769. Turning to the facts, if we take first the circumstances of Albion, that company has now been seeking to establish a common carriage arrangement for its customer Shotton Paper, against what appears to be the determined opposition for over six years of both Dŵr Cymru and the Authority. However, Albion's proposal seems fully in accordance with OFT 422, cited above:

> "Common carriage, therefore, has the potential to increase customer choice by facilitating the entry of competitors (whether existing undertakers or new entrants) into a local market." (paragraph 4.16)

770. And with MD 163:

> "Common carriage is one route through which competition can develop."

771. Shotton Paper has supported Albion because it valued being able to choose its supplier. For whatever reason, it no longer wishes to be dependent upon the local monopolist, Dŵr Cymru. From the customer's point of view, choice in itself is probably the most important benefit that competition can provide. If there is no effective alternative, customers have no ability to bring pressure on suppliers to reduce prices or improve service. Furthermore, if Albion had not persisted so determinedly with its proposals, Dŵr Cymru would never have been called upon to justify its price structure in the way it has.

772. However, it has not been seriously disputed by the Authority and Dŵr Cymru that, if the Decision is correct, Albion's common carriage proposal is dead. Albion is expected under the Director's ECPR calculation to supply Shotton at a margin of 0 per cent. Whatever the debate about the size of the margin needed by Albion, it is not seriously suggested that it could survive on a zero margin, and it has only done so, so far, because of the support of Shotton Paper and the interim relief ordered by the Tribunal. As Mr Jeffery points out in his witness statement of 11 November 2004, Albion necessarily incurs some staff costs, office costs, insurance costs, regulatory costs associated with its statutory appointment as an inset appointee, and so on.

773. Similarly, and for the same reason, if the Director's approach is correct, Albion could not survive even under the existing arrangements: so long as Dŵr Cymru's retail price is at or about 26p/m^3 and the price under the Second Bulk Supply Agreement is the same, Albion's margin between these two prices is effectively squeezed to zero.

774. It follows that, in this particular case, the application of ECPR will prevent the development of a competitive supply situation as regards the Ashgrove system, and eliminate an existing new entrant. Under the 1998 Act, the Tribunal is not concerned with the interests of Albion as such, but it is concerned with the interests of the customer, here Shotton Paper (and possibly Corus) and the preservation of competitive choice. The adoption of a pricing rule which, in this particular case, would simply throw Shotton Paper back into the hands of its former monopoly supplier, would not seem to us compatible with the development of competition.

775. In the course of this case the Tribunal has received further evidence that the Director's interpretation of ECPR is likely to prevent entry, namely Ofwat's *Guidance on Access Codes*, June 2005, and the indicative access and common carriage prices published by water companies in the context of the licensing provisions of the WA03 in August 2005, a summary of which is annexed to Dr Marshall's First Report. These documents show how, in the view of the Director and the water companies, the Costs Principle under section 66E of the WA03 is intended to work. Although these documents post-date the Decision, we think we are entitled to take them into account since the Decision states at paragraphs 318 and 338 that the ECPR calculation in the Decision is the same as that required by the Costs Principle.

776. Mr Hope was taken to the worked example given on pages 63 to 67 of Appendix 2 of the *Guidance on Access Codes* which shows that in Ofwat's view, on a retail turnover to a customer of £346,000, the Costs Principle would give rise to avoidable costs of £606, and expenses of the incumbent chargeable to the entrant of £209, leaving, according to the calculation under the Costs Principle, a margin to the new entrant of £397 or 0.1 per cent of expected revenues. In our view, it is most unlikely that credible retail entry could take place on that basis, since the available margin is too small.

777. Although it was suggested that the worked examples in Appendix 2 to the *Guidance on Access Codes* was merely an illustration, it is a formal document issued by Ofwat. In our view it is likely that incumbents will follow the lead given by that document, which is apparently in line with the approach taken in the Decision. If there were any other more credible examples, they were not drawn to our attention.

778. Indeed, the impression given by the *Guidance on Access Codes* seems to be confirmed by the indicative access prices published by water companies in August 2005 and annexed to Dr Marshall's first report. Many of the water companies' retail margins shown are extremely low, and a number are nil or even negative. When asked whether Ofwat considered a zero margin to be reasonable in the circumstances Mr Hope's frank answer was "Yes" (Day 2, p. 62). It must be implicit in this answer that Mr Hope did not expect entry to be possible, and saw no problem with that outcome.

779. In the documents we have been referred to, slightly higher margins are shown for common carriage. In Dŵr Cymru's case the common carriage margin is shown to be 3.86 per cent of the retail price. According to the example given, on a turnover of some £363,450 at the incumbent's retail price, a third party supplier would have a margin of some £14,029. However, under common carriage the third party supplier has also to acquire the water. The Decision states the average water resource cost in the New Tariff to be 6.8p/m^3 (paragraph 305). On a retail price of 26p/m^3, water resource costs thus represent some 26 per cent of the retail price. In terms of the price under the Second Bulk Supply Agreement, the water resource cost of some 3.3p/m^3 represents some 12.7 per cent of the price of 26p/m^3. It is evident that a common carriage margin of 3.86 per cent of the retail price will not permit any common carriage to happen, since water resource costs alone are in the range of 12.7 to 26 per cent of the retail price.

780. We use these figures purely illustratively, to show the practical consequences of the particular approach to ECPR used in the Decision. In our view, on the evidence in this case, that approach, taken to its logical conclusion, is likely to deprive Shotton Paper (and prospectively Corus) of any competitive choice and to prevent competition emerging in the sector of the water industry open to competition. In effect, the margins produced by the ECPR approach used in the Decision tend to be non-existent or too small to make entry viable.

781. For that further reason, and on the particular facts of the present case, we do not think that the ECPR approach set out in the Decision can safely be used to show that the First Access Price was not excessive for the purposes of the Chapter II prohibition.

(d) Difficulties with "avoidable costs"

782. In the Decision the Director takes the view that there are no "avoidable costs"[43] to be taken into account in the ECPR calculation, other than the cost to Dŵr Cymru of resources[44] (paragraph 330). The consequence is that the First Access Price charged to

[43] In our view, the term "avoidable costs" has been used by the Authority and Dŵr Cymru in a very imprecise manner in their submissions to us.

[44] We note that, on the evidence before us, it appears that the cost to Albion of acquiring water resources at Heronbridge is likely to be greater than the cost to Dŵr Cymru under its present agreement with United Utilities.

Albion impliedly contains all the costs incurred by Dŵr Cymru other than the cost of the water, including the costs of its "retail" or "customer-facing" activities. In particular, the "distribution" element in the First Access Price discussed at length in the first part of this judgment reflects all the costs, other than treatment costs, attributable to large potable customers under the LIT, including customer-related retail costs, bad debts and the like. The result is that the First Access Price includes retail costs, even though under the proposed common carriage arrangement Dŵr Cymru would no longer be a "retailer" in the sense of a supplier to an end-user, but a supplier of water transport and treatment services to Albion. Albion argued before the Director that this approach did not allow it any margin for its own "retail" activities and in effect required it to bear the costs of Dŵr Cymru's "retail" activities, although the latter was no longer a "retailer" in the conventional sense. The Director's answer to this in the Decision was that Dŵr Cymru did not avoid any costs by supplying Albion rather than Shotton Paper directly.

783. Albion argued that this approach was contrary to MD163, cited above, which requires that an incumbent should charge for common carriage on the same basis that it charges itself. If Dŵr Cymru had a "notional" retail business, at a retail price of 26p/m³ that business would be loss-making if it was to be charged the First Access Price of 23.2p/m³ for water treatment and transportation and had a water resource cost of 3.3p/m³. Albion also relied on the definitions of margin squeeze in EC law, discussed in more detail in the next section, part of which is set out in Paragraph 117 of the Telecommunications Notice in these terms:

> "Where the operator is dominant in the product or services market, a price squeeze could constitute an abuse. A price squeeze could be demonstrated by showing that the dominant company's own downstream operations could not trade profitably on the basis of the upstream price charged to its competitors by the upstream operating arm of the dominant company".

784. In his evidence Professor Armstrong accepted that if the incumbent has "non-avoidable fixed costs on the downstream market" (here retail activities) there was a potential conflict between ECPR and the margin squeeze test set out above (Day 4, p. 2). However, in Professor Armstrong's view, "if the incumbent has fixed costs which are avoidable over the long term, and the ECPR as a test is applied over a sufficiently long

time frame so that those costs are avoidable" there was then no conflict between the margin squeeze test and ECPR (*ibid*). Professor Armstrong accepted that "avoidable costs" should be determined over a medium to long-term time frame (Day 4, p. 3).

785. In its closing submissions, the Authority argued that there were no unavoidable fixed costs in the retail sector in the medium to longer term, and that "any costs that are incurred will, by definition, therefore be avoidable and will therefore be deducted from the access price" (Day 5, pp. 55-56), although the Authority did "not need to understand the amounts of total costs to quantify the avoidable costs" (Day 5, p. 72). Dŵr Cymru similarly submits that all retail costs should be treated as "avoidable" over the longer term and that thus there was no conflict with a margin squeeze test.

786. Professor Armstrong also dealt with the problem identified by the Tribunal at paragraph 356 of the interim judgment, namely the problem of identifying "avoidable costs" on a per customer basis, which is the approach used in the Decision. The Tribunal said:

> "If, however, the 'minus' is calculated on the cost saved by the incumbent in supplying only one less customer, it is likely that there will be very little "minus" to subtract from the retail price, leaving little or no margin for the new entrant. Thus, when the first or second customer switches from the incumbent to the new entrant, the incumbent may "save" very little cost. On the other hand, if the new entrant were supplying a significant proportion of the incumbent's former customers, the avoided costs of the incumbent would presumably be greater, leaving a greater "minus" to be subtracted. But at this point a kind of chicken-and-egg problem presents itself, because if there is no margin with which to supply the first one or two customers, it is difficult for the new entrant to enter the market with a small initial customer base, and then build up from there."

787. Professor Armstrong's view was, first, if there were fixed costs arising from such matters as environmental obligations these should be spread across all participants, and we see no reason to disagree with that view. If there were "fixed avoidable costs" – an expression apparently referring to "fixed" costs which were avoided as a result of entry – again Professor Armstrong could see no problem. If, however, there were fixed costs incurred by the incumbent but entry was not so widespread as to avoid those fixed costs, Professor Armstrong saw the position as more complicated because, in that case, there are now two sets of fixed costs, the incumbent's and the entrant's. Professor

Armstrong told us that in this situation, "though it sounds unfair" ECPR would block entry unless the entrant was very efficient, with significantly lower marginal cost. However, to deal with a situation where entry has not yet reached the point where significant fixed costs could be avoided – described by Professor Armstrong as "a horrible practical aspect" – Professor Armstrong considered that it would be necessary to use average incremental cost in the retail sector. That would not be "strict ECPR" but "a practical solution to a practical problem" (Day 3, pp. 54-55). Averaging such costs would bring ECPR in line with the margin squeeze test, in Professor Armstrong's view (Day 3, pp. 55 and 61).

788. This evidence, and the submissions of the Authority and Dŵr Cymru which accompanied it, seem to suggest a different version of ECPR to the one set out in the Decision. The version of ECPR set out in the Decision is that one looks narrowly at a particular transaction – a customer who wishes to switch to an alternative supplier – and asks what costs will be saved in the short run by not serving that particular customer. The answer is often "very little" because the short-run incremental cost of serving one extra customer may be small or zero.

789. But, insofar as we could understand the Authority's closing position, it was that all retail costs are avoidable over the medium to longer term and would be deducted from the access price. As we understand him, Professor Armstrong, the Authority's expert, was really saying that ECPR ought to take into account the likely scale of entry and should be applied over a longer time scale so that all retail costs are treated as "avoidable" and thus deducted, on an averaged basis, from the retail price. As we understand it, some forecast of the likely scale of entry would be necessary, as Professor Armstrong states on page 14 of his March Report.

790. We express no view on whether an approach of this latter kind could be feasible or desirable, but the point for present purposes is that no trace of such an approach appears in the Decision, which considers only the short run avoidable costs of serving one less customer. The fact that the Authority, Professor Armstrong and Dŵr Cymru seemed to be suggesting a different, or modified, approach to the treatment of avoidable costs under ECPR to that which appears in the Decision seems to us to be a further reason for doubting whether the approach set out in the Decision is sound.

791. We also accept Dr Marshall's evidence that the calculation of avoidable cost is intrinsically uncertain, and depends on the time period adopted and the unit of output used. In our view it is difficult to work out what costs are properly "avoidable" without knowing what the relevant "total" costs are e.g. for retail activities, and then deciding which costs are fixed, and which avoidable, over what time period and at which level of output. An exercise of this kind was not carried out in the Decision.

792. We conclude that these difficulties as regards avoidable costs further render the ECPR approach in the Decision unsafe for present purposes.

(e) Dynamic effects of competition

793. It seems plain to us that in the Consultation Paper the Government was seeking to achieve the wide ranging benefits of competition. Paragraph 24 of the Consultation Paper, cited above, stated:

> "Extending competition is expected to deliver the following benefits:
>
> **Choice** – at present, customers cannot choose to remove their custom from an unsatisfactory supplier, as there is only one undertaker in their area. New entrants should bring wider choices of tariff and services to attract specific customers.
>
> **Keener prices** – from new entrants and through competitive pressure on incumbents.
>
> **Services** – there may be scope for niche marketing in other areas in which incumbents have not previously concentrated. Some new entrants may offer to provide multi-utility supply packages and other services. Competition provides an incentive to provide a service which matches customers' requirements, in order to obtain and keep customers.
>
> **Innovation** – new entrants may offer new ways of doing things, bringing ideas from other industries, which may bring service and environmental benefits. For example, there should be incentives to find ways to develop previously unusable/uneconomic water sources, and to use existing resources more efficiently.
>
> **Efficiencies** – competitive pressures on undertakers and the incentives on entrants should encourage greater efficiencies, which drive keener prices and better overall value for money."

794. In our view, paragraph 24 of the Consultation Paper closely reflects the objectives on which EC competition policy, and hence the 1998 Act, are founded. As the European Commission has said:

> "Experience in the Community and elsewhere in the world has shown that competition is an efficient tool for ensuring that producers remain dynamic, concentrate on innovation, listen to the market, reduce costs and provide high quality goods and services at the lowest possible prices. Continuing enforcement of the competition rules therefore is of paramount importance in bringing out the best in Community industry." (XXIst Report on Competition Policy (1991) point 3)

795. The United Kingdom White Paper "Productivity and Enterprise: A World Class Competition Regime" (2001) noted:

> "Vigorous competition between firms is the lifeblood of strong and effective markets. Competition helps consumers get a good deal. It encourages firms to innovate by reducing slack, putting downward pressure on costs and providing incentives for the efficient organisation of production."

796. Although Mr Hope does not mention paragraph 24 of the Consultation Paper in his witness statement, we find it difficult to see how the objectives set out in that passage could be overlooked when considering the purpose behind the encouragement of competition in the water industry. Paragraph 9 of the Consultation Paper, also cited above, states the Government's belief that such competition "can bring benefits to customers through keener prices, better services, innovation and improved efficiencies", although also stating that those potential benefits "must be balanced against the Government's wider objectives for the water industry".

797. Dr Marshall expresses the view that ECPR as applied in the Decision will "fatally compromise" any dynamic process of competition tending towards innovation, lower costs and lower prices, as envisaged in paragraph 24 of the Consultation Paper. Quite apart from the problem of passing through monopoly profits or inefficiencies in the access price, and the prevention of market entry, already discussed above, ECPR bankrolls all the incumbent's costs and insulates the latter from the disciplines of the market indefinitely. This creates a one-sided market in which the incumbent does not compete, but the new entrant bears all the risks. We share Dr Marshall's view that those are very far from normal competitive conditions.

