12 Views of third parties

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Introduction

12.1. We invited views from water companies, Ofwat, Customer Services Committees, local authorities, unions, agencies, associations, other bodies and the general public. This chapter summarizes the evidence we received. We held hearings with Southern CSC and Water UK.

Water companies

Bristol Water plc

12.2. Bristol Water plc (Bristol Water) said that it was a WoC, but a little larger than MKW. Bristol Water said that it had seen the draft Water UK evidence to the CC. It concurred with the issues raised in the Water UK submission.

12.3. The Ofwat approach had been largely predetermined by the assumption of major price cuts to be delivered by the industry before even hearing the arguments. A considerable amount of the consultation with customers was thereby wasted and it was by no means certain that customers had received what they wanted from the review.

12.4. The operational efficiency gains sought were unreasonably high. In addition, costs had not been recognized in some cases due to their uncertain nature; the climate levy and increased cost of debt collection being examples. The targets were higher than previously achieved even though managements would have eliminated the more easily identified cost reductions first. It believed that the econometric work used to assess the efficiency gains achieved by each company was flawed.

12.5. Capital efficiencies had an immediate double-digit percentage target. This was implausible given existing contractual situations and the lack of planning time between the price limit finalization and the need to deliver outputs. The cost base report used to set efficiency targets by company was flawed. The industry found that the models covered only a small proportion of capital programmes and instructions were open to wide interpretation. The method used to review opex and capex efficiencies independently had led to a potentially serious mis-statement of efficiency frontiers.

12.6. Depreciation calculations made by Ofwat could not be replicated using the information given. Ofwat figures were materially below those computed by Bristol Water even when adjusting for the asset lives used by Ofwat and incorporating their efficiency targets. The use of the BE concept was one of many techniques used to reduce K factors. No consideration appeared to have been given to cross-generational subsidies with the current customers benefiting from 'engineering safety' margins in old assets but nothing passed on in current asset additions.

12.7. Capital maintenance charges allowed were inadequate to maintain the asset network. The company believed that there had been inadequate allowance for the effects of customers opting for meters. It was not credible to expect fewer customers to opt for meters when they were free than when they were charged for. Ofwat's expectation of operating profit was overstated. Revenues were overstated by including higher revenue from unmeasured customers who in practice switched to meters and provided lower income. Costs were understated by assuming excessive efficiency gains, omitting costs and understating capital maintenance charges.

12.8. Ofwat's interest charges had been understated by a combination of overstated operating cash flows and understated borrowings with arbitrary adjustments made to opening balance sheets. The effect of this had been to lead to Ofwat materially overstating interest cover, a fundamental financial ratio in assessing the capability of the company to finance its functions—an obligation of the Director.

12.9. Bristol Water said that it had been told it had benefited from a 0.5 per cent supplement to reflect its high levels of service. The company said that, due to the lack of transparency of the Ofwat financial calculations, it could not be certain how this factor was included. The Director had used assumptions in all areas that appeared to be on the aggressive side of a normal distribution of expected outcomes. Combined over a number of assumptions, this led to Ofwat projections that were considerably more optimistic than could be expected to be the case.

Folkestone & Dover Water Services Limited

12.10. Folkestone & Dover Water Services Limited (Folkestone & Dover Water) said that its largest shareholder was General Utilities Plc which had a minority interest in MKW. Folkestone & Dover Water said that it had been a party to a proposed merger investigated by the MMC in January 1997.

12.11. The general thrust of the Folkestone & Dover Water arguments put to the MMC in 1996 in connection with the proposed merger had been the need to optimize the scarce water resources in Kent; the need to produce a more integrated supply network as part of the resource optimization; the need to achieve better demand management (education, metering and leakage reductions); and a desire to improve standards of service to customers.

12.12. Its primary concern in making representations now was to ensure that, in assessing the proposed MKW price determination, the CC recognized the importance to Kent of MKW being able to continue to play its part in achieving those shared objectives. In order to optimize the scarce water resources in Kent, a better-integrated supply network was essential. It understood that there was a poor capacity to transfer resources within the company's areas and this view was reinforced by the operating problems experienced by the company in August 1999. Poor capacity to transfer water could put at risk the ability of MKW to deliver bulk supplies, restrict the ability to achieve future inter-company transfers and lead to suboptimization of individual water sources. To alleviate these risks, and in recognition of the scarcity of water resources in Kent, the company urged the CC to pay special regard to any arguments put forward by MKW which suggested that the proposed price limit would restrict resource transfer capacity in the MKW area.

12.13. In order to achieve better demand management performance (to alleviate water resource constraints), MKW would be faced with: a leakage target set by Ofwat; a need to maintain underground assets to ensure no deterioration in their performance; and a need to satisfy demands from domestic customers to exercise their option to install meters.

12.14. In the absence of knowledge about MKW's confidence in maintaining underground assets and meeting leakage targets, it was difficult to comment but it was possible to make comparisons between domestic metering penetration rates at Folkestone & Dover Water and MKW. Folkestone & Dover Water had embraced metering and achieved a domestic penetration of 29 per cent of supplies compared with 14 per cent at MKW. Much of this difference could be attributed to the availability, since 1996, of a free meter option to Folkestone & Dover Water customers compared with a charge to MKW customers of £150 for an optional meter installation. It appeared likely that the availability to all customers of a free option for installing a meter from April 2000 would unlock demand for domestic meters in the MKW area. The Director had assumed 15 per cent of domestic unmeasured customers would opt for a meter during the next five years (10 per cent at Folkestone & Dover Water) which appeared to be a low estimate to the disadvantage of MKW.

12.15. On the issue of customer service, the methodology for determining the price limit already included a penalty for MKW on grounds of poor performance. As a neighbouring company, which had consistently achieved the best standards of customer service in the industry, its only comment was that improving customer service was more costly than maintaining existing standards and customers were not always capable of discriminating between companies.

12.16. The three local companies, South East Water, MKW and Folkestone & Dover Water had been set operating cost efficiency targets of 22 per cent, 20 per cent and 20 per cent respectively which were among the highest targets in the industry. In terms of improvement in unit operating costs across the industry since 1992/93 (the base year for the previous Periodic Review), the best performance was MKW (37 per cent reduction) followed by Folkestone (22 per cent reduction). South East Water with a 13 per cent reduction in unit costs was an above-average performer. Despite these achievements in unit operating cost reductions, the three local companies had stringent new targets. It seemed likely that in assessing efficiency, the Ofwat methodology failed to recognize the local cost factors shared by these companies.