798. It was not disputed on behalf of the Authority that ECPR does not aim to produce the "dynamic efficiency" benefits normally associated with the competitive process. The Authority accepted that ECPR does not expose the incumbent to any loss of profit, and does not give the incumbent the possibility of responding to competition. Ultimately, the incumbent is indifferent as to who gets the business. As Professor Armstrong saw it, the incumbent remained passive, and was "not a particularly active participant in the competitive process" (Day 4, p. 13). It was not disputed by the Authority that under ECPR there was no parity between the entrant and the incumbent, the latter being insulated from the risk of competition in perpetuity. Mr Hope also accepted, very fairly, "there is no level playing field in terms of the costs position of the undertaker and of the entrant." (Day 2, p. 54)

799. It was further accepted by the Authority that under ECPR a new entrant would need to be "super-efficient" as compared with the incumbent. Thus at Day 2, pp. 72-73 there was the following exchange:

> "THE PRESIDENT: Could I just, on the last topic, Mr Hope - you have been very patient, so thank you very much for your help - go back to this basic point? Is it not the case that the new entrant is effectively bearing two sets of overheads, his own and the incumbent's? In those circumstances would a new entrant have to be not merely as efficient as the incumbent but super-efficient in order to make any realistic stab at entering in an effective way? Would that be a fair way of putting it? A. I think it would. It is perfectly possible that you could have a side-by-side comparison comparing the costs of supplying a particular customer, say a particular large user customer; you could see a potential entrant being able to make that supply at lower cost than the incumbent. But if the outcome is that the total cost of supplying all customers, not just the customer who is subject to competition, but if the cost of supplying all customers would be higher in the event of entry then that is something that the efficient component pricing rule and, we think, the Cost Principle would prevent."

800. Professor Armstrong took the same view:

> "it might be that the entrant is more efficient from a sort of starting from fresh approach compared to the incumbent but [under ECPR] it still should not come into the market"
> (Day 3, p. 54)

801. In terms of the application of the Chapter II prohibition, that takes us to one of the central conceptual problems in this case, which is as follows. The proponents of ECPR consider the main goal to be to minimise any risk of raising total costs of supply in the short run; only if this is achieved is entry deemed to be "efficient" under ECPR. That is the assumption in the Authority's model. As Professor Armstrong says: "efficient entry by definition is entry that is profitable under ECPR" (Day 3, p. 66). On the other hand, the Chapter II prohibition is concerned with effective competition, that is to say the whole competitive process affecting price, service, innovation and customer choice. That process, in general, tends towards lower costs and prices than prevail under monopoly conditions. For that reason practices by monopolists which restrict or distort the conditions for market entry are scrutinised with care under the Chapter II prohibition.

802. Although the entry of a further competitor may to a certain degree add to total costs in the short run, the general assumption of competition policy is that in the longer run the competitive process will lead to lower costs overall. What the Authority describes as "the duplication" of fixed costs is not normally regarded as a problem. As Dr Marshall points out, in competitive markets a certain duplication of fixed costs is inherent in the fact that there are a number of competitors each of whom has their own costs and overheads. But, in normal circumstances, competitive markets will still produce goods and services at lower costs than will be the case if the market is monopolised. Similarly, we would be reluctant to assume, as does the Authority, that there is little scope for innovative developments in the water industry. The water efficiency services offered by Albion discussed in the next section are one example, and the general introduction of lower tariffs has in the past been in response to competitive forces: see e.g. the Director's statements of 24 November 1997, discussed below, and his statement "Tariff Structure and Charges 2001/02", p. 51, cited above.

803. In those circumstances it seems to us that there is a potential clash between the narrow short run productive efficiency sought in theory through ECPR, and the wider dynamic competition benefits and level playing field which the Chapter II prohibition is designed to safeguard. At the very least, a pricing policy which insulates the incumbent in perpetuity from competition; which requires the new entrant to support the incumbent's overheads as well as its own, and to indemnify the incumbent

indefinitely against any loss of revenues (except as regards "avoided costs"); and which requires the new entrant to be "super-efficient" as compared with the incumbent requires close scrutiny under the Chapter II prohibition. However, in our view we do not need to decide whether ECPR is in all circumstances *intrinsically* contrary to the Chapter II prohibition, because we have already held above that *the particular way ECPR has been applied in this case* cannot be safely relied on since it would: (i) preserve retail prices which do not appear to be reasonably related to costs, and which the evidence strongly suggests to be excessive; (ii) would effectively preclude any effective competition or market entry; and (iii) gives rise to difficulties in relation to "avoided costs".

(f) Justifications advanced for ECPR

804. However, to the extent it might be argued that the Authority's approach was "objectively justified" in view of the special circumstances of the water industry, we offer the following comments on the arguments for ECPR as put forward before the Tribunal, noting generally that this case is concerned only with the supply of non-potable water to large industrial customers.

805. There were, in effect, three principal arguments which seemed to be at the heart of the Authority's case: (i) ECPR enables incumbents to continue to recover their sunk and common costs, and to fund their investment requirements; (ii) ECPR protects customers ineligible to benefit from competition from increased costs, particularly the costs of stranded assets; and (iii) ECPR maintains the cross-subsidies implicit in regional averaging. Reliance was placed in particular on paragraphs 187 and 190 of the Consultation Paper which stated:

> "187.…It is not appropriate for the Government to prescribe a methodology for calculating undertakers' charges. There are various methods and how they are used is a matter for undertakers and Ofwat. However, the Government believes that, whatever methodology (or methodologies) are chosen, the charges should be consistent with three general principles. These are:
>
> - Undertakers' prices for distribution and wholesale supply should not, in themselves, deter potential licensees from seeking to supply customers. This implies that they should reflect the actual costs of providing the service, they should

> not be unduly discriminatory and they should be transparent.
>
> - Undertakers' capital investments are largely driven by the need to meet Government and EC drinking water quality and environmental improvement objectives. If licensees abstract and treat their own water, some of undertakers' existing assets may be made redundant, or become 'stranded'. If undertakers were not compensated for these stranded asset costs, this could affect undertakers' future investment decisions. If these costs were not reflected in access and wholesale supply charges, they would fall on undertakers' remaining customers. The Government, therefore, considers that it would be reasonable for undertakers' access and wholesale supply charges to reflect these costs. In seeking to recover stranded asset costs, undertakers would be expected to demonstrate that these were reasonable and could not be avoided, for example by disposal of stranded assets.
> - To the extent that undertakers' tariffs reflect a geographical averaging of costs, access and wholesale charges should generally be set in order to avoid unwinding the associated cross-subsidies."
>
> "190. The Government recognises that there is an inherent conflict between promoting competition, protecting customers from knock on costs and ensuring that undertakers continue to have an incentive to invest to meet EC requirements and Government objectives for drinking water and environmental improvements. A reasonable balance must be struck, and the proposals set out in this paper are intended to provide a framework for doing so. Ofwat, in carrying out its regulatory duties, will also need to ensure that the various elements are reconciled in ways that are in the interests of all consumers and the long-term future of the water industry."

- *Recovery of infrastructure and related costs*

806. The objective that water companies should be able, within reasonable limits, to recover their sunk infrastructure costs, fund their investment programmes and recover a contribution to common overheads is a major objective of the Government, as we have already noted at paragraph 357 of the interim judgment. In our view such an objective does not automatically conflict with the Chapter II prohibition in circumstances such as the present, provided that it is pursued in a reasonable way. Dr Marshall points out that this kind of problem arises in other network industries, such as gas, where the problem

of infrastructure costs has been solved in different ways. It was suggested that Dr Marshall's views depended on the dismantling of vertical integration in the water industry, which was not on the agenda. We do not think that correctly reflects Dr Marshall's argument, which was that even within a vertically integrated structure one can seek to identify the costs of the network infrastructure (the natural monopoly sector) and of other relevant overheads (e.g. environmental obligations), and average those costs across all players, incumbents and entrants alike, so that the latter make an appropriate contribution to those costs. Such an approach prevents the new entrant from "free riding" without making a proper contribution to infrastructure costs, which would otherwise fall on the incumbent's remaining customers who were not eligible to benefit from competition.

807. We have no reason to doubt Dr Marshall's evidence that there are other ways of recovering infrastructure and related costs. However, we do not need to decide whether a modified form of ECPR or some other pricing policy would achieve the objective of funding the infrastructure and other common costs here sought by the Authority.

808. Our view on this aspect is the same as that already set out above, namely that, however legitimate the need to fund the industry's infrastructure costs and protect ineligible customers from significant price increases, there is, side by side with that, a Government and regulatory policy decision to introduce the possibility of competition for the business of large industrial users dating from 1999, and now reinforced by the WA03. As the Government rightly points out at paragraph 190 of the Consultation Paper, there is a balance to be struck. If, as we have found above on the facts of this case, that balance is struck in a way which eliminates existing competition, or prevents virtually any new entry to the market, it is hard to see how any effective "balance" has been struck: on the contrary, in those circumstances the rules have been tipped all one way, in favour of the incumbents. In our view, however legitimate the objective of enabling the industry to fund its infrastructure and other relevant costs, the approach in the Decision tends "to throw the baby out with the bathwater". It does so by effectively eliminating any reasonable prospect of market entry. On the evidence in this case the approach in the Decision also maintains a retail price which is not shown to be cost-based and which the evidence strongly suggests to be excessive.

- *Stranded assets*

809. The submission based on stranded assets forms a central plank of the Authority's justification for ECPR. Reliance was placed on the second indent of paragraph 187 of the Consultation Paper, cited above. According to Mr Hope, if there are no stranded assets, then the avoidable costs will be higher, giving rise to a greater margin (Day 2, pp. 65-66). In our view however, this argument is not borne out by the facts of this case.

810. In the case of common carriage, the distribution system in question is not "stranded": on the contrary, it is being used to best advantage. We find it hard to see how a pricing system which is structured so as to recover the supposed costs of stranded assets is appropriate to a case where no assets are stranded. As to Mr Hope's suggestion that if there are no stranded assets, there will be a higher margin, that is not the case on the facts before us. The ECPR calculation in this case still produces a zero margin, even though there are no stranded assets.

811. A case of stranded assets would arise if one were to pursue the possibility suggested by the Authority and Dŵr Cymru in their 'stand-alone' cost calculations, and by the Director in Annex I to the Decision, of constructing an alternative pipeline to the Ashgrove system. But, in that case, Dŵr Cymru's asset would be by-passed altogether, and there would be no way for Dŵr Cymru to recover the cost of that stranded asset from the new entrant. That cost would either have to be absorbed by Dŵr Cymru or Dŵr Cymru might seek to recover it from its other customers, if it is able to do so. It seems to us, therefore, that ECPR is not helpful to either of the two scenarios possibly relevant to this case: if there is common carriage through the Ashgrove system, there is no risk of stranding, and if an alternative pipeline were constructed, ECPR would not assist Dŵr Cymru either.

812. Moreover, in Professor Armstrong's view it is not merely that ECPR does not assist in these circumstances: ECPR is not appropriate if there is a potential risk of bypass, in his view. It seemed clear to us that Professor Armstrong was not aware that the possibility of the Ashgrove system being bypassed by an alternative pipeline had been raised by the Authority in connection with the issue of dominance (see the Decision at

Annex I). Professor Armstrong's view quite clearly was that, if bypass is a potential possibility or danger, following ECPR does not produce an appropriate access price, and a price based directly on the cost of providing access, with a mechanism for recovering universal service costs, would be preferable (Day 4, p. 14). We accept the logic of this view. If an ECPR calculation sets an access price so high that bypass (alternative pipes or development of boreholes) may be encouraged, one simply brings about the duplication of fixed costs and stranded assets that ECPR is designed to avoid, which is self-defeating.

813. If we were to accept the Authority's suggestion in the Decision, that bypass could be feasible, then on Professor Armstrong's evidence, which we accept, ECPR would be a counter-productive pricing policy. Similarly, the price derived from the Authority's "stand-alone" costs calculation shows a "bypass price" at a similar level to the First Access Price. If we were to accept that calculation (which we do not) then, as Professor Armstrong says, those are precisely the circumstances in which ECPR should not be used.

814. In those circumstances we have found it hard to identify what the much relied on "stranded asset" argument really amounts to. Mention was made of the possibility in some circumstances of the partial stranding of a reservoir (not this case) but we cannot say whether this is a plausible example: it is certainly not relevant here. The only concrete element we have to go on is the Director's own statement in MD 163:

> "Stranded assets have not proved to be a significant barrier to competition in other industries. Ofwat expects that they should not be a barrier in the water industry either."

815. We also add for completeness, since some concern was expressed, without supporting evidence, about the effect of competition on the cost of capital, that the view of the Government was set out in paragraph 180 of the Consultation Paper:

> "The proportion of undertakers' revenues attributable to the contestable market will be limited by the eligibility threshold. It is the Government's view, therefore, that with a relatively high threshold, any effect on the cost of capital is likely to be negligible".

- *Cross-subsidies*

816. In the literature, the classic situation where the use of ECPR is indicated, according to its proponents, is where there are mandated cross-subsidies which it is thought socially desirable to preserve. The most usual example, mentioned by both Professor Armstrong and Dr Marshall, is where there is some kind of cross-subsidy between (lower cost) business and (higher cost) household customers. In those circumstances, if a new entrant could come in and supply the incumbent's business customers 'at cost', the incumbent would be left with the increasingly heavy burden of subsidising household customers out of its remaining revenues. ECPR avoids that consequence, so the argument runs.

817. An unusual and possibly unique feature of this case is that ECPR is not defended by the Authority on the basis that it is necessary to preserve socially desirable cross-subsidies between business users as a class and household customers as a class. It is not the Authority's case that such cross-subsidies exist to any material extent. Thus paragraph 178 of the Consultation Paper stated:

> "Ofwat believes that there are no significant cross-subsidies between eligible and ineligible customers."

818. The argument advanced by the Authority before the Tribunal was a quite different one, namely that ECPR is necessary to preserve the existing cross-subsidy that, according to the Authority, is implicit *within* the regional averaging of tariffs charged to large industrial users. In other words, as we understand it, it is essential to preserve a situation in which large industrial users *subsidise each other.* Professor Armstrong did not seem to have been informed that the Authority's case was based on maintaining cross-subsidies between large industrial customers (Day 4, p. 9).

819. As far as we know the alleged cross-subsidies between large industrial customers are not "mandated" under any legislation. However, reliance was placed on the third indent of paragraph 187 of the Consultation Paper, cited above.

820. We do not need to address the Authority's general arguments in any detail since we are dealing with the specific case of non-potable supplies in Wales. As we have already

held above, in the specific case of non-potable supplies in Wales, “regional averaging” has been historically weak or non-existent, for what are in our view good reasons. As already stated, in the context of the Chapter II prohibition we can see no factual or legal basis on which a paper mill using a discrete non-potable supply system in North Wales could or should be expected to cross-subsidise a steel mill using a discrete non-potable system 200 miles away in South Wales, or vice-versa.

821. As regards alleged cross-subsidies between industrial customers using *potable* supplies of over 50Ml per annum, those customers are not part of this case, so we deal with the matter only briefly. We do however have a difficulty at the outset with the Authority’s argument, since paragraph 28 of the Consultation Paper states in relation to large users: “unlike household customers cross-subsidies have been largely unwound”. Reading paragraphs 26 to 28 of the Consultation Paper as a whole, the Government seemed to be saying that whereas competition could unwind cross-subsidies *within* household tariffs, that would not be a problem in the context of competition for the business of large users. It is thus wholly unclear to us whether there are significant cross-subsidies between large users in the first place.

822. However, the Authority’s principal argument was that “de-averaging” in the sector of large potable users would lead to “winners and losers”. The Authority was concerned to protect the alleged “losers”, particularly large industrial customers in rural areas who, the Authority said, could be so adversely affected that they might go out of business. Price “volatility” resulting from competition was also relied on, in addition to regulatory complexity, lack of transparency and customers’ legitimate expectations. The arguments are summarised in our discussion above of the costs attributable to Ashgrove.

823. As already indicated earlier in this judgment, where large users are served by conjunctive use systems, it may be impracticable and inappropriate to determine prices other than on an average basis. Similarly, for practical reasons, common costs may well need to be averaged across customers. Averaging for good practical reasons, in our view, is not necessarily an objectionable “cross-subsidy” under the Chapter II prohibition.

824. However, it would be another matter to maintain a pricing policy which requires some large industrial customers using more than 50Ml a year to subsidise, apparently indefinitely, other large industrial customers within that class, if there are identifiably different costs of supply for the customers in question. Assuming that, for particular customers within the class of large users, there are clear and identifiable differences in the costs of supply, it seems to us that such a situation could give rise to difficulties in a Chapter II context. Similarly there could be a real issue under Condition E if large customers who have identifiable and significantly different costs of supply are nonetheless charged the same price. Local costs could be relevant here, as the Authority points out (skeleton argument, p. 96).

825. As to paragraph 187 of the Consultation Paper, cited above, the third indent to the effect that "to the extent that undertakers' tariffs reflect a geographical averaging of costs, access and wholesale charges should generally be set in order to avoid the unwinding [of] the associated cross-subsidies", does not appear to us to be entirely consistent with the first indent of that paragraph, which states that undertaker's charges "should reflect the actual cost of providing the service". The latter citation is in line with the principle of *United Brands,* that the actual costs of supply should be ascertained.

826. More generally, the references in several places in the Consultation Paper (e.g. paragraphs 17 and 24) to such matters as "keener prices" imply to our mind that the Government expected some large users to be able to obtain better prices as a result of competition. That in our view must necessarily imply some weakening of the impact of regional averaging in the sector of large users using more than 50Ml per annum.

827. As to the "winners and losers" submission, we have no evidence to support the assertion that there would be significant "losers"[45]. The Authority cannot, we are told, identify what cross-subsidies exist among large customers, so it is at the moment unclear whether there would be a problem or not. The evidence we have about large industrial users in rural areas is that in some respects they are cheaper, not more expensive, to supply. We do, however, have sympathy with Dr Marshall's view that

[45] We note that in the present case it has been an attempted move *towards*, not away from, regional averaging that has caused difficulties for customers such as Corus.

there is no obvious reason why customers paying too much should continue to do so, although some transitional arrangements might be necessary for customers paying too little. Why water companies would act so as to drive major customers out of business, as the Authority suggested they would, was not clear to us. There was no evidence to support that implausible and probably unlawful scenario put forward by the Authority.

828. It is also difficult for us to accept on the evidence that there is no scope for the water industry to become more efficient and thus lower its costs and prices or minimise future price increases. Whether, if there were some move to more competitive pricing in the sector open to competition, some large industrial customers' prices might rise over time, and whether some mechanism would be necessary to deal with that, we cannot say on the evidence. But in the context of the Chapter II prohibition that possibility does not seem to us a very strong reason for saying that other industrial customers with clearly identifiable different costs of supply should continue to be disadvantaged, as a result of "averaging", which is what seemed to be the logic of the Authority's argument.

829. When Mr Hope was pressed in evidence as to the reason for wanting to maintain cross-subsidies for large industrial customers, he explained that the Authority's primary concern with regional averaging is that if prices for large customers begin to diverge to reflect more closely the local costs of supply as a result of competition, there may be a demand from water undertakers to be able to "de-average" the prices they charge to other customers who are not open to competition. The Authority's support for regional averaging is in a sense a "psychological" attachment, in order to prevent future unravelling of regional averaging in respect of the household sector (Day 2, page 69).

830. The Authority's argument therefore seemed to be, not so much that regional averaging between large users was in itself desirable, but that it would lead to a move away from regional averaging in the sectors not open to competition. That argument seemed to us to be very far away from the facts of the present case. In any event, household and business customers taking below 50Ml per annum of water are not at present able to benefit from competition, so there is no reason to suppose that this case could affect those customers. In the context of the Chapter II prohibition, the argument that a weakening of regional averaging in the large industrial user sector might have a knock-

on effect in other sectors, did not seem to us a persuasive reason for limiting the competitive opportunities now available to large industrial customers in the sector that has been opened to competition.

831. Mr Hope also accepted (Day 2, p. 72) that the international competitiveness of large industrial users of water was not something that the Authority had considered. The Tribunal was surprised by this approach, since a customer such as Shotton Paper has to remain internationally competitive, and it is in the interests of both Dŵr Cymru and the wider community in Wales that Shotton Paper prospers. Yet if Shotton Paper is expected to subsidise Dŵr Cymru's other large industrial customers, it may be placed at a disadvantage vis-à-vis its competitors worldwide. It did not seem to us to be in the interests of Dŵr Cymru or its other customers that Shotton Paper's international competitiveness should be affected by high non-potable water prices. The Authority's regulatory approach had not taken into account the dynamics of the various markets in which Dŵr Cymru's large industrial customers are themselves competing. This aspect is relevant in our view, not only to the application of the Chapter II prohibition, but also as regards a possible effect on trade under EC competition law.

832. In addition, regional averaging seems to us to encourage new plants or developments to be located in particular places without taking into account the costs of supply. Again, we were surprised that the Authority should accept that undertakers' pricing policies need not take into account factors such as encouraging the efficient use of water resources. We doubt the logic of the argument that ECPR is intended achieve productive efficiency, if the application of ECPR in a particular case tends to sustain a pricing system that may be productively inefficient as regards the siting of new plants or developments.

833. Moreover, as the CCCWG itself pointed out, the pursuit of alleged short-run productive efficiency also has to be balanced against the advantages of the longer term benefits of competition, in terms of allocative and dynamic efficiency. We note, for example, that Mr Jones of Dŵr Cymru told us, without apparent concern, that for every one of its large industrial customers there are probably ten large industrial users of water in Wales that are not supplied by Dŵr Cymru but which rather "self-supply" their own water resources and treatment (Day 3, page 33). With such a potential market it

cannot, in our view, be assumed that a more competitive pricing policy would not bring substantial benefits to Dŵr Cymru, allowing overheads to be spread across a wider customer base and thus keeping prices down to all customers.

834. Our conclusion on the "regional averaging" arguments put forward by the Authority in support of ECPR is that for historical and other reasons they have little bearing on the specific case of non-potable customers in Wales that we are considering. Insofar as the Authority seeks to defend the ECPR approach in the Decision by more general arguments related to the need to maintain regional averaging in respect of large potable customers using more than 50Ml per annum, on the evidence available we did not find the Authority's arguments (including those we have not addressed in detail such as the implications for the regulatory system) persuasive in the specific circumstances of the present case. But since regional averaging in respect of large potable users does not arise as an issue on the facts of this case, we do not think it necessary to deal with the issue any further.

(g) Conclusions on ECPR

835. In our view ECPR is not a safe methodology to use in this case for the purpose of determining the reasonableness of the First Access Price because: (i) the 'retail' price used in the calculation is not shown to be cost-related as regards the distribution element; (ii) the evidence strongly suggests that that price is itself excessive; (iii) the particular method of ECPR used in this case would eliminate the existing competition and in effect, preclude virtually any competitive entry, because the resultant margins are insufficient; and (iv) the approach of the Authority to avoidable costs in its evidence and submissions was not the same as that in the Decision.

836. As to the justifications put forward by the Authority for ECPR, the reasonable recovery of infrastructure and common costs is a reasonable objective, but the calculation that was applied in this case has the effect of eliminating existing competition and preventing virtually any market entry. It also maintains a retail price which is not shown to have been cost-based, and which the evidence strongly suggests was excessive. The argument on stranded assets did not seem to us to be made out on the facts. Regional averaging as regards non-potable customers in Wales did not seem to

us to be a good reason for using ECPR, for the reasons already given in our discussion of the costs attributable to Ashgrove. We have doubts as to the force of the arguments addressed to us about the need to maintain regional averaging in general in respect of large potable users, but that is not an issue in the case. As a result, none of the justifications put forward for an ECPR approach persuaded us that we could rely on the ECPR approach set out in the Decision in the circumstances of the present case[46].

XIII CONCLUSION ON EXCESSIVE PRICING

837. For the reasons given above, we do not consider that the Director's conclusion in the Decision that the First Access Price did not infringe the Chapter II prohibition can be supported, either on the average accounting cost approach, or on the ECPR approach used in the Decision.

838. Dŵr Cymru submitted that the Tribunal needed clearly to understand that if the First Access Price was found to be excessive on the basis of the figures advanced by Albion, the consequence could only be that Dŵr Cymru would have to seek the Authority's permission to raise its prices to every household customer in Wales. We do not accept that submission as either relevant or well-founded.

839. The submission is not relevant, because if the Tribunal finds that the Decision cannot be upheld, the Decision cannot be upheld, irrespective of the threat of supposed consequences for household customers.

840. Secondly the submission is not well founded because it has frequently been made clear, not least in the Consultation Paper at paragraph 176, Ofwat's Report on Tariff Structure and Charges, page 51 (cited above) and at footnote 15 to the Authority's Annex to Professor Armstrong's First Report, that the consequences of competition in respect of eligible customers cannot be a good reason for permitting increased prices to ineligible customers. It would certainly be remarkable if a finding of overcharging by a

[46] We have not addressed three other points concerning ECPR: (i) the need to consider the price elasticities of supply when determining the 'opportunity cost' of the incumbent, which is not done in the Authority's model but which we understand Professor Armstrong to have discussed in other writings; (ii) whether the products concerned here are homogenous, a matter also relevant to the consideration of margin squeeze in the next section; and (iii) whether the local costs calculation in this case was predatory, on the basis that the price paid by Dŵr Cymru to United Utilities under the First Bulk Supply Agreement is itself below the true cost of supply, as the latter submitted.

dominant undertaking entitled the latter to increase its prices to other, even more captive, customers.

841. The Tribunal is not in a position to say whether this case has any financial ramifications outside its own facts. Even supposing other non-potable customers might be indirectly affected, Dŵr Cymru's total non-potable revenue for 2003/2004 seems to have been around £7 million, out of total company revenue of some £450 million. We note, however, that according to the special agreements register for 2003/2004, two non-potable customers, apparently accounting for around 40 per cent of non-potable volume were at that time apparently already enjoying prices significantly below those charged to Albion/Shotton Paper.

842. Moreover, in recent years Dŵr Cymru has rebated to customers some £18 per customer annually. In 2006 Dŵr Cymru increased that rebate to £19 per customer at a cost of some £24 million – more than three times total non-potable revenue. Dŵr Cymru is on the evidence a highly profitable company. Dŵr Cymru is stated to have financial reserves of £683 million at 31 March 2006, and does not seem to have had any difficulty in financing its activities or raising capital. That evidence does not sustain the suggestion that the Authority would allow price increases to household customers as a result of this case.

XIV MARGIN SQUEEZE

A. INTRODUCTION

843. This part of our judgment focuses on the legal issues in relation to margin squeeze. Many of the economic issues have already been referred to in our discussion of ECPR above.

844. In addition to excessive pricing, Albion complained, to the Director, of a separate abuse by Dŵr Cymru based on a margin squeeze. According to Albion, Dŵr Cymru had allocated "customer facing costs" to its upstream activities with the consequence that the First Access Price payable to Dŵr Cymru for the (upstream) transportation of water left Albion with no margin with which to compete in the (downstream) retail

market for the supply of water. That, submitted Albion, gave rise to a margin squeeze, sometimes also referred to as a price squeeze (we use the terms synonymously).

845. A margin squeeze or price squeeze is defined at paragraph 117 and 118 of the Commission's Telecommunications Notice cited by the Director at paragraph 342 of the Decision:

> "117. Where the operator is dominant in the product or services market, a price squeeze could constitute an abuse. A price squeeze could be demonstrated by showing that the dominant company's own downstream operations could not trade profitably on the basis of the upstream price charged to its competitors by the upstream operating arm of the dominant company. A loss making downstream arm could be hidden if the dominant operator has allocated costs to its access operations which should properly be allocated to the downstream operations, or has otherwise improperly determined the transfer prices within the organisation…
>
> 118. In appropriate circumstances, a price squeeze could also be demonstrated by showing that the margin between the price charged to competitors on the downstream market (including the dominant company's own downstream operations, if any) for access and the price which the network operator charges in the downstream market is insufficient to allow a reasonably efficient service provider in the downstream market to obtain a normal profit (unless the dominant company can show that its downstream operation is exceptionally efficient)."

846. In the Decision, the Director, however, considered that no margin squeeze contrary to the Chapter II prohibition arose because the entry of Albion had not resulted in Dŵr Cymru ceasing to incur any retail costs. Dŵr Cymru had simply ceased to supply water to one customer (Shotton Paper) and was now supplying it to another customer (Albion), who was being supplied with the same water through the same pipes (paragraphs 346 to 347 of the Decision). Moreover, the water efficiency services supplied by Albion were not supplied by Dŵr Cymru, and were "consultancy services" which did not form part of the "retail" activity of water supply. Similarly, Albion's proposed common carriage arrangements would not result in Dŵr Cymru avoiding any costs either (paragraphs 348 to 351 of the Decision). In response to a submission by Albion as regards MD 163, the Director stated at paragraph 360 of the Decision:

> "The statement in MD 163 that an undertaker should charge entrants as it would charge itself summarises our thinking on

> discrimination as it applied to common carriage. In theory, this would mean charging a third party in the same way that the undertaker would charge itself if it had separate distribution and production (resource and treatment) businesses. Because undertakers do not have separate businesses in this way, in practice it meant that undertakers should not set access prices for charging their competitors that were inconsistent with their final retail tariffs, without objective justification".

B. THE PARTIES' ARGUMENTS

Albion's submissions

847. Albion relies on the fact that on any realistic view the First Access Price would prevent it earning any margin at all on any supply of water it purchased from United Utilities for resale to Shotton Paper, just as it has been unable to earn any margin on the resale to Shotton (at 26p/m^3) of the water it currently purchases from Dŵr Cymru (at 26 p/m^3) under the Second Bulk Supply Agreement. In Albion's submission, Dŵr Cymru has failed to charge Albion as it would charge itself, contrary to the guidance in MD 163.

848. Relying on *Genzyme v OFT* [2004] CAT 4 and the EC jurisprudence there cited, Albion submits that the Director erred in law at paragraphs 345 to 352 of the Decision in failing to determine the margin required by a reasonably efficient supplier of water to Shotton Paper operating in competition with Dŵr Cymru, and instead wrongly considered only the level of savings accruing to Dŵr Cymru as a result of Albion's activities. Albion rejects the Director's argument that it does nothing which would entitle it to any margin, relying on its roles as a broker, as a statutory undertaker, as a retailer, and as a supplier of water management services, as set out in Mr Jeffery's statement of 9 November 2004. According to Albion, these latter services equate to those notified to the Director by Dŵr Cymru by letter of 2 December 1998 when justifying its new Large Industrial Tariff (LIT) for customers using more than 50 Ml per annum. The services supplied by Albion are said by Mr Jeffery to include water management, the provision of detailed water data, and advice on water use efficiency. Those services give rise to direct operating costs, before any contribution to central overheads or profit, of some £120,000 p.a. That is equivalent to 1.77p/m^3, giving total costs of 3.47p/m^3. On the basis of a profit before tax of 1.53p/m^3, that would imply a retail margin of 5p/m^3, according to Mr Jeffery.

849. Albion also relies on the submissions it has already made as regards ECPR, in particular that: (i) the Director's approach is contrary to the established principle that a dominant supplier must grant a margin which would enable its own downstream arm (whether actual or hypothetical) to compete; (ii) the practical effect of ECPR is to make it impossible in this case for an equally efficient entrant to compete: such an entrant would have to be "super-efficient" as Dr Marshall says; and (iii) the Decision fails to identify the avoidable costs of retailing, an exercise which the Authority had not yet undertaken (see the Authority's own "Draft Guidance on Access Pricing" produced in mid-2004, at p.7). Albion relies on Dr Marshall's report, and the evidence given by Professor Armstrong, to show that ECPR is itself contrary to EC jurisprudence on margin squeeze.

850. In any event Albion submits that the Authority's analysis leaves out of account the fixed costs of the downstream (i.e. retail) activities whereas *Genzyme*, cited above, shows that the margin must be sufficient to cover the total costs of the downstream competitor. Dŵr Cymru's argument that one should take the retail costs as being avoidable over a sufficient period of time, and that all such costs are avoidable if a sufficiently long period is taken, is not the Director's approach in the Decision; it is not suggested by the Authority that the total costs of the reasonably efficient competitor or of the incumbent's own downstream operations should be deducted from the retail price. Case T-5/97 *Industries des poudres sphériques* [2000] ECR-II 3755 relied on by the Authority is very far from the present case.