Northumbrian Water Group Plc

12.17. Northumbrian Water Group plc (NWG) said that it was the parent company of both Northumbrian Water Limited (Northumbrian Water) and Essex & Suffolk Water plc (Essex & Suffolk Water). NWG said that price cap regulation provided companies with incentives to beat the price cap by allowing them to retain the proceeds of outperformance until the price cap was reviewed. It was important to allow shareholders to benefit first from cost reductions for a sufficient time, so that customers might benefit later. The RPI–X model, under which the water industry was privatized, went further and anticipated efficiency gains. This naturally reduced the incentive properties of a simple price

cap by immediately transferring to customers assumed gains, whether the company actually made them or not. The company was now in the position of needing to make efficiency gains equal to the regulator's forward assumptions merely to avoid losing profits and destroying shareholder value by making returns below its cost of capital. Only if the company were able to outperform the regulator's assumptions would it be able to increase its profits and make returns above the rate of return set by the regulator.

12.18. In March 1999, Ofwat had acknowledged the problem of incentives for operating cost outperformance by issuing proposals for an incentive allowance in MD145. However, NWG believed that five years was too short a period for company retention of its outperformance, particularly as the simplest efficiency measures had already been taken, and further efficiencies would increasingly rely on investments in new technology. Unfortunately Ofwat had deviated substantially from the MD145 Incentive Allowance methodology several times in the course of preparing the draft and final determinations and NWG was concerned that there did not appear to be a settled coherent methodology in place.

12.19. A crucial part of preserving incentives was stability in the regulatory framework, which implied a lack of retrospection, and the maintenance of predictable regulatory outcomes. NWG's experience of the 1994 final determination was that it did not represent a clear regulatory contract. For example, companies were provided with insufficient detail of Ofwat's assumptions regarding the timing of outputs. NWG was concerned that differences between EA, DWI and Ofwat expectations, evident during the Periodic Review process, might persist during the AMP3 period. This could ultimately lead to a quality regulator prosecuting for failure to deliver outputs that have not been included in the price limits. Its concern had been increased on receipt of a letter dated 4 January 2000 from the EA. This had asked companies to note that 'the Agency is not bound by Annex E of the Final Determination', and stated that 'any additional (environmental quality) problems identified from now on will be regarded as a failure to maintain the necessary infrastructure'. It was not acceptable that disputes between regulatory bodies should place companies in an invidious position. NWG's final concern with regard to the regulatory framework was the lack of a satisfactory appeal process. The current use of the CC was complex, lengthy and demanding of senior management time. A more streamlined appeal process that allowed for more limited appeals on specific aspects was desirable.

12.20. NWG said that Ofwat assumed substantial reductions in base opex, due to a flawed methodology for establishing the base costs in 2000/01, in addition to the headline assumptions that Ofwat had made for future opex efficiency improvements, making the total opex target extremely difficult for some companies to achieve, let alone outperform. NWG strongly objected to Ofwat's retrospective opex adjustment in respect of the reprofiling of the quality outputs over the 1995 to 2000 period.

12.21. Ofwat had on previous occasions pointed to analyst opinion and the market response as evidence that the allowed rate of return was consistent with the industry's true cost of capital. The substantial falls in share price across the sector following the final determination suggested on this occasion that the market considered Ofwat's allowed rate of return to be below the true cost of capital. Ofwat had selected low values for the risk-free rate, ERP and equity beta, based on spot market evidence rather than longer-term averages. It was widely accepted that spot market values of index-linked gilts were strongly affected by institutional factors peculiar to the UK. Internationally, index-linked gilt yields were more consistent with long-term averages, suggesting that recent yields in the UK were not good indicators of the risk-free rate. Ofwat had failed to take account of the evidence for an inverse relationship between the risk-free rate and the ERP. Instead, Ofwat had assumed that values of both had reduced. Ofwat accepted that the CAPM methodology failed to capture asymmetric risks but maintained that asymmetric risks were not significant. Ofwat also claimed that quoted companies in other markets were also subject to asymmetric risks, and that this must therefore be a factor built into expected market returns. However, these companies were able to reflect common input price or demand shocks in competitive market prices, and to defer investments, unlike regulated utilities with capital programme obligations, operating under a price cap.

12.22. Both Northumbrian Water and Essex & Suffolk Water had consistently asserted that a single A credit rating should be the minimum assumption for financing of functions, rather than BBB assumed by Ofwat. This accorded with US experience and accepted practice in rate base hearings. Recently, NERA had shown that a single A credit rating was the optimum rating which minimized the cost of capital for the water industry.

12.23. NWG believed that Ofwat should be required to justify its assumptions where determinations were based on proforma balance sheets.

12.24. Ofwat had changed its approach to tax in the 1999 Periodic Review compared with that used in the 1994 Review, where a tax wedge was assumed, linked to a pre-tax allowed rate of return. In the 1999 Review the allowed rate of return was quoted as post-tax, and tax was calculated as a cost. If Ofwat considered it justifiable to reduce allowed future opex to claw back supposed gains due to reprofiling in AMP2, Ofwat should also take into account at the next review differences in the profiles of forecast and actual AMP3 tax.

12.25. Ofwat had been pursuing a minimalist strategy with regard to capital maintenance. Unless serviceability had reduced, the price cap allowance for capital maintenance would not be increased above that previously spent, and might be reduced. This paid no regard to the long-term condition of assets, which might deteriorate substantially before serviceability was affected, creating a large investment backlog legacy for future customers. Ofwat had not attempted to justify the policy as economically efficient and, given the enormously long asset replacement cycles implied by the current industry levels of capital maintenance, NWG found it difficult to see how this could be the case.

12.26. Ofwat's licence amendment was proposed in recognition of the risk exposure to large parts of the water industry, arising from a greater number of free meter optants than assumed by Ofwat in companies' final determinations. NWG therefore welcomed this, and also welcomed the intention to generalize the licence amendment to amend the calculation for all revenue items. However, both Northumbrian Water and Essex & Suffolk Water had expressed the view to Ofwat that the licence amendment should not be linked to acceptance of the final determination.

12.27. Ofwat had excluded from consideration in the final determination any allowance for the cost of any obligations where there was any uncertainty over scope or timing (for example, for cryptosporidium monitoring) even though a reasonable estimate could have been made and allowed for in the price cap. This increased the probability of interim determinations. There was a danger that regular annual reviews could effectively replace Periodic Reviews.

Severn Trent Water Ltd

12.28. Severn Trent Water Ltd (Severn Trent) said that the outcome of the Periodic Review had been prejudged early in the process with the expectation of large cuts emphasized by the regulator from the beginning. Such prejudgement severely discredited the Periodic Review process and indicated that company information, advice from regulatory bodies (including the Secretary of State) and consideration of changes in the sector, such as the review of competition, were always going to have minimal impact.