Aquavitae's submissions

851. Aquavitae supports Albion's submissions and submits that ECPR focuses incorrectly on excluding "inefficient" new entrants instead of protecting new entrants from abuse by incumbents. ECPR also results in the incumbent charging new entrants more than it charges its own potential downstream arm. It is not correct, according to Aquavitae, that the new entrant is duplicating rather than "replacing" the incumbent: as far as the customer is concerned the incumbent has been replaced. Furthermore, since Albion holds an inset appointment and Aquavitae is licensed under the WA03, Parliament must have intended that access to Dŵr Cymru's network should be available on reasonable terms. However, the documents prepared by Ofwat showing nil or a very

small margin show that entrants have little hope of ever breaking even: see Ofwat's *Guidance on Access Codes*, June 2005, particularly Appendix 2.

The Authority's submissions

852. According to the Authority, the EC Commission's decisions on margin squeeze focus on the product-specific costs incurred by the dominant undertaking in the downstream market: see e.g. *Napier Brown/British Sugar* 1988 OJ L 284/41, at paragraph 66; and *Deutsche Telecom* 2003 OJ L 263/9 at paragraph 107. A dominant firm has no obligation to compensate a competitor for any disadvantages he may be under: *Industries des poudres sphériques*, cited above, at paragraph 179. The Authority submits that EC law does not preclude an incumbent firm recovering the full cost of supply, as distinct from the marginal cost of supply. In any event, in *Napier Brown/British Sugar* and *Genzyme* cited above, the margin was to be found in the avoided costs of the incumbents who were no longer transforming sugar, or supplying homecare services respectively. But here Albion has not replaced Dŵr Cymru's services, and the latter provides the same services as before. To find a margin squeeze in these circumstances would be requiring Dŵr Cymru to subsidise Albion. There might be scope for a margin if Albion supplied more customers, but no costs are avoided by Dŵr Cymru when only one customer is involved.

853. The water efficiency services previously, but no longer, provided by Dŵr Cymru to about 14 customers as part of the LIT "were not particularly expensive" according to the Authority. Now a website service is provided instead. It was never clear that the New Tariff included "water efficiency services". The Authority emphasises that, following the 1999 periodic review, water efficiency audits carried out by water companies fell from over 8300 in 1999/2000 to some 860 in 2004/2005. Many of those audits had previously been supplied by Yorkshire Water Services Limited in water stressed areas.

854. The Authority stands by its interpretation of MD 163. It would be an "onerous task" for Dŵr Cymru to assess the notional costs of its retail activity, and there was no need to do so in this case because it was clear that no retail costs were avoided. The Authority doubts the credibility of the retail margin of 5 p/m^3 suggested by Albion.

855. Nor do Albion's water efficiency services justify a margin. In the course of oral argument, the Authority submitted that the water efficiency services supplied by Albion did not constitute "appointed business" although "water efficiency" services for the benefit of the community as a whole did. Although there was no clear dividing line, a full time employee dedicated to one customer to manage water efficiency was not envisaged by the Director as part of appointed activities. The reference to "conservation" in the Ofwat document relied on by Albion referred to the conservation of flora and fauna pursuant to section 3 of the WIA91.

856. According to the Authority in its closing submissions, there are no unavoidable fixed costs in the retail sector over the medium to long term, and such costs will fall to be deducted from the access price, although in this case Dŵr Cymru did not avoid any costs. An entrant should however contribute to the fixed costs of the displaced supplier in the competitive sector (Day 5, pp.55 to 57).

857. Later in its oral submissions the Authority accepted that "some" of Albion's water efficiency activities could be considered as regulated activities (Day 6, pp. 26 to 27) but only to a maximum value of £1000 a year. If a company wants a high level water efficiency service it should pay for it itself. Ofwat's approach to water efficiency is set out in its publication *Security of Supply, Leakage and the Efficient Use of Water 2004-2005*.

Dŵr Cymru's submissions

858. Dŵr Cymru takes the same approach as the Authority. Dŵr Cymru further contends that in 2001 it was not offering Shotton Paper a price, so there could have been no margin squeeze.

859. According to Dŵr Cymru, *Deutsche Telekom,* cited above, is essentially an application of ECPR, since in that case there was something tangible and material which was done by the competing supplier at the downstream level, but was no longer done by the dominant undertaking. In this case, however, there is no legal presumption that Albion is entitled to a margin. It cannot be the law that in the case of any dominant company, a competitor can interpose itself into the supply chain at some nominal wholesale level, and demand a margin for doing so. In this case, there is no clearly separable activity at

the downstream level which would entitle Albion to a margin, which is the implicit assumption in *Deutsche Telekom*. According to Dŵr Cymru there is no evidence here that Dŵr Cymru's upstream price is abusive (if it was, according to Dŵr Cymru, Albion would not need the margin squeeze argument) or that its downstream price was predatory. Albion's interposition into the supply chain simply raises costs all round.

860. In any event, according to Dŵr Cymru, it is not the case that under ECPR a new entrant has to be more efficient than the incumbent: if a sufficiently long period is taken, all the costs of the downstream business can be regarded as avoidable, in which case the incumbent and the entrant will be on an equal footing. There is no requirement for Dŵr Cymru to fund Albion's margin, at the expense of its other customers. Here Albion's water management services are irrelevant since Dŵr Cymru was not supplying such services.

C. THE RELEVANT LAW

861. In a series of well known cases, the Court of Justice has held that it may well be an abuse if an undertaking which is dominant in one market acts without objective justification in a way which tends to monopolise a downstream, neighbouring or associated market: see, for example Case 6 and 7/73 *Commercial Solvents v Commission* [1974] ECR 223 and Case 311/84 *Télémarketing* [1988] ECPR 3261 at paragraph 27. In the context of a refusal to supply, those cases have more recently been considered in Case C-7/97 *Oscar Bronner* [1998] ECR I-7791, which concerned the refusal of the leading newspaper publisher in Austria to allow a rival newspaper publisher access to its distribution system.

862. The effect of those decisions, in broad terms, is that it may be an abuse for an undertaking which is dominant in one (upstream) market to refuse to supply a rival with which it is in competition in a neighbouring or downstream market with goods or services which are indispensable to carrying on the rival's business, provided that: (i) the refusal will eliminate all competition on the part of the person requesting goods or services; (ii) the refusal is incapable of being objectively justified; and (iii) the goods or services are indispensable for carrying on the rival's business, in the sense that there is no realistic possibility of creating a potential alternative: see *Oscar Bronner* at

paragraphs 40 to 46 of the judgment, and the opinion of Advocate General Jacobs in that case, at paragraphs 56 to 69, cited by the Tribunal in *Burgess v OFT* [2005] CAT 25, at paragraphs 303 to 311.

863. One particular manifestation of the above general principle occurs in the case of a "price squeeze" or "margin squeeze" where, instead of refusing entirely to supply the essential input in question, the dominant undertaking supplies the input to its competitors on the downstream market at a price which does not enable those competitors to compete effectively on the downstream market. The law on this issue has been reviewed by the Tribunal in *Genzyme v OFT* [2004] CAT 4, at paragraphs 489 to 493. In that case Genzyme supplied a pharmaceutical product, Cerezyme, to third party healthcare providers at a price which did not enable those third parties to compete effectively with Genzyme's in-house home care services, notwithstanding evidence from patients and clinicians that they wished to deal with independent home care providers, rather than with Genzyme's own in-house operation.

864. In its draft Guideline, *Assessment of Conduct* OFT 414a, April 2004, the OFT describes a margin squeeze in these terms:

> "6.1 A margin squeeze may occur in an industry where a vertically integrated undertaking is dominant in the supply of an important input for a downstream market in which it also operates. The vertically integrated undertaking could then harm competition by setting such a low margin between its input price (e.g. wholesale price) and the price it sets in the downstream market (e.g. retail price) that an efficient downstream competitor is forced to exit the market or is unable to compete effectively.
>
> 6.2 To test for margin squeeze, it is usual to determine whether an efficient downstream competitor would earn (at least) a normal profit when paying input prices set by the vertically integrated undertaking.
>
> 6.3 In practice, in order to determine whether an efficient downstream competitor would make a normal profit, the test is typically applied to the downstream arm of the vertically integrated undertaking. Therefore, the test asks whether, given its revenues at the time of the alleged margin squeeze, the integrated undertaking's downstream business would make (at least) a normal profit if it paid the same input price that it charged its competitors.

> 6.4 A test for margin squeeze might require assessing the accounts of a 'notional business' as in practice the integrated undertaking's downstream business may not have separate accounts from its upstream business and would not usually treat its input prices as a cost in the same way that an independent downstream competitor would. Therefore, the details of how costs and revenues are allocated and/or calculated will depend on the circumstances of each case. For example, a margin squeeze investigation may raise issues such as the measurement and allocation of costs and revenues (both between products and between upstream and downstream operations), the appropriate rate of return, and the appropriate time period over which to measure profitability.
>
> 6.5 If there is evidence that a vertically integrated dominant undertaking has applied a margin squeeze and that it harmed (or was likely to harm) competition, this is likely to constitute an abuse of that dominant position."

865. The tests for margin squeeze set out in OFT 414a at paragraphs 6.2 and 6.3 are very similar to the tests set out in the Telecommunications Notice, cited above, at paragraphs 117 to 119.

866. In *Deutsche Telekom* OJ 2003 L263/9 the Commission's decision concerned a situation where Deutsche Telekom's charges for wholesale access to its local loop were so high that Deutsche Telekom's competitors could never sell their services to end users in competition with Deutsche Telekom, even though they were at least as efficient as Deutsche Telekom. The Commission rejected Deutsche Telekom's defence that the wholesale charges were fixed by the German regulatory authority (paragraph 104). The Commission then said at paragraphs 106 to 108:

> "106. The Commission's practice in previous decisions has been to hold that there is an abuse of a dominant position where the wholesale prices that an integrated dominant undertaking charges for services provided to its competitors on an upstream market and the prices it itself charges end-users on a downstream market are in a proportion such that competition on the wholesale or retail market is restricted.
>
> 107. In the case of the local network access at issue here, there is an abusive margin squeeze if the difference between the retail prices charged by a dominant undertaking and the wholesale prices it charges its competitors for comparable services is negative, or insufficient to cover the product-specific costs to the dominant operator of providing its own retail services on the downstream market.

108. In such a situation, anticompetitive pressure is exerted on competitors' trading margins, which are non-existent or too narrow to enable them to compete with the established operator on retail access markets. An insufficient spread between a vertically integrated dominant operator's wholesale and retail charges constitutes anticompetitive conduct especially where other providers are excluded from competition on the downstream market even if they are at least as efficient as the established operator."

867. The Commission said at paragraphs 126 to 127:

"126.… The margin squeeze test seeks to compare charges for two particular services at different commercial levels…

The method used to determine whether there is a margin squeeze in this case is based on the principle that the established operator's tariff structure must enable competitors to compete with that operator effectively, and at least to replicate the established operator's customer pattern. It must not be assumed that the competitors' customer structure and range of services will necessarily be more profitable than those of the incumbent. The primary consideration here is the effect on market entry by competitors …"

868. And at paragraphs 140 and 141:

"140. Where wholesale and retail services are comparable, as described above, a margin squeeze occurs if the spread between DT's retail and wholesale prices is either negative or at least insufficient to cover DT's own downstream costs. This would mean that DT would have been unable to offer its own retail services without incurring a loss if, during the period under investigation, i.e. since 1998, it had had to pay the wholesale access price as an internal transfer price for its own retail operations.

141. As a consequence the profit margins of competitors are squeezed, even if they are just as efficient as DT. This means that they cannot offer retail access services at a competitive price unless they find additional efficiency gains. A margin squeeze imposes on competitors additional efficiency constraints which the incumbent does not have to support in providing its own retail services."

869. The Commission concluded at paragraph 180:

"By proving the existence of a margin squeeze, the Commission has therefore done enough to establish the existence of an abuse of a dominant market position."

870. Under section 60 of the 1998 Act the Tribunal (and the Authority) are required to ensure that questions arising in relation to competition within the United Kingdom are so far as possible, and having regard to any relevant differences, dealt with in a manner which is consistent with the treatment of corresponding questions in Community law: section 60(1). Similarly the Tribunal must decide any such question in a manner consistent with any relevant decision of the Court of Justice: section 60(2). The Tribunal must also "have regard" to any relevant decision or statement of the European Commission: section 60(3).

D. THE TRIBUNAL'S ANALYSIS

871. The issue of an alleged margin squeeze arises because, to operate the proposed common carriage arrangement, Albion would have to pay the First Access Price of 23.2p/m^3, and also acquire the water from United Utilities. United Utilities submits that it was likely to wish to negotiate with Albion a higher water price than the price United Utilities currently pays Dŵr Cymru[47] but, even if Albion paid only the price currently paid by Dŵr Cymru of some 3.3p/m^3, Albion's total cost would still be some 26.5p/m^3. Since the retail price currently offered by Dŵr Cymru under the New Tariff is 26.6p/m^3, the *de facto* position is that the difference between the input price set by Dŵr Cymru (i.e. the First Access Price) and the price Dŵr Cymru sets in the downstream market (i.e. Dŵr Cymru's retail of price of 26.6p/m^3) is such that Albion would be unable to compete effectively and would be forced to exit the market. In effect, the difference between Dŵr Cymru's upstream and downstream prices would leave Albion with a zero margin, and thus unable to compete unless Shotton Paper were prepared to pay Albion more than Dŵr Cymru's retail price.

872. In those circumstances there is no doubt in our view that in this case there is a margin squeeze in the terms set out in OFT 414a and the Telecommunications Notice. The question is whether or not the Decision was correct in finding that the facts here in question did not give rise to an abuse within the meaning of the Chapter II prohibition.

873. In our view, there are four reasons why the analysis in the Decision is incorrect, or at least inadequate, on the issue of margin squeeze. (1) Since the First Access Price has

[47] The correspondence shows United Utilities requesting a price of 9p/m^3.

not been shown to be related to the costs, and the evidence strongly suggests that price to have been excessive, as found earlier in this judgment, it cannot be assumed that Dŵr Cymru's upstream price is reasonable. (2) The margin squeeze in question cannot be justified on the basis of an ECPR approach which is itself unsound, for the reasons already given. (3) The Decision does not deal adequately with the fact that Albion wishes to continue to combine the supply of water with its offer of water efficiency services. (4) The Director's approach in the Decision is contrary to the approach for determining the existence or otherwise of a margin squeeze under Community Law. We are not persuaded that any different approach is justified on the facts of this case.

(1) The First Access Price

874. It follows from the earlier part of our judgment that the First Access Price has not been shown to be reasonably related to costs. In addition, the evidence strongly suggests that price to have been excessive. Had the First Access Price been set at a lower level, and had Dŵr Cymru's retail price remained at 26p/m^3, Albion would have had a margin. Since the evidence strongly suggests that level of the upstream price was excessive, in our view the zero margin between Dŵr Cymru's upstream price and its downstream price cannot be objectively justified. In this respect this case differs from *Industries des poudres sphériques*, cited above, where there was no evidence that the upstream price was excessive: paragraph 179 of that judgment.

(2) ECPR

875. Insofar as the margin squeeze here in issue is said to result from the legitimate application of ECPR, we have already held above that the particular ECPR approach in the Decision cannot safely be relied upon. In our view it follows, for the same reasons, that the ECPR approach used in the Decision does not objectively justify the margin squeeze here in issue.

(3) Water efficiency services

876. The analysis of margin squeeze in this case is complicated by the fact that the services Albion as a water supplier wishes to provide to Shotton Paper, and is currently

providing to Shotton Paper, are not merely "water only" services but consist of a water supply combined with water efficiency services. As Albion told us, the company provides an employee on-site at Shotton Paper, which has a complex production process, to assist the company in making the most efficient use of the large quantities of water Shotton Paper consumes. We are told that, as a result of Albion's collaboration with Shotton Paper in this regard, Shotton Paper's efficiency (in terms of water use relative to the output of paper) has improved from $16m^3$ to $13m^3$ of water used per dry tonne of paper, although this is still short of the international standards of the UPM Group. Albion takes the view that, in view of the water resource and conservation issues facing the country, this kind of service should not be seen as an "added extra", but part of the normal activities of a responsible water supplier (Day 2, p. 25).

877. It seems that at an earlier stage in this matter Dŵr Cymru took a similar view. Under the LIT, Dŵr Cymru offered to supply water efficiency services to large potable customers using more than 50Ml per annum within its tariff charges. In its letter of 2 December 1998 to the Director, Dŵr Cymru stated:

> "The tariff will include the following:-
>
> Customers, using over 50Ml/annum, will be given the following benefits:-
>
> detailed water management data
>
> advice on efficient use of water and benefits of seasonal use
>
> leakage monitoring
>
> Additional benefits for users over 250Ml/annum:-
>
> water efficiency audits"

878. It must, in our view, be assumed that the cost of those water efficiency services was taken into account in setting the LIT when it was introduced in 1999.

879. We are told that about 14 customers of Dŵr Cymru were at one time supplied with water efficiency services. However, we were also told by Mr Jones that Dŵr Cymru abandoned the supply of those services, as a result of the constraints imposed on the company by the Director's 1999 price determination. We were also told by the Authority that the 1999 price determinations had a similar effect across the industry: the incidence of water efficiency management services offered by statutory undertakers

apparently declined by some 90 per cent between 1999 and 2004. We are surprised that the effect of the regulatory system has apparently been to suppress this innovative aspect of water undertakers' services, despite public concern as regards water efficiency and conservation.

880. However, notwithstanding the abandonment by Dŵr Cymru of those water efficiency services (which are now limited to advice on a website), no corresponding change was made to LIT.

881. The Authority's case is that the "Distribution" cost, which formed the foundation for the LIT, equally formed the basis for the New Tariff introduced in 2003, which in turn is now the foundation for Dŵr Cymru's retail price of 26.6p/m³. Although the Authority states it was "not clear" whether water efficiency services were included in the New Tariff, it seems to us reasonable to assume that both the LIT and the New Tariff still reflect the imputed cost of providing those services, notwithstanding that Dŵr Cymru no longer provides them.

882. In our view this situation is not dissimilar to that in *Genzyme*, cited above. In that case, Genzyme sold the drug Cerezyme to third party homecare providers at a price which included the cost of providing homecare services, even though Genzyme was not supplying those services to the third parties in question. The Tribunal upheld the OFT's decision that Genzyme, a dominant undertaking, was obliged to offer Cerezyme to third party homecare providers at a discount off its retail price sufficient to allow an efficient homecare provider to provide homecare services to end-users.

883. The Authority's position, however, is: (i) that the water efficiency services supplied by Albion do not form part of a statutory water undertaker's "appointed activities", except to a minor extent; and (ii) if Shotton Paper wants such services, it should pay for them over and above the tariff price - such activities benefit Shotton Paper and no one else. We find those submissions very difficult to accept.

884. As regards the question whether the provision of water efficiency services falls properly within the activities of a statutory water undertaker, section 93A(1) of the WIA91 provides:

> "It shall be the duty of every water undertaker to promote the efficient use of water by its customers".

885. By section 101(1) and paragraphs 2 and 29 of Schedule 8 to the WA03 the above duty is also extended to any new entrant holding a water supply licence under the new licensing provisions introduced by that Act.

886. In an Ofwat paper dated April 2006 entitled "*Development of a Revised Access Code Draft Guidance over Access Pricing*", Ofwat's description of secondary retail activities includes:

> "(i) advice on water and waste water conservation
>
> …
>
> (k) development of innovative tariff structures and supply options that enable customers to reduce their costs of using water."

887. As regards customers using more than 50 Ml per annum this document states:

> "(q) water conservation advice would be customer-specific
>
> …
>
> (s) Account managers are often assigned to large customers."

888. In addition, in identifying activities avoided or reduced when a customer switches to a licensee under the WA03, this document identifies:

> " • Water conservation advice: although undertakers have a statutory duty to promote the efficient use of water to customers this activity will also become the responsibility of the licensee for its customers."

889. In those circumstances we find it very difficult to see how the Authority's argument, that the provision of water efficiency services and water conservation advice to customers in some way falls outside the proper ambit of the activities of a water undertaker, can be sustained. The further suggestion in argument that "conservation" in this context referred to the conservation of natural beauty, flora, fauna and geological and physiographical features of special interest under section 3 of the WIA91 was rightly not pursued. Indeed, if water efficiency services are not within the ambit of the services to be offered by a water undertaker it is hard to see on what basis the Authority approved the LIT.

890. As to the Authority's argument that the *degree* to which Albion offers water efficiency services goes beyond the ambit of the services to be offered by a water undertaker, it was accepted by the Authority that there is no definition as to the services to be offered by a water undertaker. Bearing in mind the size of Shotton Paper, whose water consumption, we are told, is approximately equivalent to a town of about 40,000 people, we have no basis on which to find that the provision of these services by Albion is in some way disproportionate to the needs of the customer.

891. As to the suggestion that Shotton Paper should pay extra for these services, since only Shotton Paper benefits, in our view the conservation of water by the second largest user of water in Wales redounds to the benefit of the community generally, potentially conserving water resources and reducing abstraction from the River Dee.

892. Moreover, to the extent that greater water efficiency enables Shotton Paper to remain internationally competitive, and even increase its production, that in turn safeguards Dŵr Cymru's customer base, to the benefit of Dŵr Cymru and its customers generally. The suggestion that Shotton Paper should be expected to pay even more for these services, in circumstances where the evidence strongly suggests that Dŵr Cymru's existing retail price is excessive, was not a suggestion that we found persuasive.

893. The Authority originally characterised Albion's position as that of someone who snatched a letter from the postman's hand at the garden gate, and then demanded a margin for delivering the letter to the front door. According to the Authority, Albion merely "retyped the invoice" (First hearing, Day 2, p. 5). That description turns out to be far from the facts of this case. The Authority's stance of being opposed to undertakers offering water efficiency services somewhat surprised us, as did the apparent lack of weight attached by the Authority to the water efficiency services in issue in the present case in view of public concern about conservation of water resources. We note that in the Consultation Paper the Government attached particular importance to competition bringing about improvements in water efficiency services and customers' water efficiency:

> "241. Increasing competition may offer potential for improving eligible customers' water efficiency. Studies have found that industrial sites can typically reduce their water use by up to 50% by using relatively simple and inexpensive

> measures. However, it is evident that a lot of these opportunities are not currently being taken up. As well as improving their environmental performance, water efficiency activity may benefit customers through reduced water bills, and can provide savings on associated costs such as pumping, heating and effluent discharge.
>
> 242. Competition could provide a spur for undertakers and new entrants to offer customers greater assistance in reducing their water consumption and thus saving on their water bills. A number of companies already offer whole site utilities management and water demand management services, whereby for a fee (or on a shared savings basis) they manage and reduce the water consumption of large users. These types of services might be expected to increase as licensees seek to enter the industry and offer customers new and improved customer service packages, and as undertakers seek to retain their existing customers."

894. It seems to us that Albion is supplying Shotton Paper with exactly the kind of services the Government hoped would be provided in a more competitive environment. The submissions made by the Authority on this part of the case seem to us at odds with the objectives set out in paragraphs 241 and 242 of the Consultation Paper, and we do not accept them.

895. It follows, in our view, that in the Decision the Director did not adequately investigate what services were being supplied to Shotton Paper by Albion, nor did he consider the relevance to the margin squeeze issue of the facts that: (a) Dŵr Cymru's tariffs presupposed the supply of water efficiency services; (b) Dŵr Cymru ceased to supply those services but did not adjust its tariffs; and (c) Albion has been supplying such services to Shotton Paper since 1999. In our view, the question whether in those circumstances the First Access Price should have allowed a margin to enable Albion to supply water efficiency services which Dŵr Cymru was no longer offering, was a relevant consideration which should have been addressed in the Decision, but was not.

(4) The approach to determining a margin squeeze

896. As expressed in the Decision, the Authority's basic argument is that Dŵr Cymru incurs the same costs in serving Albion as it did when serving Shotton Paper, and would still incur the same costs under the proposed common carriage arrangements, other than

water resource costs (paragraphs 348 and 351). Applying an ECPR-type approach, the Authority concludes that the First Access Price is to be determined simply by deducting the water resource costs of 3.3p/m³ from the Second Bulk Supply Agreement price of 26p/m³, the latter also being close to Dŵr Cymru's retail price under the New Tariff[48].

897. We have already found above that such an ECPR approach is unsound, and we need not repeat those findings.

898. With regard to the legal question of whether an unlawful margin squeeze arose in this case, both the OFT and the European Commission apply the same tests for determining whether there is a margin squeeze. The standard formulation poses two alternative tests: (i) that the dominant company's own downstream operations could not trade profitably on the basis of the upstream price charged to its competitors by the upstream operating arm of the dominant company; or (ii) that a reasonably efficient downstream operator could not earn (at least) a normal profit when paying input prices set by the vertically integrated undertaking.

899. As regards (ii) above, it is not suggested that Albion is an inefficient undertaking. Nor has it been suggested that Albion could earn a normal profit (or indeed any profit) when paying the First Access Price. On that approach, there is a clear margin squeeze in this case.

900. As regards (i) above, examination of the question whether the dominant undertaking's downstream operation (here Dŵr Cymru's notional retail operation) could itself trade profitably at the upstream price charged to Albion by Dŵr Cymru (here the First Access Price of 23.2p/m³) normally involves considering a notional business (here consisting of Dŵr Cymru's retail arm), and allocating costs to that business, including an appropriate amount for profit. That approach is common to both the OFT (OFT 414a at paragraph 6.14) and the European Commission (e.g. *Deutsche Telekom*, paragraph 140). That approach was not followed by the Director in this case. In our view that failure constitutes an error of analysis.

[48] Dŵr Cymru argued that its "avoided costs" to be deducted were only 0.7p/m³ (power costs) since it was contractually obliged to purchase the water from United Utilities in any event. This argument, if correct, would again demonstrate that the approach in the Decision would prevent any market entry and eliminate competition from Albion.

901. Moreover, in our view it is manifest that a "notional" retail business of Dŵr Cymru could not trade profitably at a retail price of 26p/m³ and an input price of 23.2p/m³. It would still have to acquire the water (costing at least 3.3p/m³). At a retail price of 26p/m³[49], a notional "retail arm" of Dŵr Cymru would itself have no margin to meet its costs, including overheads and profit. It follows that on this approach the alternative test for a margin squeeze is also met.

902. In MD 163 the Director stated, on the advice of the CCCWG, the principle that in setting common carriage charges the incumbent "should charge entrants as it would charge itself and should be able to demonstrate this…" That test is in line with the approach of both the OFT and the European Commission.

903. In the first sentence of paragraph 360 of the Decision the Director apparently accepts that MD 163 requires undertakers to charge third parties as they would charge themselves. However, the second sentence of paragraph 360 goes on to state:

> "Because undertakers do not have separate businesses in this way, in practice [MD163] meant that undertakers should not set access prices for charging their competitors *that were inconsistent with their final retail tariffs, without objective justification."* (emphasis added by the Tribunal)

904. In our view the second sentence of paragraph 360 of the Decision does not reflect MD 163 or the Guidance issued by either the OFT or the Commission. First, the fact that undertakers do not have separate retail businesses, which is often the case with dominant incumbents in network industries, does not justify a failure to impute costs and revenues to a notional retail business, as required by the OFT and the Commission. The Director's apparent position that undertakers are not in breach of MD 163 if they charge their competitors according to the existing *retail* tariffs (i.e. prices to end users) is in our view inconsistent with MD 163 itself, and with the guidance of the OFT and the Commission, which sets out an entirely different principle, namely that the undertaker should charge *third parties* in the same way as it would charge *itself*.

[49] We do not accept Dŵr Cymru's argument that at the material time it had not "offered" a price of 26p/m³. Dŵr Cymru reduced its price to Shotton Paper from 27.2p/m³ to 26p/m³ in or around 1999 and in our view that price continued implicitly to be Dŵr Cymru's price to Shotton Paper, as confirmed by the adoption of that price in the New Tariff in 2003.

905. MD 163 was still extant when the Decision was taken. In accordance with normal principles, in our view the Director should be held to his published Guidance. Similarly we see no reason why the Director should not have taken into account the Guidance of the Commission in the Telecommunications Notice, and of the OFT in 414a, as well as the *Deutsche Telekom* case, having also regard to section 60(4) of the 1998 Act. The failure to consider the costs of a notional retail arm of Dŵr Cymru is in our view an important omission in this part of the Decision.

906. We add that, in our view, a central weakness of the Decision, already referred to above, is that the service sought by Albion is essentially a transportation service, but no attempt has been made to identify separately the costs of providing that service. Albion is simply charged all Dŵr Cymru's revenues from large non-potable users (including its current level of profit) less the avoided water resource cost, which in this case at 3.3p/m^3 is well below Dŵr Cymru's average water resource cost of 6.8p/m^3. This takes us back, in effect, to the earlier part of this judgment where the Tribunal expressed the view that it had not been demonstrated that costs typically incurred in potable systems are incurred to the same extent in non-potable systems, let alone in an extremely simple system such as Ashgrove. In particular, it seems clear that the price charged by Dŵr Cymru for the upstream product (transportation) incorporates costs (in particular retail costs) that are not related to the transportation service actually being supplied.

907. One of the principal purposes of requiring an assessment of costs of the incumbent's downstream retail arm when applying the margin squeeze test is to put the incumbent and the entrant on an approximately equal footing. Yet, as already accepted by Mr Hope and Professor Armstrong, the approach in the Decision does not put the incumbent and the entrant on an equal footing. Unlike the entrant, under ECPR the incumbent's profit stream is guaranteed indefinitely, since the entrant funds the incumbent's revenues. As compared with the incumbent, the entrant has to be at least "super-efficient" to enter the market, but in this case even a "super-efficient" entrant in Albion's position could not make any profit. The fact that the approach in the Decision does not create a level playing field is a further reason for not upholding that approach.

908. Professor Armstrong accepted in evidence that an ECPR approach did give rise to a margin squeeze if the incumbent had fixed costs in the competitive sector which were

not covered by the incumbent's avoided costs (Day 4, page 2). The Authority initially argued that under EC law the incumbent was entitled to recover its full costs of supply (including, we assume, its fixed costs) from the entrant, but that would seem to be in conflict with Professor Armstrong's evidence and the margin squeeze case law already referred to. As already indicated, the Authority and Dŵr Cymru then argued that if one took a long enough timescale there would be no fixed costs in the retail sector. All Dŵr Cymru's retail costs would be avoidable, and deducted from the access price. However, as we have already held in our discussion of ECPR above, this approach to avoidable costs is not reflected in the Decision, which assumes there are no avoidable costs. It may well be, as Professor Armstrong suggests, that a different approach to avoidable costs could bring a "retail-minus" approach in line with the European Commission and OFT's view of a margin squeeze, but that is not the approach the Decision adopts.

909. The Authority's essential argument is that there is no scope here for a margin squeeze since Albion is duplicating, rather than replacing, services offered by Dŵr Cymru. To create a margin would be artificial, and would amount to subsidising Albion. According to the Authority, Albion has not come up with an innovative business model which gives rise to efficiencies. Cases such as *Napier Brown/British Sugar, Deutsche Telekom* and *Genzyme* implicitly assume that the margin is to be found in the dominant supplier's avoided costs.

910. To take the last point first, it is true that in the margin squeeze cases cited above, the incumbents did not incur the costs of the downstream activities in question when supplying third parties with the upstream inputs. However, in *Genzyme (remedy)* [2005] CAT 32 the Tribunal did not determine the appropriate margin on the basis of Genzyme's avoided costs, but on the basis of the margin required by a reasonably efficient homecare services provider to supply its services and earn a competitive return (paragraph 249 of that judgment) i.e. an amount sufficient to cover the entrant's total costs. Neither *Napier Brown/British Sugar* nor *Deutsche Telekom,* nor the Guidance issued by the OFT and the Commission, appear to proceed on an "avoided costs" basis. An "avoided cost" approach in our view would not be a satisfactory basis for a margin squeeze test, because it takes no account of the incumbent's fixed costs, takes no account of the entrant's total costs, and requires the entrant to be more

efficient than the incumbent, as already shown above. In addition there are the problems of determining "avoided" costs. These difficulties are illustrated by the fact that the Authority's position seems to have swung during these proceedings from arguing that no retail costs are avoided to submitting that all retail costs are avoidable.