12.29. Ofwat's approach to estimating the cost of capital had been overinfluenced by recent (short-term) market conditions. As such it was inherently unstable, risked significant price fluctuations at successive reviews and created additional regulatory risk. Additionally, the methodology adopted, in particular the undue weighting given to short-term trend data, was inconsistent with established regulatory practice as evidenced by the approach previously taken by Ofwat as part of the 1994 Review and in successive Commission investigations. This lack of consistency only served to exacerbate and add to the regulatory uncertainty which already existed.

12.30. Apart from important technical issues, not least the lack of a robust statistical basis, a major concern was Ofwat's failure to recognize the underlying reality of the industry's cost structure. Achievement of significant savings required substantial manpower reductions, and it was a matter of real concern that no provision had been made for the unavoidable severance costs that would be incurred. In Severn Trent's case alone, these would amount to more than £50 million over the AMP3 period.

12.31. The approach taken by Ofwat to capital maintenance funding was reactive and backward looking. As such it fell short of the longer-term perspective and strategic approach advocated by the Secretary of State. Without that necessary longer term perspective, it risked a return to the stop/go investment policies which applied in the industry pre-privatization. It also had serious implications for longer-term price stability.

12.32. There were, also, important process and procedural issues which Severn Trent asked the CC to consider as part of its investigation. Over the five years 2000 to 2005 Severn Trent alone would invest close to £2 billion (against an industry total of £15 billion). It was also reasonable to expect that a similar level of investment would be needed in the quinquennium following 2005. There was the further point that, by 2005, most companies would have utilized the borrowing capacity within their balance sheets with the result that the pressure for investment would feed directly into prices. This meant that if prices beyond 2005 were to be constrained, which was clearly in the public interest, then all parties, government regulators and companies must work together to reduce market perceptions of the regulatory and political risks attached to that investment and to ensure that incentives for cost efficiency, output delivery, and services performance were maximized.

12.33. To achieve this required a regulatory framework based on the principles of predictability, transparency and consistency. These principles were strongly endorsed by the Government as evidenced in recent consultation on the reform of utility regulation. This raised the question whether the current reference process should be widened to allow companies to challenge specific matters of principle, or untoward and sudden changes in regulatory methodology, before these became enshrined as part of a final price cap. In conjunction with Water UK, this was something Severn Trent had been pursuing with the Government. In order to promote the necessary predictability, consistency and transparency in regulatory arrangements, it was also a matter which the CC should consider as part of its wider public interest remit.

12.34. The determination had placed a high level of risk on companies, because of the size of efficiency targets; arbitrary adjustments made to costs and balance sheets; the inadequate or lack of funding for known obligations and costs; and the potential for further regulatory or political changes which added to company's costs, without any compensating increase in prices.

12.35. Companies faced the risk of failing to meet expected cost levels or to deliver required outputs, with little corresponding upside. Financial markets recognized the risks, which accounted for companies' market valuations being below regulatory capital values. Regulation was not currently achieving the Government's objectives, set out in its consultation process on regulation, of predictability, transparency and consistency.

12.36. At a strategic level, society would demand ever-increasing health protection, environmental improvements, and security against more volatile climate. It was also essential that adequate provision was made for maintenance, to avoid a backlog building up, which would lead to large increases in customers' bills in the future to restore the position. It was, therefore, critical that investment in these national assets was attractive**.** This meant that returns must be aligned to the requirements of the market, and that determined efforts should be made to reduce political and regulatory risk.

12.37. It was clear from the performance of industry shares since the final determination—with valuations significantly below RCV—that the market believed that there was too much risk and too little return.

12.38. Ofwat should stop experimenting with the methodology for the cost of capital, and return to the methodology which the Commission had consistently supported. In addition, it was crucial that Ofwat and the Government worked to reduce the political and regulatory risk. Substantial progress to achieve this could be made by:

(a) extension of interim determination provisions;

(b) legislative provisions to enable companies to challenge matters of general principle, before they were incorporated into the final determination, allowing increased scope for challenge to regulatory process as well as outcome; and

(c) licence changes or new legislation to ensure that the key elements of the price-setting process could not be subject to late and arbitrary changes, by codifying the principles to be applied on: the cost of capital and allowed returns; the regulatory asset base; incentive mechanisms relating to the distribution of past out performance and the treatment of obligations not included within the price review process.

12.39. Companies should be given the ability to propose licence changes, which could be referred to the CC if the regulator refused permission. Companies could, therefore, seek a fair hearing for proposals which might reduce regulatory risk, but which did not find favour with the regulator's own agenda.

South West Water Limited

12.40. South West Water Limited (South West Water) said that it wished to comment on the cost of capital assumptions made by the Director in his 1999 determinations.

12.41. Evidence provided to the CC by Water UK pointed to the concern that companies were exposed to asymmetric risks, due to the Director's selecting tight assumptions in determining funding for both existing and new obligations. As a result, South West Water considered that the cost of capital allowed by the Director was too low, as appeared to be evidenced by the stock market reaction since the draft price determinations were published. The Director had made a central cost of capital assumption of 4.25 to 5.25 per cent in 1999, compared with a range of 5.5 to 6.2 per cent in 1994. The MMC had expressed the view in 1994 that the pre-tax cost of capital for the water industry was in the range of 6 to 8 per cent. Taking the Director's assumption that an optimal WACC required gearing of 50 per cent, the post-tax cost of capital assumed exceptional importance.

12.42. The Director took the post-tax cost of debt to be in the range 2.8 to 3.5 per cent real. It was interesting to compare this assumption with other utility regulators' assessments: Ofgem (4.1 to 4.45 per cent), The Office of the Rail Regulator (ORR) (3.34 to 4.5 per cent) and the MMC in the Vodafone case (4.2 to 4.8 per cent). In addition to taking a low assumption for the cost of new debt, the Director failed to take sufficient account of companies' existing 'historic' debt costs. In the case of South West Water, the nature and extent of capital programme funding requirements from 1991 made it essential to borrow long at competitive interest rates. The approach adopted by the Director in recognizing historic or 'embedded' debt, was to collect industry data on fixed-rate debt at 1999, and apply an 'average premium' to each company relative to the level of fixed debt in the balance sheet. This approach, applying industry average debt costs over several years, was in sharp contrast to company-specific judgements applied elsewhere in the price determination process, and further contributed to the overall cost of capital assumption being unrealistically low.

12.43. In summary, South West Water believed that the CC should pay particular attention to the assumptions of the Director in determining the cost of capital for water companies at the 1999 price review, in the light of evidence that insufficient regard was taken of asymmetric risks as recognized by investors and demonstrated by stock market movements since July 1999.

Southern Water Services Limited

12.44. Southern Water Services Limited (Southern Water) said that adequate expenditure on asset maintenance was vital to preserve service levels, safeguard health and safety, and provide a platform for delivering operating cost efficiencies. The system for assessment needed to be robust, forward looking, and ensure that investment took place early enough to avoid deterioration of performance in future years. The system used by Ofwat was simplistic and focused heavily on past spending levels. It translated past spending into future requirements with only minimal reference to the actual performance of the assets. The range of measures used to look at performance was extremely limited.

12.45. Southern Water had devised a system which looked at the performance of its assets in delivering their required outputs from all stakeholder perspectives. All assets were evaluated under this methodology and it formed the basis of the plan to Ofwat. In common with the approach taken for the rest of the industry this plan was ignored in favour of the simple average approach. The company believed it was in the public interest for the price setting process to focus on a system which was based on proper, prioritized plans for maintenance. This would safeguard performance into the future as opposed to the current simplistic short-term approach which had the potential to store up significant problems for the future.

12.46. All companies were required to undertaken extensive customer research as part of the Periodic Review. Southern Water believed that this was potentially a valuable process. It was concerned, however, that for the second consecutive review these views had been ignored. It accepted that the

Director took a different view on the scope for a price cut, but against the background of customers' desires for specific improvements in preference to price cuts, it seemed against the public interests to push the price cut to the extreme and exclude these improvements. For any future consultation process to have credibility the regulator ought to have a duty to show how he had taken the results into account.

12.47. Southern Water believed that the Director had taken an opportunistic short-term approach to setting the cost of capital. The regulator's approach to this area should be predictable and consistent in order to reduce the cost of capital in the long-term interests of consumers, companies and shareholders.

Thames Water Utilities Limited

12.48. Thames Water said that it had decided not to refer the outcome of the Periodic Review to the CC because of the potential cost of a referral; the likelihood of a favourable outcome; the uncertainty created in the capital markets; and the fact that the outcome could only be referred as a package. Specific issues could not be referred.

12.49. Thames Water said that there were a large number of issues, either Thames-specific or of an industry-wide relevance, which it considered had been inappropriately dealt with by Ofwat. However, in this submission it dealt with only the cost of capital, which it considered to be of major importance to the sound regulation of regulated utilities.

12.50. Ofwat had introduced an approach for determining the allowed cost of capital for the current review which placed emphasis on forecast, rather than historic, interest rates. The approach had entailed considerable subjectivity and the selective use of evidence. It differed from that adopted by other regulators and that advocated by most independent advisers. The resulting cost of capital had been considered by many experts to be too low and did not provide the necessary incentives for investment.

12.51. Thames Water said that the Director had said that he had consulted widely in the financial markets and taken advice from both his financial advisers, Singer & Friedlander, and a panel of senior industrialists. The Director also said that the water industry was perceived by investors as being relatively low risk.

12.52. Thames Water said that Ofwat's approach to the setting of a cost of capital for the next five years, which was based on the Director's market forecasts, generated figures that were too low. This had been demonstrated already by the significant increases in real interest rates. The water industry was not a low risk, as Ofwat claimed. Regulatory risk did exist, was asymmetric and was not reflected in Ofwat's beta figures. Different licence conditions also added differential risk for some companies. The resulting cost of capital in the final determination was below the nominal cost of debt. This gave a disincentive to invest in the review period, which was to the long-term detriment of all parties.

12.53. Thames Water said that the CC should review Ofwat's approach to this component of the Periodic Review and should recommend an appropriate longer-term approach that promoted independence from individual regulators' opinions and ensured an adequate return consistent with all available evidence. It should also suggest an approach for future reviews which ensured consistency over time and restored the confidence of industry managers and investors.

12.54. Thames Water said that Ofwat's approach to the allowed cost of capital in the final determination, also failed to properly recognize companies' specific risks. It had ignored licence differences and the potential impact of expected quality obligations in the detail of the determination, and had failed to recognize the associated risk in the allowed cost of capital. It had also failed to minimize the risk to companies by ignoring company-specific audited data in favour of its own general assumptions.

12.55. Thames Water said that Ofwat had said that it had not considered it necessary to include any headroom in the cost of capital for two principal reasons. First, in the assessment the mid-point of ranges had been used. Secondly, Ofwat's approach to 'bankability' had incorporated some margin on financial indicators compared with those consistent with investment grade rankings. Also, the Director did believe that companies with more risky licences, following amendments in 1994, should have a higher cost of capital. Any new quality obligations could be taken into account at the next review (through the logging up process) or, if material, at an earlier interim determination. Ofwat was of the view that major uncertainties in the areas of meter optants, increased cost of bad debts following loss of the power to

disconnect, and the cost of administering arrangements to protect vulnerable groups had been addressed through Notified Items.

12.56. Thames Water said that Ofwat had made insufficient allowance for risk in the determination and its assumed ERP was too low. Ofwat's determinations failed to allow for the increased risks of capital inflation which some companies had accepted in their licence. Perversely, companies which had retained protection against high inflation had received extra funding compared with those which accepted the risk. Ofwat had allowed insufficient headroom in the determination to reflect the relative risks faced by companies, in particular arising from unfunded new obligations, reduced revenue, and regulatory and political risk. Ofwat's claim to have provided headroom in its allowed cost of capital was flawed. Use of mid-range assumptions did not imply headroom and Ofwat's 'bankability' tests were misleading when based on artificially adjusted balance sheets.

12.57. Thames Water said that the CC should reconsider Ofwat's approach to the funding of risks and obligations. It believed that an approach which disadvantaged companies facing greater risks and ignored known costs, simply because their extent was less certain, was fundamentally flawed.

Dwr Cymru Cyfyngedig

12.58. Dwr Cymru Cyfyngedig (Dwr Cymru) said that, while it had concerns over the detail of many aspects of the Periodic Review 1999 methodology, its primary concern related to the comparative efficiency studies of operating costs. In the final determination Ofwat had stated that the structured and open way in which the models had been developed, checked for both operational and statistical plausibility, subjected to rigorous external challenge and refined in the light of debate, gave confidence that the comparisons were fairly drawn. Dwr Cymru had commissioned work which demonstrated that this was not the case. These reports, by Professor John Cubbin, Professor James Davidson, NERA, PricewaterhouseCoopers and Montgomery Watson, had been published in September 1999. It believed that the reports showed that the Ofwat methodology, results and conclusions had been fundamentally flawed and had not been a robust basis for setting catch-up operating cost targets. Ofwat had placed great reliance on the results of these econometric models even though it was clear that they were not robust over time, did not conform with industry engineering knowledge or even, in some cases, common sense.