911. As to the Authority's argument that Albion is merely "duplicating", not replacing, Dŵr Cymru's services and that Albion's presence is "artificial", that argument would lead logically to the conclusion that there would never be any prospect of Shotton Paper (or Corus) seeking an alternative supplier via common carriage. That would deprive the customer of choice of supplier, and it is the interests of the customers, as beneficiaries of the competitive process, to which the Tribunal must have primary regard. Similarly, on the Authority's approach, the prospects of any other large industrial customer ever being able to deal with an alternative supplier, whether an inset appointee or under the licensing provisions of the WA03, would seem to be slight or non-existent, for the reasons already given. Such a result in our view would be contrary to the thrust of the Director's *Guidance* in MD 163, and also to the purpose of the new provisions of the WA03. It would lead to the reinforcement of local monopolies and prevent the development of competition. We do not accept that such a result is compatible with the Chapter II prohibition.

912. As to the suggestion that the alternative would be to require Dŵr Cymru to subsidise Albion, we have already dealt with cross-subsidy issues. We have no reason to suppose that Albion's proposed common carriage arrangement would lead to adverse consequences for customers ineligible to benefit from competition. The alternative, that Ashgrove might be bypassed, could be worse from the point of view of Dŵr Cymru's other customers, since the asset would be stranded without the possibility of Dŵr Cymru recovering the costs.

913. We add, moreover, that to the extent that competition brings the efficiency and other gains envisaged by the Consultation Paper, we have no reason, on the evidence, to suppose that customers generally should not benefit from a degree of competition in the water industry, as they have in the telecommunications, gas and electricity industries. That is the Government's view set out in the Consultation Paper.

914. As to the Authority and Dŵr Cymru's argument that, if Albion is correct, any company could simply interpose itself in the supply chain of a dominant company and demand a margin for doing so, that argument ignores the particular facts of this case. Albion is a statutory inset appointee of some years' standing which is already being supplied by Dŵr Cymru under the Second Bulk Supply Agreement. Albion's inset appointment runs to over 100 pages and imposes significant statutory duties on Albion. Albion has an existing 10 year supply agreement with Shotton Paper dated 19 March 1999 under which Albion assumes supply obligations, the credit risk and the functions of metering, billing and customer service. In addition, Albion supplies the water efficiency services to Shotton Paper already mentioned. It has been supported throughout by Shotton Paper which, presumably, prefers Albion to Dŵr Cymru, even though Shotton Paper was formerly Dŵr Cymru's second largest customer. Shotton Paper has improved its productive efficiency as a result of dealing with Albion. Albion's offering, which combines water supply services with water efficiency services through the same supplier is a desirable innovation, according to the Consultation Paper. In those specific circumstances, the approach in the Decision, which would eliminate the existing offering by Albion to Dŵr Cymru, is not in our view compatible with the Chapter II prohibition.

915. In our view it is too late to pursue the argument, if it is still maintained, that Albion was granted its inset appointment in 1999 only on the basis that it would develop an alternative supply via the Milŵr Tunnel. The inset appointment was not made subject to any condition to that effect. The Director knew at the time that there were uncertainties in that regard (paragraph 36 to 37 of the Decision), and Albion has explained why that proposal did not proceed. Moreover, as we understand it the Milŵr Tunnel proposal would have required the construction of a new pipeline (paragraph 48 of the Decision) and would presumably have led to the duplication of fixed costs and the stranding of Dŵr Cymru's bypassed assets, which is exactly the result that the Authority seeks to avoid. The Director's *Guidance* is that an inset appointment made on the basis of a bulk supply is legitimate: RD7/98 of 6 March 1998.

916. The fact that Albion's operations are at the moment somewhat limited seem in large measure to be due to the approach set out in the Decision, which has effectively

prevented Albion from trading profitably or acquiring other customers. That is not a factor which can be held against Albion.

917. As pointed out in the interim judgment, Albion has also been acting as a middleman, negotiating to obtain the water from United Utilities, while paying a reasonable price to Dŵr Cymru for common carriage (figure 2 above). In a press release of 24 November 1997, the Director referred to inset appointments sought by Enviro-Logic: "The competitor acts as a middleman, driving down the costs of supply. This has brought benefits with companies responding by introducing large user tariffs". To seek by brokerage to achieve a better price for large industrial users seems to us to be a further, legitimate commercial activity which would be expected in a competitive market. The approach in the Decision would preclude such competitive activity.

918. For the reasons given above, in the specific factual circumstances of this case, we see no reason to depart from the standard approach to the finding of a margin squeeze contrary to the Chapter II prohibition, as set out in the OFT's Guidance in OFT 414a, the European Commission's approach in the Telecommunications Notice, the decision in *Deutsche Telekom*, and MD 163 itself, properly interpreted.

Conclusion on margin squeeze

919. In the circumstances the Director's conclusion, at paragraph 352 of the Decision that Dŵr Cymru did not infringe the Chapter II prohibition by engaging in a margin squeeze or "price squeezing" was in our view erroneous in law and incorrect, or at least insufficient, from the point of view of the reasons given, the facts and analysis relied on, and the investigation undertaken.

XV SECTION 66E OF THE WIA91: THE COSTS PRINCIPLE

Introduction

920. At paragraphs 317 to 338 of the Decision, the Director states that his approach to ECPR is reflected in the Costs Principle now set out in section 66E of the WIA91. The Costs Principle is the principle introduced by section 66D of the WIA91 to be applied when determining charges to be paid by licensees to undertakers for the supply of

water for resale (section 66A) or common carriage, (sections 66B and 66C) under the licensing provisions of that Act as amended, designed to encourage competition in respect of water supplies to customers using more than 50Ml per annum. According to the Director, his ECPR access price of 22.5p/m³ is the same price that the Costs Principle would produce (paragraphs 331 and 338 of the Decision).

921. We accept that if the Director's approach in the Decision were in conformity with the Costs Principle, that would be relevant to the justification advanced by the Director for using that approach in the Decision, albeit that section 66E was not in force when the Decision was adopted, and that it did not exist at the time when Dŵr Cymru quoted the First Access Price in February 2001. On the other hand, if the approach in the Decision would not have been mandated by section 66E, had that section been in force at the material time, that in our view is equally a factor which adversely would affect the validity of the Director's reasoning in the Decision, particularly his conclusion that the Costs Principle would have produced a price very close to the First Access Price (paragraphs 331 and 338). We have therefore heard argument on the construction of section 66E. Indeed, this is the principal matter of concern to Aquavitae in its intervention, whose appeal raising the same points is currently stayed.

The statutory context

922. Following the Consultation Paper of July 2002, the WA03 introduced a system for strengthening competition in the water industry. Instead of the Director's general duty to "facilitate" effective competition under the previous section 2(3)(e) of the WIA91, new section 2(2A)(a) of the WIA91 as amended by the WA03 introduced a new duty to "further the consumer objective". The consumer objective is:

> "to protect the interests of consumers, wherever appropriate by promoting effective competition between persons engaged in, or commercial activities connected with, the provision of water and sewerage services." : section 2 (2B)

923. Section 17A of the WIA91 provides for the licensing of water suppliers in addition to the existing statutory undertakers. There are two kinds of licence. A retail authorisation, known as a retail licence, permits the licensee "to use a water undertaker's supply system for the purpose of supplying water to premises of

customers of the [licensee]": section 17A(2). A "combined licence" permits the licensee "to introduce water into a water undertaker's supply system", in addition to supplying that water to customers of the licensee: section 17A (5). In broad terms, a retail licence would correspond to the present situation at Ashgrove, whereas a combined licence would involve common carriage of water, either from the licensee's own source, or supplied to the licensee by another undertaker.

924. Sections 66A to 66K impose duties on the existing statutory undertakers to supply licensees. The supply of water to a licensee holding a retail licence is dealt with in section 66A. Section 66A(1) and (2) provides:

> "66A Wholesale water supply by primary water undertaker
>
> (1) This section applies where-
>
> (a) a licensed water supplier requests its primary water undertaker to provide it with a supply of water for the purpose of supplying water to the premises of its customers in accordance with the retail authorisation; and
>
> (b) the premises are in the area of the undertaker.
>
> (2) Where this section applies, it shall be the duty of the primary water undertaker, in accordance with an agreement or determination for such period and containing such terms and conditions as may be provided for under section 66D(2) below-
>
> (a) to take any such steps-
>
> (i) for the purpose of connecting the premises in question with the undertaker's supply system; or
>
> (ii) in respect of that system,
>
> as may be so provided for in order to enable the undertaker to provide the requested supply; and
>
> (b) having taken any such steps, to provide that supply."

925. The situation of a licensee holding a combined licence and having his own source of water (e.g. a borehole) which he wishes to supply to a customer is dealt with under section 66B. Section 66B (1) to (3) provides:

> "66B Introduction of water into water undertaker's supply system

(1) This section applies where-

(a) a qualifying licensed water supplier requests a water undertaker to permit it to introduce water into the undertaker's supply system, by means of which any particular supply of water to any premises in accordance with the retail authorisation is to take place, in connection with that supply; and

(b) the premises are in the area of the undertaker.

(2) This section also applies where-

(a) a water undertaker agrees to permit a qualifying licensed water supplier to introduce water into the undertaker's treatment works;

(b) in connection with that introduction, the supplier requests the undertaker to permit it to introduce water into the undertaker's supply system, by means of which any particular supply of water to any premises in accordance with the retail authorisation is to take place, in connection with that supply; and

(c) the premises are in the area of the undertaker.

(3) Where this section applies, it shall be the duty of the water undertaker, in accordance with an agreement or determination for such period and containing such terms and conditions as may be provided for under section 66D(2) below-

(a) to take any such steps-

(i) for the purpose of connecting the premises in question with the undertaker's supply system;

(ii) for the purpose of connecting the treatment works of the qualifying licensed water supplier with that system (in a case falling within subsection (1) above);

(iii) for the purpose of connecting with that system any source used by the qualifying licensed water supplier for the purpose of supplying water other than for domestic or food production purposes (in a case falling within subsection (1) above); or

(iv) in respect of that system, as may be so provided for in order to enable the supplier to make the requested introduction of the water into that system; and

(b) having taken any such steps, to permit the requested introduction of the water into that system.

926. Section 66C contemplates a situation similar to the proposal in the present case, where a company such as Albion acquires the water from a "secondary water undertaker", in this case United Utilities, and then introduces that water into Dŵr Cymru's system for onward supply to Shotton Paper. Section 66C(1) to (3) provides:

"66C Wholesale water supply by secondary water undertaker

(1) This section applies where-

(a) a qualifying licensed water supplier-

(i) requests a water undertaker other than its primary water undertaker (the "secondary water undertaker") to provide a supply of water for the purpose of the supplier supplying water, using the primary water undertaker's supply system, to the premises of the supplier's customers in accordance with the retail authorisation; and

(ii) requests its primary water undertaker to permit it to introduce that water into its supply system; and

(b) the premises are in the area of the primary water undertaker.

(2) Where this section applies-

(a) it shall be the duty of the secondary water undertaker, in accordance with an agreement or determination for such period and containing such terms and conditions as may be provided for under section 66D(2) below-

(i) to take any such steps in respect of its supply system as may be so provided for in order to enable it to provide the requested supply; and

(ii) having taken any such steps, to provide that supply; and

(b) it shall be the duty of the primary water undertaker, in accordance with an agreement or determination for such period and containing such terms and conditions as may be provided for under section 66D(2) below-

(i) to take any such steps specified in subsection (3) below as may be so provided for in order to enable the licensed water supplier to make the introduction of the requested supply of water into the primary water undertaker's supply system; and

(ii) having taken any such steps, to permit the introduction of that supply of water into that supply system.

(3) The steps mentioned in subsection (2)(b)(i) above are steps-

(a) for the purpose of connecting the premises in question with the primary water undertaker's supply system;

(b) for the purpose of connecting that system with the secondary water undertaker's supply system; or

(c) in respect of the primary water undertaker's supply system."

927. Section 66D (3) provides that the charges to be paid by a licensee to a water undertaker in respect of supplies under sections 66A(2), or 66(B)(3), or 66C(2), whether agreed between the parties or determined by the Authority, "shall be fixed in accordance with the costs principle set out in section 66E below".

928. Section 66E provides:

"66E Section 66D: costs principle

(1) The costs principle referred to in subsection (3) of section 66D above is that the charges payable by a licensed water supplier to a water undertaker, under the agreement or determination mentioned in that subsection, shall enable the undertaker to recover from the supplier-

(a) any expenses reasonably incurred in performing any duty under sections 66A to 66C above in accordance with that agreement or determination, and

(b) the appropriate amount in respect of qualifying expenses and a reasonable return on that amount, to the extent that those sums exceed any financial benefits which the undertaker receives as a result of the supplier supplying water to the premises of relevant customers.

(2) In subsection (1) above "qualifying expenses" means expenses (whether of a capital nature or otherwise) that the water undertaker has reasonably incurred or will reasonably incur in carrying out its functions.

(3) For the purposes of subsection (1)(b) above, the appropriate amount is the amount which the water undertaker-

(a) reasonably expected to recover from relevant customers; but

(b) is unable to recover from those customers as a result of their premises being supplied with water by the licensed water supplier.

(4) Nothing in subsection (3) above shall enable a water undertaker to recover any amount-

(a) to the extent that any expenses can be reduced or avoided; or

(b) to the extent that any amount is recoverable in some other way (other than from other customers of the undertaker).

(5) In this section "relevant customers" means customers to whose premises the licensed water supplier is to make any supply of water in connection with which the agreement or determination mentioned in subsection (1) above is made."

The reasoning in the Decision

929. According to the Decision, the Costs Principle "is a kind of retail-minus approach" (paragraph 324). The Costs Principle "sets the parameters for calculating access prices" and "describes the revenue relating to certain relevant costs and returns that water undertakers can recover from licensed water suppliers" (paragraph 325). At paragraph 329, the Decision states "When considering any retail-minus approach it is necessary to take the retail price as a starting point", although that contention is not specifically linked back to the text of section 66E. The Decision points out that the Costs Principle also describes "some costs and returns which water undertakers cannot recover" (paragraph 326). It is common ground that these latter costs are known as "ARROW costs" i.e. costs that undertakers can <u>a</u>void, <u>r</u>educe or <u>r</u>ecover in some <u>o</u>ther <u>w</u>ay. ARROW costs are referred to in section 66E(4), which provides that the

undertaker cannot recover any amount to the extent that "any expenses can be reduced or avoided" (section 66E(4)(a)) or that any amount "is recoverable in some other way" (section 66E(4)(b)). It is common ground that ARROW costs cannot be included in the access price.

930. Adopting what he considered to be the correct application of the Costs Principle, in the Decision the Director took the price under the Second Bulk Supply Agreement as the relevant "retail" price of 26p/m³, and deducted from that price the "avoided" cost of water resources that Dŵr Cymru would no longer incur of 3.3p/m³, to give an access price considered to be consistent with the Costs Principle of 22.5p/m³, close to the First Access Price of 23.2p/m³.

931. The Decision further states (paragraphs 23 and 24) that the 1998 Act is "superceded" on the coming into force of section 66E, since prices set in accordance with the costs principle will be set in compliance with a legal requirement in accordance with Schedule 3, paragraph 5(3) of the 1998 Act.

Albion's submissions

932. Albion's essential submission is that Section 66E is a perfectly straightforward provision under which the water undertaker is entitled to recover from the licensed entrant (i) the direct costs reasonably incurred by the undertaker in carrying out the duties referred to in sections 66A to 66C in accordance with the agreement or determination made under section 66D: see section 66E(1)(a); and (ii) an appropriate contribution towards the carrying out of his general functions as a water undertaker (for example his universal service or other relevant functions) to reflect the fact that the customer in question will no longer be contributing to the cost of the performance of those general functions: section 66E(1)(b) read with section 66E(2) and (3), less (iii) the undefined financial benefits referred to in the last indent of section 66E(1)(b), and less (iv) the ARROW costs referred to in section 66E(4). According to Albion, the Director's approach is really "retail-plus" because, on his construction, the incumbent is entitled to recover the retail price under section 66E(1)(b) plus the expenses referred to in section 66E(1)(a). Albion does not consider that the principles of *Pepper v. Hart*

[1992] 3WLR 1032 apply in this case, or that the Parliamentary extracts referred to by the Director take the matter any further.