12.59. The final determination had been acceptable as a whole by Dwr Cymru. However, it had had grave reservations over the efficiency targets which it considered not to have been soundly based. If there had been an opportunity for a single issue to be referred, Dwr Cymru would have appealed against its operating cost efficiency targets. Any investigation into the price limits set for both MKW and SESW had to consider whether the Ofwat comparative efficiency methodology, and the resultant econometric models, were robust enough to predict efficient operating cost levels—more specifically, whether the models were robust enough to calculate an efficiency frontier or any company's position relative to the efficiency frontier and hence its potential for catch-up efficiency savings. It was Dwr Cymru's opinion that they were far from robust and any catching up identified by the models should be heavily discounted if not ignored.

Wessex Water Limited

12.60. Wessex Water Limited (Wessex Water) said that, although it had accepted the terms of the determination by Ofwat it did not believe that it was in the long-term interests of consumers, the environment or the industry. It considered that the price control implemented was essentially short-termist and, in particular, it believed that the initial price reduction was unsustainable.

12.61. Wessex Water, in common with many other companies, was disappointed with the account that had been taken of customers' views. From the outset of the review process, Ofwat had seemed determined to reduce prices in the year 2000. When asked, customers stated that they would welcome price cuts only if they did not prejudice service, long-term levels of maintenance, or environmental improvements and also so long as an initial price reduction were not followed by subsequent increases.

12.62. Ofwat's approach to the supply/demand balance was predicated on the view that growth should be self financing. It had been argued that companies in a truly competitive market would be expected to finance the costs of meeting new demands from increases in revenues. Wessex Water argued

that this approach was only workable in a perfect world where there were constant returns to scale; no indivisibility in investment; coincidental growth rates of base and peak demand; fully integrated asset systems, and exactly offsetting changes in demand between all customer segments at all locations. None of these conditions applied in the real world. In particular, firms in competitive markets had a choice over whether to supply or not—water companies did not; in most markets customers paid for incremental use—this was not the case for unmetered customers, and water companies could not easily differentiate prices, for example between new and existing customers, even when it was cost justified to do so.

12.63. Despite the theoretical shortcomings, Ofwat had chosen to allow for expenditure within price limits only up to a level which was covered by incremental revenue. This was unsatisfactory given that the marginal price to unmeasured customers was zero. Wessex Water considered that Ofwat's approach should be rejected in favour of determining what was the cheapest way of meeting new demands and changes to available supplies; how much of this cost could be offset by changes to measured sales and other contributions and the residual sum, if any, needed to be financed from the existing customer base.

12.64. Ofwat's approach also failed to recognize the cost of reducing leakage to the economic level and subsequently holding it there. Ofwat did not believe that this should have an impact on bills. Wessex Water disagreed, arguing that, whilst reducing leakage to the economic level might minimize future bills, this could not finance itself as no additional revenue was generated and operational cost savings were relatively small. Without any allowance for the necessary expenditure there was a risk that mandatory leakage targets would not be achieved and the probability was that use restrictions would increase.

12.65. Ofwat's approach to the review had been to reduce the rate of return to the cost of capital and to move companies towards what it regarded as an optimal level of gearing. Given the resulting loss of headroom, companies could only continue to raise new finance if they exceeded Ofwat's expectations on efficiency and obligations and the cost of finance was no worse than Ofwat predicted.

12.66. The history of the water industry had been that new environmental, customer or political risks consistently occurred during the course of a price review, adding to the cost of the business. In Wessex Water's case, these obligations had amounted to almost £80 million during the last five years. Without the ability to use headroom this would have resulted in interim determinations which would have added at least 3 per cent to customers' bills.

12.67. To counter this loss of headroom Ofwat had chosen to strengthen the interim determination process. Whilst this was helpful, the safeguards remained inadequate, particularly as Annex E of the final determination (which the EA did not seem to accept), had set out a protocol which required companies to take an adversarial role in challenging the need and timing of a scheme before a price review was triggered. If the company did not play this role, the documents suggested that 'the company … should be deemed to have accepted that it can absorb the implications of the change without increased price limits'. Given the lack of headroom, companies would have to play this role to secure adequate finance. It seemed inappropriate, however, for the water industry to challenge one of its regulators before it obtained funding from another.

12.68. The Commission had in the past concluded that it was important to consider the balance of risks when determining price limits. For example, in respect of South West Water in 1995, the MMC had concluded: 'we agree with the Director that an immediate and sudden convergence to the target rate of return could be detrimental to the company, adding to uncertainty and risk, with adverse effects on the company's ability to raise finance and ultimately on its customers.' Wessex Water concurred with this view. Ofwat's 1999 position jeopardized the ability of the industry to finance its statutory functions and the sustainability of incentive-based regulation, particularly as known obligations and new costs had been excluded from the determination.

12.69. Wessex Water believed that Ofwat had underestimated the cost of capital and adopted inappropriate means by which to determine its level. In terms of process, the company did not concur with Ofwat's view that greater emphasis should be placed on current market data than on historical averages. In reaching this view, Ofwat had stated that 'the market … discounts views about past trends of prices and yields as well as future ones'. Whilst this might be true in principle, the lessons of history were that markets were far from perfect and frequently misjudged future trends. It was only necessary to examine the return on government bonds over the last three or four years to see the extent to which the market could misjudge the future.

12.70. Moreover, if short-term rates were assumed now, then they must be at future price reviews as well. That being the case, the risk on the cost of capital in general, and the cost of debt in particular, was being transferred from the shareholder to the customer. This seemed inconsistent with long-term incentive-based regulation. Consequently, Wessex Water had expressed the view to Ofwat, which mirrored the position taken by the CC in the Calls to Mobiles case, which stated that 'longer-term averages … are … a more reliable basis upon which to derive expected future rates. Shorter periods, including the last two years or so, repeatedly exhibit significant volatility in both the real risk-free rate and equity premium' and 'Purely on the basis of historical data that is no strong reason to think that the recent fall in the real risk-free rates, or the recent rise in equity returns would be sustained for long.'