Aquavitae's submissions

933. Aquavitae submits that while the Consultation Paper, cited above, clearly shows the Government's intention to introduce competition, the Director has always been unenthusiastic about the introduction of competition, and has now adopted an approach in the Decision which effectively prevents competition ever emerging.

934. According to Aquavitae, the Decision is wrong in presupposing that section 66E provides unambiguously for a "retail-minus" model which requires the Director to start with a water undertaker's retail price, based on a "regional average". Aquavitae submits that the wording of the section cannot bear the meaning contended for by the Director.

935. Aquavitae refers to section 66E(1) which, it submits, sets out the overarching principle that section 66E is concerned with an expenses (i.e. costs) based model. The primacy of costs (and not the retail price) is underscored by the name Parliament has attached to the section – the "Costs Principle" which must be given some significance. Parliament could have provided for a retail-minus calculation and called the section the "Retail-Minus Principle", had that been Parliament's intention. Any implication that the section is concerned with retail-minus arises only indirectly, by reference to subsection (3), but subsection (3) is hierarchically subordinate to subsection (1) and merely clarifies one expression that appears in subsection (1). There is, moreover, no reference to "regional average" prices in section 66E.

936. In Aquavitae's view, however, a retail-minus approach can be made to work *in practice* in many cases, provided that the correct retail price is identified and the correct minus element is also identified. But it can only work where the retail price identified is a reasonable price, taking into account the true cost of providing the water, and where the deductions made truly reflect the savings that can be made if there is a proper will to make them.

937. To the extent that section 66E is ambiguous, Aquavitae submits that the Tribunal should seek external assistance in accordance with *Pepper v Hart*, cited above, from (a) other sections in the legislation; (b) the Consultation Paper; (c) legislative debates; and (d) general principles of law such as the Chapter II prohibition. There can be no doubt that those materials support the view that Parliament's intention was to allow fair and effective competition, but the Director's construction would frustrate that.

938. Aquavitae submits that section 66E can be analysed according to two tiers: a "top tier" principle and "second-tier principle". The top-tier principle is in section 66E(1)(a) and (b), and provides for an entitlement for the incumbent water undertaker to recover expenses incurred in carrying out its role. The second-tier principle sets out a requirement to give credit for financial benefits received (the final part of section 66E(1) (b)); some account to be taken of the amount which the undertaker reasonably expected to recover from a relevant customer but is unable to recover as a result of the new licensee making the supply (66E(3)); and a prohibition on the recovery of ARROW costs (section 66E(4)).

939. Aquavitae submits that the expression "reasonably expected to recover" in section 66E(3)(a) does not specify the assumptions required in making an assessment of what is "reasonable". Similarly, section 66E(4) does not state how any alleged saving is to be computed. However, the Director's assumption, that the amount a water undertaker "reasonably expected" to recover for the purposes of section 66E(3)(a) is an amount equivalent to the prevailing retail price, can only be taken as the starting point if that price reflects the actual cost of providing the service, adjusted downwards for any inefficiencies.

940. Furthermore, according to Aquavitae, the Director's approach to ARROW costs in this case is unduly restrictive and amounts to an error of principle. In the Decision he deducts only the amount paid by Dŵr Cymru to United Utilities. He thus ignored a major source of saving, namely the retail and associated elements of the retail price, which according to Aquavitae amounts on average in the industry to at least 7 per cent of the retail price.

941. Aquavitae points out that if one takes the ARROW costs referred to in section 66E(4) to mean the costs avoided by no longer serving the first customer to take supplies from a licensed water supplier, the ARROW costs will be virtually nil. On that basis, there will initially be no margin available to a new entrant, so it will be difficult for any new entrant to become established. On the other hand, if one assumes that ARROW costs are to be calculated on the basis that the new entrant is serving a number of customers, then the ARROW costs could be more significant. However, on the Director's approach the new entrant is never able to reach this position since no ARROW costs are generated by the first few customers. The solution to this conundrum, says Aquavitae, is to calculate ARROW costs by assuming a fair retail margin, rather than by calculating the marginal cost saved by serving one less customer. Aquavitae relies on various figures in the Director's publications and water companies' indicative charges to show that the Director's application of the Costs Principle produces no margin.

942. According to Aquavitae, the consequence of the Director's approach is that what would otherwise be a margin squeeze, contrary to domestic and Community law, would be immune from challenge by virtue of section 66E, as construed by the Director.

The Authority's submissions

943. The Authority maintains that section 66E makes mandatory a "retail-minus" approach to pricing, that is to say in calculating an access or wholesale price, the incumbent undertaker starts with the retail price under section 66E(1)(b) and 3(a), then deducts any costs that can be reduced, avoided or recovered in some other way under section 66E(4) (the ARROW costs), and then adds back under section 66(1)(a) the expenses which the undertaker has incurred in providing the services in question.

944. The Authority emphasises that Parliament took a cautious approach to the opening of the water sector to competition. The general principles governing access and wholesale prices were indicated in paragraph 187 of the Consultation Paper, cited above. That requires that undertakers' prices should not, in themselves, deter entry, should reflect the actual costs of providing the service, should not be unduly discriminatory and be transparent. Undertakers should be compensated for stranded assets, but undertakers

are expected to demonstrate that such compensation is reasonable and could not be avoided. To the extent that undertakers' tariffs reflect geographic averaging of costs, access and wholesale charges should be set to avoid the unwinding of the associated cross-subsidies. In addition, as set out in paragraph 188 of the Consultation Paper, the Government has decided that undertakers should be entitled to recover certain other costs, for example relating to any additional equipment required, or the costs of negotiation.

945. The Authority argues that "the appropriate amount" referred to in section 66E(1)(b) includes the amount which the water undertaker "reasonably expected to recover from relevant customers" see section 66E(3)(a). According to the Authority the amount which the undertaker reasonably expected to recover from relevant customers refers to the retail price, since that is what the undertaker would reasonably have expected to receive from the customers in question. The Authority accepts that the "appropriate amount" in section 66E(3)(a) does not, as a matter of construction, directly refer to the retail price, since the retail price would ordinarily include a reasonable rate of return: so section 66E(3)(a) must implicitly refer to the retail price less a reasonable rate of return. However, according to the Authority, one then adds back a reasonable rate of return under section 66E(1)(b) to arrive back at the retail price.

946. The Authority further submits that section 66E(1)(a) refers essentially to the cost incurred by an undertaker in making the connection, and related costs, which costs are those incurred in taking "the steps" mentioned in section 66A(2)(a) and (b), section 66B(3)(a) and (b), and section 66C(3)(a), (b) and (c). According to the Authority, Aquavitae's submission to the effect that while the existing retail price may be the starting point under section 66E(1)(b) and (3)(a), that retail price must also be reasonable having regard to the costs involved, would be unworkable and would involve de-averaging, contrary to the Government's intention.

947. As to Aquavitae's submission that the Authority has adopted too restrictive an approach to the ARROW costs referred to under section 66E(4), the Authority submits that there is no evidence of any of Dŵr Cymru's costs being avoided or reduced in the present case, so this issue does not arise for determination.

948. The Authority also refers to a number of extracts from the Parliamentary debates, including the following:

- The Parliamentary Under-Secretary of State at the Department for Environment, Food and Rural Affairs ("Defra"), Lord Whitty :

> "Competition can deliver benefits for customers through keener prices, more innovation and improved service quality. But competition must be consistent with the Government's wider policy objectives for the water industry. It is important for the framework and scope of any further competitive activity to be tailored to the particular circumstances of the industry and the needs of its customers[50]."

- Mr Elliot Morley (Minister for Environment and Agri-Environment):

> "The benefits of genuine open competition are well known and widely supported. In the case of water, however, the potential for more innovation and improved service must be balanced against public health, the environment and affordability. That is coupled with another wider Government objective – to safeguard consumers' interests by ensuring that the water industry continues to provide water efficiently and effectively for all. [..]
>
> There are potential downsides to competition in the domestic water system. The Bill does introduce competition, but I think it right to adopt a cautious approach and, initially, to set a level that will benefit the very large consumers. Once experience of competition has been gained and we are certain that it is not interfering with the environment, consumer protection and affordability, it will be possible to review the threshold in due course — I think a period of three years is being considered — to establish whether extending it can be justified.[51]

- Mr Andrew Lansley MP[52] (Conservative, South Cambridgeshire):

> "It is interesting that when one looks at the cost principle as set out in proposed new section 66E of the Water Industry Act, one sees that the Government appear to have decided in advance how the access pricing will work, before we have examined the options. The Government have said that the measure will be retail-minus on the basis that the only costs to be offset against the retail price - the retail element being the appropriate amount that the water undertaker reasonably expected to recover from relevant customers - are avoidable expenses. None of the profit element of those avoidable expenses or the water undertakers' upstream fixed costs will be offset against the retail price. It

[50] Water Bill [Lords], 20 March 2002.
[51] Water Bill [Commons], 8 September 2003 (afternoon).
[52] Referred to, incorrectly, as "Mr Langley" in the Authority's submissions.

seems that the cost principle is designed to minimise the extent to which new entrants can enter the market".[53]

- Mr Elliot Morley, the Minister, in reply to Mr Lansley:[54]

> "That was an interesting contribution about how the cost principle is applied and I accept that there is a debate about how it should be done. The Bill's approach is that the cost principle is just that; it will be for Ofwat to sort out the detail, although as the hon. Gentleman rightly stated, a clear structure is laid out. It is to everyone's benefit that they understand what is involved.
>
> There is justification for the retail-minus approach, because water has been in regulatory control since 1989. It is not the same for the postal service; the hon. Gentleman accepted that there were differences between water and post, and that is a key difference. It is important to recognise, too, that assets still have to be paid for in the water industry and the undertakers have to recover costs. Our approach is a means to achieve a balance in the unique situation that applies to water, which has universal service obligations. I shall expand on the issue of assets and the impact on other customers in a moment".
>
> …
>
> "That approach is not unreasonable. We do not want to encourage people to compete who do not take a fair share of the infrastructure costs, because that would mean there were more costs on existing customers, who do not benefit from the competition. That is reflected in new section 66C, whereby licensees can enter if they can do things more cheaply than the current undertaker, which puts the onus on them to demonstrate their efficiency. A cost-plus system would allow inefficient entry into the market; there would be less emphasis on the need for efficiency because there would be an element of protection".[55]
>
> …
>
> "Amendment No. 251 would have the further effect of allowing an option of an agreement or determination on an access or wholesale price to reflect only the expenses and reasonable return the undertaker incurs in providing access or a wholesale supply to a licensee. That could effectively leave an undertaker's other customers exposed to the full impact of covering all the undertaker' s reasonable costs that are no longer recoverable from customers . . . now served by the licensee. Again, that would adversely affect other customers. We have put in place a costs principle that is crafted as far as possible to protect other

[53] House of Commons, Standing Committee D, Thursday 16 October 2003 (afternoon), Column 273
[54] *ibid* Column 274
[55] *Ibid*, Column 274

> customers from those impacts and to recognise the needs of those who are coming in for competition"[56].

The Tribunal's analysis

949. As with any question of statutory construction, we start with the words used, giving them their natural meaning.

950. It seems to be common ground that the mechanism for calculating an access price set out in section 66E is, broadly speaking, that the undertaker is entitled to recover (i) his expenses reasonably incurred in performing any duty under sections 66A to 66C: (section 66E(1)(a)) plus (ii) "the appropriate amount" as determined by the combined provisions of section 66E(1)(b), (2), (3) and (5) less (iii) ARRROW costs as provided in section 66E(4).

951. Albion's main contention is that the undertaker is entitled to recover, pursuant to section 66E(1)(a), the reasonable expenses incurred in performing the duties under sections 66A to 66C, which would include not only taking steps to make the necessary connections under sections 66A(2)(a), 66B(3)(a), and 66C(2)(a)(i) and (b)(i), but also the expenses of performing the duty of providing the supply (section 66A(2)(b) or section 66C(2)(ii)), or permitting the requested introduction of the water into the system (section 66B(3)(b) or section 66C(2)(b)(ii)). In addition, the undertaker is entitled to recover a contribution to overheads in the form of "the appropriate amount in respect of qualifying expenses" plus a reasonable return on that amount, less any countervailing financial benefits, under section 66C (1)(b), (2) and (3). From the resulting amount the ARROW costs fall to be deducted under section 66E(4).

952. The Authority's alternative construction is that in section 66E(1)(a) "the expenses reasonably incurred in performing any duty under sections 66A to 66C above" refer to "the steps" to be taken by the undertaker under section 66A(2)(a), section 66B(3)(a), and sections 66C(3)(a)(i) and (3). The combined effect of section 66E(1)(b), (2), (3) and (5) is that, leaving aside costs such as the costs of connection dealt with under section 66E(1)(a), the starting point for calculating the access price is the retail price, from which is to be deducted ARROW costs under section 66E(4).

[56] *Ibid*, Column 275-6

953. Aquavitae's principal submission is that although section 66E may *in practice* mean that the retail price forms the starting point to the calculation, the retail price is required to be reasonable and cost-based. Secondly, submits Aquavitae, the Authority's view of ARROW costs under section 66E (4) is far too narrow.

The role of section 66E(1)(a)

954. Although we accept that Albion's approach is arguable as a matter of construction, at this point in the analysis we prefer the Authority's view that section 66E(1)(a) refers to the expenses (such as connections etc) incurred by the undertaker in order to allow the relevant supply to take place at all, rather than all the expenses incurred by the undertaker in supplying and/or transporting the water in question.

955. For example, in a common carriage context, the relevant duty is "to permit the introduction of that supply of water" into the undertaker's system (section 66B(3)(b), section 66C(2)(b)(ii)). A duty "to permit the introduction of" does not seem to us to be a particularly apt form of words if the intention is that, on the basis of those words, the undertaker recovers the cost of transporting (and possibly treating) the water as "expenses" under section 66E(1)(a) rather than, as the Director submits, under the mechanism of section 66E(1)(b), (2) and (3). Albion's contention that it is basically under section 66E(1)(a), rather than pursuant to section 66(1)(b), (2) and (3) that the undertaker is remunerated for the water supply and/or transport (and possibly treatment) of the water, also tends to imply that those services are to be provided "at cost", without any return since it is difficult to construe the word "expenses" in section 66E(1)(a) as including a return or profit element, having regard to the fact that where the draftsman intended to allow for a reasonable return, as in section 66E(1)(b), that is provided for in express words. On Albion's contention, the "reasonable return" referred to in section 66E(1)(b) would apply only to the rather vague "contribution to the undertaker's general functions" which, in Albion's submission, is what section 66E(1)(b) is referring to. We do not think Albion's construction fully takes account of these difficulties.

956. Our view, looking at the scheme of section 66E as a whole, is that subsection (1)(a) refers to the additional specific expenses – such as connection costs – reasonably

incurred by the undertaker by virtue of the fact that it has been requested to supply water or permit the introduction of water into its supply system

957. On that approach – which is essentially the Authority's approach – in our view the remainder of section 66E has a natural logic. Leaving aside additional expenses such as connection charges dealt with under section 66E(1)(a), it seems to us that, on the wording of the remainder of the section, the access price is to be calculated by (i) taking a starting point figure, which is to be determined by the combined effect of section 66E(1)(b), (2), (3) and (5); and (ii) deducting from the starting point figure the ARROW costs referred to in section 66E(4). That seems to us to be the natural meaning of the section, as a matter of construction.

958. That however still leaves two problems: (i) what is the starting point under section 66E (1)(b), (2), (3) and (5): and (ii) how are ARROW costs to be determined under section 66E(4)?

What is the starting point in the calculation?

959. The Authority in effect concedes that on the wording of section 66E(1)(b), (2) and (3) it is only by an indirect route that one could arrive at the conclusion that the starting point for the calculation is the incumbent undertaker's retail price. According to the Authority, "the appropriate amount" in section 66E(1)(b) and (3)(a) does not refer to the retail price, but since in section 66E(1)(b) one has to add "a reasonable return" on that amount, one arrives in effect at the retail price as the starting point for the calculation.

960. On the other hand, we see force in Aquavitae's contention that section 66E nowhere refers to the retail price. Section 66D(3) and the heading to section 66E refer to "the costs principle". In our view a 'costs' principle is at first sight a principle based on costs, not on price. Similarly the use of the word "recover" in section 66E(1), (3) and (4) suggests to our mind costs, not price. While it is natural to "recover" costs, it is perhaps less natural to speak of "recovering", as distinct from "charging", a price.

961. If one starts with section 66E(1)(b), the undertaker is entitled to recover from the supplier (the licensee) two elements: (i) "the appropriate amount in respect of qualifying expenses"; and (ii) "a reasonable return on that amount". That, in our view, arguably requires those two elements to be separately ascertainable. "Qualifying expenses" are "expenses whether of a capital nature or otherwise that the undertaker has reasonably incurred or will reasonably incur in carrying out its functions". The definition of "qualifying expenses" is thus widely drawn, but is subject to the qualification that such expenses must be "reasonably" incurred, the word "reasonably" appearing twice in section 66E(2). The appropriate amount is similarly the amount which the undertaker "*reasonably* expected to recover from relevant customers" but can no longer do so because those customers are now supplied by the third party supplier: see section 66E (3), and the definition of "relevant customers" in section 66E(5).

962. Putting those elements together, what the undertaker may recover as the starting point under section 66E(1)(b) seems to us to be: (i) the amount the undertaker could *reasonably* have expected to recover from the customers now being supplied by the licensee in respect of the *expenses*, including capital *expenses*, *reasonably* incurred or to be *reasonably* incurred by the undertaker in carrying out its functions; and (ii) a *reasonable* return on that amount (emphases added)[57]. In other words, conceptually it seems to us plain on the meaning of the section that the starting point for calculating what the undertaker is entitled to recover from the licensee is its *reasonable* costs plus the *reasonable* rate of return that it could *reasonably* have expected to recover from relevant customers, but can no longer do so because the licensee is supplying those customers. Thus the amount to be recovered by the undertaker must be cost-based. Further, the fact that the words "reasonable" or "reasonably" occur four times in section 66E(1)(b), (2) and (3) indicate to us that the constituent elements in the calculation must be reasonable.

963. It may well be that the sum of the expenses (i.e. costs) reasonably incurred or to be incurred by the undertaker which he reasonably expected to recover from the relevant customers in question, plus a reasonable rate of return, will in many cases equate to the

[57] We leave out of the analysis the further possible deduction of possible "financial benefits" referred to in the latter part of section 66E (1) (b).

retail price. But analytically one arrives at the retail price as "the starting point" only on the basis: (i) that the costs which the retail price is intended to recover were or will be reasonably incurred; (ii) that the undertaker could reasonably have expected to recover those costs from the customers in question; and (iii) that the return on the resulting amount is itself a reasonable return.

964. In normal circumstances it may be that the regulatory system will ensure that each of those requirements is satisfied. Thus, it may well be the case that a given retail price, properly regulated, will fulfil those requirements. But it does not seem to us that on its wording, section 66E would *automatically* preclude a challenge to the amount demanded by the undertaker from the licensee, based on the grounds that the amount was calculated on the basis of costs not reasonably incurred, or was not reasonably related to the costs of supplying the relevant customers in question, or was based on an unreasonable return.

965. That construction of section 66E is fully in line with the evidence about the consequence of an ECPR-type approach before the Tribunal. Both experts, and virtually all commentators, accept that if a retail-minus type approach is to be adopted, the "retail" element in the calculation needs to be set at a reasonable level, otherwise "monopolistic" elements such as excessive profits, inefficiencies or cost misallocations are simply passed on to the entrant, as shown in more detail in our discussion of ECPR above. We find it impossible to accept that Parliament could have intended that the starting point in the calculation could be an unreasonable or excessive retail price. Similarly we would not expect Parliament to disapply domestic and EC competition law on excessive pricing without express wording. Parliament, in our view, went out of its way to safeguard the position by providing explicitly that the calculation of the "appropriate amount" had to be cost-based and reasonable. Parliament could easily have provided explicitly that the starting point was the retail price *per se*, but did not do so.

966. As to the Authority's fear about regional averaging, we reiterate that our specific findings as regards "regional averaging" are made in respect of prices for large users of non-potable water in Wales, in the specific context of those 'bespoke' systems serving one or two customers. Our findings in that regard are in the context of the specific

issue of the costs attributable to the Ashgrove system. Our more general comments above about regional averaging as regards large potable users are made in response to certain general arguments put forward by the Authority about ECPR, but we are not considering large potable users in this case, nor are we considering customers within the "tariff basket". Whether or not for a specific large potable user a particular retail price would satisfy the requirements of section 66E(1)(b), (2) and (3)(a) would depend on the facts of a particular case, and is not an issue before us.

967. In those circumstances, we accept Aquavitae's submission that although section 66E on its true construction may, indirectly and by a somewhat roundabout route, produce a result that is equivalent to a "retail-minus" calculation, that is subject to the important qualification that the retail price in question must be cost-based and reasonably calculated in the respects identified in each of the sub-sections 66E(1)(b), 66E(2) and 66E(3)(a).

968. Turning to the facts of the present case, Albion has challenged the reasonableness of the First Access Price of 23.2p/m³. We have found that that price is not shown to be cost-related, and that the evidence strongly suggests the price to have been excessive. We have also found that the same applies *a fortiori* to the 'retail' element used in the ECPR calculation, i.e. the price in the Second Bulk Supply Agreement of 26p/m³, and to Dŵr Cymru's existing retail price under the New Tariff (26.6p/m³), and to Dŵr Cymru's former retail price to Shotton Paper (27.2p/m³). On that basis, among others, we have found that the ECPR calculation in the Decision is unsafe.

969. On the view we take of the construction of section 66E, we do not think our conclusion as to the outcome of this case would have been different had that section been in force. In effect, to use the statutory wording, Albion's arguments in this case are to the effect that the costs (i.e. "expenses") on which the retail price used in the calculation was purportedly based were not reasonably incurred in relation to the non-potable supply here in question; or could not reasonably be expected to be recovered from Shotton Paper (e.g. because the costs in question were not reasonably attributable to that customer); or that the return implicit in the calculations is unreasonable (e.g. being 15 to 17 times higher than Dŵr Cymru's normal rate of return, even accepting Dŵr

Cymru's and the Authority's calculations of the capital values in question). We have, in effect, upheld those arguments in the earlier part of this judgment.

970. Where, as in this case, the evidence is that the 'retail' price used in the calculation was not reasonably cost-based, and the evidence strongly suggests the retail price to be excessive, we do not think it may safely be assumed, as the Director does at paragraphs 331 and 338 of the Decision, that the application of the Costs Principle set out in section 66E in the present case would give rise to the result arrived at by the Director in the Decision. To find otherwise would in our view deprive the words "expenses", "reasonable" or "reasonably" used several times in that section of any effective content.

ARROW costs

971. Section 66E(4) gives no guidance as to how the words "to the extent that any expenses can be reduced or avoided" are to be applied. In particular, there is no guidance as to the period of time to be considered or the unit of output to be assumed. In particular, there may be some significance in the words "can be" which are not necessarily the same as "are". The question of the practical application of section 66E(4) is not, it seems to us, a matter of statutory construction, but rather whether the approach adopted by the Authority in implementing section 66E(4) is a reasonable approach, having regard to the relevant legislation and all the relevant circumstances. We are not considering that issue in this case, since section 66E(4) was not in force at the relevant time.

972. We have held above that the approach set out in the Decision whereby the "avoidable costs" are to be found in the short-run avoided cost of no longer serving one customer tends by its nature in this case to eliminate existing competition from Albion and to prevent market entry, in particular by precluding Shotton Paper from benefiting from common carriage arrangements. On that basis, among others, including the difficulties and inconsistencies in the Authority's submissions about "avoidable" retail costs to which we have already referred, we have not been able to find that the approach in the Decision to "avoidable" costs is compatible with the Chapter II prohibition. We have similarly found that the finding in the Decision, that such an approach does not give

rise to a margin squeeze contrary to the Chapter II prohibition, cannot be sustained on the facts of this case.

973. In the course of our findings, we have also made reference, for illustrative purposes, to the Authority's published *Guidance* on how to calculate wholesale and access prices, and the indicative wholesale and access prices subsequently published in August 2005 by the various statutory water companies, on the basis that those documents reflect the approach adopted in the Decision. On the evidence, we have found that market entry could not realistically take place on the basis of the margins indicated by those documents.

974. To take one further illustrative example: Aquavitae refers to some of the published margins being of the order of 0.1 per cent. Arithmetically, Aquavitae would need a turnover of some £25,000,000 before its margin was sufficient to cover the salary of even one employee at £25,000 per annum. Entry on such a basis would seem to us to be wholly impracticable.

975. Since the purpose of the licensing provisions of the WIA91 is to facilitate market entry, albeit in a cautious way, it seems to us seriously open to question whether an approach to the words "can be reduced or avoided" in Section 66E(4) which effectively precludes virtually any entry at all is compatible with the purpose of the legislation in general or the consumer objective set out in section 2(2A)(a) and (2B) to protect the interests of consumers, wherever appropriate *by promoting effective competition* between persons engaged in the provision of water services" (our emphasis). Any "effective" competition seems to us to be highly unlikely, on the Authority's present approach. "Consumers", as the Authority submits, include large industrial users. The question whether the approach in the Decision is compatible with the intention behind the WIA91, as amended, arises quite apart from the further difficulty of the incompatibility of the approach in the Decision with the Chapter II prohibition, in relation to margin squeeze.

976. For the purpose of the present case we do not need to express a view about how precisely the expression "reduced or avoided" in section 66E(4) should be interpreted. That issue is not before us. The only issue that is before us is whether we are satisfied

that the approach in the Decision correctly reflects the Costs Principle as enacted by Parliament. We have already held that we are not so satisfied as to the calculation of the "retail" element. For the above reasons we are not so satisfied as regards the calculation of the "minus" element either. In our view, an interpretation of section 66E(4) which gives rise to a minus element which, in effect, precludes virtually any effective competition or market entry, is in potential conflict with the consumer objective set out in sections 2(2A)(a) and (2B) of the WIA91, and with the Chapter II prohibition, and thus open to serious question.

977. For that further reason we are not satisfied that the Director's conclusion in the Decision, namely that his approach would give rise to the same result were the Costs Principle to be applied, is correct.

978. We do not need to express a view as to the future relationship between the Chapter II prohibition and the provisions of sections 66D and 66E of the WIA91, since that does not arise in this case. We observe merely that the WIA91 does not dis-apply the Chapter II prohibition. Indeed, what are now sections 2(6A) and (6B) of the WIA91 resolve any conflict between the 1998 Act and the Director's duties under the WIA91 in favour of the former, not the latter. We note also that although section 66D(9) and (10) dis-apply to some extent certain powers of direction in relation to the Chapter I prohibition, those provisions do not dis-apply the Chapter II prohibition and expressly leave open the possibility of an interim direction being given in the case of a suspected infringement of the Chapter II prohibition under what was section 35(1)(b) of the 1998 Act[58]: section 66D(10).

979. We have reached the above conclusions without finding it necessary to make reference to the Parliamentary debates. The Parliamentary materials to which we have been referred do not, in our view, greatly assist on the questions on construction which arise. Even if we are entitled to consider them, we see nothing in those materials inconsistent with the views we have reached.

[58] The intention of the legislation under the WIA03 does not seem to us to be affected by the subsequent amendment of section 35 of the 1998 Act by S.I. 2004/1261.

980. For the above reasons we do not consider that the references in paragraphs 317 to 338 of the Decision to the Costs Principle constitute a safe basis on which to uphold the result which the Director reached.

XVI CONCLUSIONS

981. For the reasons given above we have reached the following conclusions:

(1) There is evidence before the Tribunal that the treatment cost of non-potable water on an average accounting cost basis was over-estimated in the Decision. However the Tribunal is prepared to assume, without deciding, that treatment costs are in the range 1.6p/m^3 to 3.2p/m^3.

(2) The matter of the "distribution" cost of non-potable water on an average accounting cost basis was not sufficiently investigated. In this respect the Decision is incorrect, or at least insufficient, from the point of view of the reasons given, the facts and analysis relied on, and the investigation undertaken, as regards in particular to the Director's conclusion in paragraph 302 of the Decision to the effect that it was not unreasonable to assume that the "distribution" costs of potable and non-potable water are the same.

(3) The evidence strongly suggests that the First Access Price was excessive in relation to the economic value of the services to be supplied, by reason of the absence of any convincing justification for the "distribution" costs included in the average accounting cost calculation.

(4) The cross-check as to the validity of the First Access Price by reference to ECPR in paragraphs 317 to 331 of the Decision cannot be safely relied on because (i) the 'retail' price used in the calculation is not shown to be cost-related, as regards the distribution element; (ii) the evidence strongly suggests that that price was itself excessive; (iii) the particular method of ECPR used in this case would eliminate existing competition and, in effect, preclude virtually any competitive entry, because the margins are insufficient; and (iv) the approach of the Authority in its evidence and submissions was not the same as that in the Decision. None of the justifications for an ECPR approach advanced by the Authority persuaded us that we could safely rely on the approach set out in the Decision in the circumstances of the present case.

(5) As regards the allegation of margin squeeze, the existence of a margin squeeze was not seriously disputed. The Director's finding at paragraph 352 of the Decision that nonetheless there was no breach of the Chapter II prohibition was erroneous in law and incorrect, or at least insufficient, from the point of view of the reasons given, the facts and analysis relied on and the investigation undertaken.

(6) It is unsafe to assume, as the Director does in paragraphs 331 and 338 of the Decision, that the Costs Principle set out in section 66E of the WIA91 supports the conclusion which the Director reached in the Decision, since (i) the retail price used in the calculation in the Decision is not shown to have been reasonably cost-based, and the evidence strongly suggests that that price was itself excessive; and (ii) the Director's interpretation of ARROW costs under section 66E(4) is open to serious question, since that interpretation would on the evidence preclude virtually any effective competition or market entry, and give rise to a potential conflict with the consumer objective under that Act and with the Chapter II prohibition.

982. It is now for the Tribunal to consider what consequential action, as regards orders and remedies, to take to conclude this case, having regard to the Tribunal's powers under paragraph 3(2) of Schedule 8 of the 1998 Act, together with any appropriate ancillary relief.

983. There is also the remaining issue of dominance and the associated question of essential facilities. In the Decision the Director was prepared to assume dominance, while expressing reservations as to whether Dŵr Cymru had a dominant position (paragraph 215). The Director did not believe that the Ashgrove system is an essential facility (paragraph 225). In recent submissions, the Authority has taken the stance that it is not yet in a position to take a final view on the issue of dominance which it considers to be outside the scope of the appeal. Dŵr Cymru adopts a similar position, and argues that how issues of dominance should be addressed, if at all, should be considered at a further case management conference. Both the Authority and Dŵr Cymru submit that it is not open to the Tribunal to make a finding of dominance under Schedule 8, paragraph 3(2)(e) of the Act. Albion submits that the issues of dominance and essential facilities are before the Tribunal and raised in the notice of appeal, and that the

Tribunal can and should deal with them, if necessary by making the appropriate findings.

984. The Tribunal's present view is that it is highly unsatisfactory for the issue of dominance to be left as it is, and for the issue of dominance to have become "detached" from the issues relating to abuse. A good deal of evidence bearing on the issue of dominance that was not before the Director is now before the Tribunal. In those circumstances the Tribunal proposes to consider with the parties how the matter of dominance should now be handled. To facilitate that consideration, Annex A to this judgment summarises non-exhaustively matters potentially relevant to the issue of dominance and to the most appropriate course to adopt in that regard.

985. Those and any other relevant applications or matters will be considered by the Tribunal at a further hearing on a date to be notified.

Christopher Bellamy Antony Lewis John Pickering

Charles Dhanowa 6 October 2006
Registrar

ANNEX A: DOMINANT POSITION

[Omitted]