12.71. In line with this, Wessex Water used historic information on the ERP, the risk-free rate and the equity beta in assessing the appropriate cost of capital for the water industry. Wessex Water argued that the cost of capital lay in the range of 4.75 to 5.75 per cent—ie around 0.5 per cent more than assumed by Ofwat. Recent evidence seemed to support this view. Over the last six months there had been an increase in the cost of debt and a substantial fall in equity prices suggesting that the financial markets did not believe that companies could deliver returns equal to the cost of capital. Wessex Water therefore believed that there was a strong case to reject both Ofwat's approach to determining the cost of capital and the level assumed for the price review.

Yorkshire Water Services Limited

12.72. Yorkshire Water Services Limited (Yorkshire Water) said that one of the key factors in determining the appropriate level of prices for the period under review was the cost of capital. The Director, in making his determination of price limits for all companies, assumed a WACC, post-tax, of 4.75 per cent plus, where appropriate, a small company premium of 0.75 per cent.

12.73. The company believed that the Director's assumption regarding the cost of capital, for all companies including the two companies whose determinations were being disputed, was too low. Yorkshire Water provided evidence to Ofwat that the WACC for a WaSC was in the range 6 to 6.6 per cent. The key issue between their respective positions was the Director's view that the appropriate range for the ERP was 3 to 4 per cent. Although this was based on evidence from a variety of sources, Yorkshire Water was disturbed that little or no weight was given to the extensive body of independent and expert evidence available in the research papers published in the leading journals in the fields of finance and economics. This evidence indicated that the Director's view was at the bottom end of the range of estimates and that as a consequence the rate of return allowed in price limits was too low.

Customer Service Committees

Southern Customer Service Committee

12.74. Southern CSC said that it welcomed the move to five-year price reviews because it allowed for an adjustment to customers' bills in the light of more rapid changes in legislation and practice in the water industry.

12.75. The Southern CSC did not have access to the financial data or modelling, nor did it have the necessary expertise to judge whether the Director's determinations were appropriate. However, given that MKW water prices had been among the highest and their service delivery particularly poor, it had pressed for the largest reduction that the Director felt able to justify. At the same time, customers should be able to receive the same quality of service and security of supply enjoyed by other customers in England and Wales.

12.76. The Southern CSC supported the Director's proposed modification to the licence on the grounds that it would be in the customers' interests. For example, without the licence modification customers would be financing the company against possible risks of greater expenditure which the Southern CSC regarded as a proper responsibility for shareholders to carry as part of usual business risk. The Southern CSC supported the Director's proposals for interim determinations as being the fairest way of balancing customers' interests and those of the company. On the question of metering, the Southern CSC said that it was satisfied that Ofwat had offered the company an adequate mechanism to recoup revenue if that became necessary.

12.77. The Southern CSC said that, although there had been improvements over the last two years (1998/99 and 1999/2000), the Southern CSC still received a considerable number of complaints about the way MKW dealt with its customers. It was still a long way behind other companies in terms of customer service.

Local authorities

Gravesham Borough Council

12.78. Gravesham Borough Council said that it would not wish to make representations about the detailed issues on the appropriate levels to be charged. However, it was against large profits being made by the water companies, as water was a basic requirement and should be available at a reasonable price. There were pockets of serious deprivation in the borough, and the reality of people on low incomes struggling to pay water bills whilst the companies made large profits was unacceptable. The Council recognized the need for ongoing investment in the infrastructure but was of the view that this should not be a reason for large rises in the charges being made to consumers. Having regard to the significant profits that were announced by companies, the Council considered that some of this money should be redirected into improvements.

Agencies, associations and other bodies

Civil Aviation Authority

12.79. The Civil Aviation Authority (CAA) said that its Economic Regulation Group handled the regulation of airports designated under the Airports Act 1986. As the CC would be aware, this involved a mandatory reference of designated airports (BAA plc's three London airports and Manchester Airport plc) to the CC every five years. [*Details omitted. See note on page iv.*]

12.80. The CC's press release of 17 April 2000 had set out the CC's issues statement for the MKW inquiry and the SESW inquiry. Most of the issues were specific to these inquiries and the CAA would not wish to comment on them. However, some of the issues raised in relation to estimation of the cost of capital potentially had wider implications. In particular, the assumptions and methodology for determining the ERP and the risk-free rate should, in principle, be invariant to the specific case being examined.

12.81. Ofwat's final determination took greater account of short-run or spot market conditions, particularly in relation to the risk-free rate, than the CC had done in previous reports (most recently in *Cellnet-Vodaphone*). Ofgem had adopted a similar approach in its final proposals on electricity distribution price controls, and the ORR's provisional conclusions on Railtrack's access charges did the same.

12.82. These were important issues which were far from straightforward. In a recent consultation paper published by the Economic Regulation Group relating to price control proposals on National Air Traffic Services Ltd following the Government's proposed public-private partnership, the Economic Regulation Group did not come to a conclusion on the appropriate methodology for estimating the cost of capital (although the paper did adopt a relatively new approach to treatment of tax). However, this would be an important issue at the next airport review, and the CAA would be examining the question in more depth over the next 18 months. Whichever conclusion the CC adopted, and the greater the extent to which this were explained by explicit reference to the theoretical and empirical analysis underpinning the conclusion, the easier it would be for the CAA and other regulators to address the issue in the future, given their statutory duties.

National Association of Citizens Advice Bureaux

12.83. The National Association of Citizens Advice Bureaux (NACAB) said that it welcomed proposed determinations which resulted in lower household water bills. However, it expressed

disappointment that, whilst the Director had proposed reductions to average bills, the scale of reduction proposed might not be enjoyed by all households equally due to, variously, relatively high bills and/or low incomes. In this regard the NACAB represented the experiences of Citizens Advice Bureaux clients who found it difficult to afford their water bill. It understood that MKW was not content to accept the Director's determinations. It would be disappointed if the CC failed to determine that consumers should enjoy reductions in water bills at least equivalent to the extent proposed by the Director.

National Campaign for Water Justice

12.84. The National Campaign for Water Justice (NCWJ) said that its objectives were: affordable water charges; opposition to metering; the abolition of Ofwat and its replacement with a publicly accountable consumer body; a ban on all water and utility disconnections; and the reinstatement of water and sewerage businesses to public control. The NCWJ said that it was opposed to the water companies having the right to appeal to the CC. Ofwat was aided by financial Reporters and should be sufficient to deal with the industry.

12.85. The NCWJ said that the level of profits and dividends produced by MKW indicated that customers were being charged too much. The amount of debt held by the MKH had dropped by £6.8 million in 1998/99 leaving a gearing level of only 8 per cent. If substantial investment were now needed by MKW and over the next five years, it was not clear why the MKW should not be forced by the regulator to borrow more money. The current financial year bill (as at 31 March 2000) for MKW had been on average £147. The new charge proposed by Ofwat for MKW was of the order of £117. The NCWJ did not believe that the decrease was sufficient and considered that the regulator had been too lenient. The NCWJ said that customers in the MKW area had been surprised by the announcement on 1 April 1999 by Ofwat that MKW could sell bulk supplies of water to Folkestone & Dover Water. The NCWJ considered that the £300,000 a year consequently received by MKW should be used to reduce water bills. The NCWJ were also concerned that MKW were currently in discussion about the possibility of a split of ownership of its supply infrastructure and management, as had been announced in the trade press on 24 May 2000.

12.86. The NCWJ said that it had received many letters to the effect that income from wages, pensions and benefits was likely to be low in 2000/01 and showed little sign of improvement in the next few years. As a consequence, the public did not believe that water companies should be allowed to increase their charges every year. The NCWJ were also concerned about the effect of the cost of water on local health authorities. It believed that insufficient information was given by the water companies to the public about future increases.

12.87. The NCWJ said that the level of service provided by the company was poor and that it had received complaints about the manner that grievances were dealt with. Having received thousands of letters and phone calls since the NCWJ began in early 1992, it had found no substantial support for water meters, even if offered free. The NCWJ also found resistance from consumers in the MKW area to meters and fears over price rises if more meters were introduced.

12.88. It did not consider that the licence conditions were sufficiently tough to prevent income from consumers flowing from core to non-core activities. For example, MKW had invested in several ventures including a scientific company with laboratories. It had found no evidence to support the claims by the water industry that customers were willing to pay extra for their water charges. The CC should uphold the price determinations proposed by Ofwat.

Railtrack plc

12.89. Railtrack plc (Railtrack) said that it was coming towards the end of the Rail Regulator's Periodic Review of its access charges. There were a number of areas, particularly in corporate finance, where the Ofwat determination has some relevance to the rail review.

12.90. Railtrack was concerned by the recent trend for regulators, such as Ofwat and Ofgem, to use short-term market data when determining the cost of capital. Railtrack favoured the use of long-run market data rather than spot rates. For example, in calculating the risk-free rate by the real yield on index-linked gilts, a reasonable range should take account of recent and longer-term historical evidence.

Observations of the index-linked gilts with different maturities showed variability in risk-free returns, especially in the early years. The approach taken by most regulators and the CC had been to consider observed redemption yields averaged over various time horizons, but excluding the early period when liquidity was low. The advantage of averaging was that it smoothed out short-term volatility in the observed redemption yields, which could have a significant effect upon the estimated cost of capital. For example, in mid-1994 the rate of return on five-year index-linked gilts rose from around 2.5 to 4 per cent in a matter of months. By focusing on averages over reasonably long time periods, potential accidents in timing—in both directions—could be avoided.

12.91. Railtrack had recently made a submission to its Regulator which demonstrated that focusing on current returns on index-linked bonds resulted in an unduly low range for the cost of capital. This was caused by distortions in the market for index-linked bonds which had emerged since 1998 and a methodological error which failed to take account of inflation risk in the calculation of the risk-free rate. As a consequence, Railtrack believed that there was a risk that Ofwat's approach was likely to lead to cyclical price fluctuations and the use of longer-term historical averages would help smooth these variations out.

12.92. The financeability of a business like a water company was largely dependent on its credit rating. Therefore, the greatest emphasis should be on cash-based financial indicators as these were of most relevance to the rating agencies. Railtrack thought that it was essential that there was a consistent approach by different regulators in order to minimize uncertainty and reduce regulatory risk.

12.93. Railtrack said that its regulator had indicated that he believed it was important for him to have regard to relevant precedent. The regulator recognized that, in following the methodology recently adopted by Ofwat and Ofgem, he was departing from established precedent. He had stated: 'if any of them [water companies] reject their regulator's proposed price controls and the matter is referred, the regulator would be able to take this into account in reaching his conclusions.' Railtrack believed that it was particularly important that the CC's conclusions should be drafted so that the generic principles would be applied to the Rail Regulator's circumstances.

12.94. Railtrack believed that similar arguments applied to the determination of the ERP. Again, use of spot rates could lead to cyclical price fluctuations and the use of longer term historical averages would help to smooth these variations out.

South East England Development Agency

12.95. The South East England Development Agency (SEEDA) said that, in common with the other recently established Regional Development Agencies, SEEDA had just completed a Regional Economic Strategy following a period of public consultation over the summer. One of the issues that it had considered was the role of infrastructure provision in helping to secure the regional objective of improving the overall GDP performance of the South East. Whilst this was often seen as a matter of improvements in the transport network, there was also the role of utility services, particularly in areas of anticipated growth, to consider.

12.96. Many parts of the region were expected to sustain considerable increases in new development over the next two decades and, if the recommendations of the panel examining draft Regional Planning Guidance which had reported were accepted, then this scale of new development could be substantially greater than had been contemplated hitherto. In this connection, the draft price determination for the water industry over the next five years, and the proposals to impose substantial price reductions on the WaSCs that covered the South-East region were relevant. Whilst the calculation of the price limits was something about which SEEDA had no competence to express a view, there did seem to be potential implications for the ability of those companies which were likely to have the greatest price limits imposed upon them to meet the requirements of new housing and economic development through the provision of water distribution infrastructure. This seemed to be particularly an issue for the WoCs, many of which existed only in the South East region such as MKW, South East Water and North Surrey. SEEDA asked that the strategic infrastructure needs of the South-East region in which the water companies would have an increasingly important role to play, should be borne in mind when reaching decisions about the price limits.

The Office of Gas and Electricity Markets

12.97. Ofgem said that the cost of capital was usually calculated as a weighted average of the cost of debt and equity finance. Both could be calculated by using averages of historical data or present market evidence. An important component of the cost of debt was the risk-free rate. It was possible to derive an estimate from the returns available on UK government index-linked and conventional gilts. At present the yields on index-linked and conventional gilts were relatively low compared to longer-term historical averages. Since 1997/98 yields on both index-linked and conventional gilts had fallen significantly. The longer the present relatively low yields persisted, the more persuasive became the argument that these lower yields were not simply a feature of short-term market conditions. It was appropriate to consider whether there were short-term market conditions that might be causing undue volatility in estimates based on present market rates. There had been some discussion as to whether a number of UK-specific institutional factors could account for the relatively low yield on gilts. For instance, the May 1999 Bank of England inflation report suggested that the MFR for pension funds and substantial demand from insurance companies for gilts had combined to create a strong institutional demand for gilts. More detailed analysis by the Debt Management Office published in July 1999 suggested that this strong institutional demand and stable government finances should continue in the medium term, indicating that present rates were not unduly influenced by short-term factors.

12.98. While present market rates were likely to give the best indication of future rates it was important to bear in mind that a reasonably efficient capital structure required a mixture of debt with short- to longer-term maturities. Thus not all the debt taken on since privatization would have a coupon reflecting present market conditions.

12.99. In the light of these considerations it was clear that using present market evidence for estimating the cost of debt did not give undue weight to short-term trend data. Using medium to longer-term averages of historical data to estimate the cost of debt would provide less reliable estimates of the present cost of debt and so would increase investors' perceptions of uncertainty. The overall impact of this would be to make the regulatory regime less stable.

12.100. Ofgem said that the appropriate method for estimating the ERP had been the subject of considerable debate. This had mainly focused on whether the ERP should be based on observed historical returns, surveying investors' expectations or combining estimates of dividend yields with real dividend growth. As investment decisions were made on the basis of expectations of the future it seemed appropriate to focus attention on present market evidence rather than averages of historical returns. This approach also avoided the practical difficulties associated with judging the period and method for calculating historic averages of returns.

12.101. A survey of equity analysts published by NERA in January 1999 suggested that the ERP was in the range 3 to 4 per cent. A Price Waterhouse survey published in 1998 found a range of 2.7 to 4.5 per cent. A survey of institutional investors published by Credit Lyonnais Securities Europe in October 1998 suggested that, after adjusting for inflation, the range for the ERP was 2.7 to 4.5 per cent. In its September 1998 report on electricity companies, Merrill Lynch noted that some fund managers had started to use estimates for the ERP as low as 2 to 3 per cent. In an October 1997 report on the cost of capital, SBC Warburgs used 3.5 per cent as an estimate for the ERP. There appeared to be no evidence to suggest that expectations of the ERP would be unstable over time, although they might change in response to movements in underlying economic conditions. Thus lower inflation and more stable economic growth in the 1990s might have contributed to a fall in the ERP.

12.102. Ofgem said that in the distribution price control review (DPCR) that the overall approach to determining the appropriate level for price control revenue involved establishing a regulatory asset base and estimating a return equivalent to the cost of capital for that asset base. It also involved considering the financial position of each distribution business. In general, respondents to the consultation process supported this overall method. The financial modelling developed to support this approach included scenarios that incorporated Ofgem's projections of the efficient level of operating and capital costs. In assessing the financial position of a regulated business during the DPCR the checks for financial viability focused on the ability of each distribution business to maintain an investment grade credit rating for its debt. This was consistent with the overall approach to calculating the cost of capital and the assumptions about efficient financing. The August 1999 DPCR draft proposals document set out certain financial ratios, based on data published by *Standard & Poor's*, and noted that if a public electricity supplier's (PES) projected financial position under the revised controls appeared broadly consistent with these

ratios it would be reasonable to assume that the PES would be able to sustain an investment grade credit rating. The draft proposals also noted that Ofwat had published similar financial ratios for the WaSCs, which were broadly comparable in size to the PESs. The interest rate coverage indicators were broadly consistent, although Ofwat's gearing indicators were lower, reflecting the substantially greater capital expenditure requirements faced by the WaSCs.

12.103. As the financial structures of the PESs were not in general consistent with the assumptions about efficient financing it was necessary to assume an initial gearing level of 50 per cent for each distribution business. This assumption was reconciled to the forecast balance sheets of the PESs at 31 March 2000 by making a stylized adjustment to increase or decrease the amount of shareholders funds. The dividend stream from the resulting shareholders' equity in the distribution business (ie 50 per cent of the distribution regulatory asset base) was set in a way consistent with the assumed nominal post-tax cost of equity capital. This was 9 per cent and, assuming volume growth in the distribution of 1.25 per cent and inflation around 3 per cent, gave an initial yield of around 4.75 per cent. In broad terms this was consistent with the sector average yield for UK listed stocks.

The National Trust

12.104. The National Trust said that its exposure to water charges by either company was limited. However, it did have some experience of applications for new connections to existing water company mains. Here the companies were in a monopoly position and there was no competition for the charge imposed to make the connection. Since the alternative of running in a new supply was not a realistic option the companies could make whatever charge they chose. Applications for connections for new field water supplies on farm land were particularly problematic where the commercial justification was not strong but the need was great. There seemed to be no redress against the companies when what appeared to be high charges were sought.

Utility Buyers' Forum

12.105. The Utility Buyers' Forum (UBF) said that it was a major customer organization representing the interests of commercial and industrial buyers in the UK. The UBF had followed the current Periodic Review throughout, and had had input throughout the process. The UBF thought Ofwat had carried out a good review. If there were criticisms these were, first, that Ofwat could have been slightly harsher with the final reductions and, secondly, UBF considered that the environment programme, asked for by the EA and endorsed by the Government, was realized over too short a period, ie five years.

12.106. UBF noticed in the price review that Ofwat identified that MKW had improved efficiency over the past five years, and it was appropriate that these savings were now passed to customers. Ofwat had also identified that efficiency savings could continue throughout the next five years. UBF considered that the efficiency improvements put forward for both companies could be achieved. In the past, water companies had consistently exceeded efficiency targets put forward by Ofwat. UBF also noted the comments by the local CSC. For MKW, the CSC commented: 'the proposed price increases [suggested by MKW] would not be in line with customers' wishes'. UBF found, in general, that water companies did not respond to customers' wishes and Ofwat had to act for the customers in these circumstances.

Water UK

12.107. Water UK said that it was the trade association for the UK water operators. All companies in England and Wales were members, with the exception of MKW; the three Scottish water authorities and the Northern Ireland Water Service were also members.

12.108. Water UK said that most companies had decided not to appeal partly because of the cost in terms of money and time and partly because they had considered that there had been only a slim chance of success, based on the evidence of the two water companies which had appealed to the MMC in 1995. A number of companies had wished to appeal on matters of common interest, in particular the cost of capital, rather than on their price limits as a whole.

12.109. A significant feature of the 1999 price review was that the Director took an early view that prices should fall. The Minister for the Environment also stated in March 1999 that the quality and environmental programme was consistent with an average price cut of 10 per cent. The consequence of the regulator's early decision to go for price cuts, coupled with a higher than expected investment programme was that all other elements in the final determination had, to be squeezed hard including the cost of capital, the efficiency assumptions and the level of maintenance spending.

12.110. In the 1999 price review the Director had refused to make provision in price limits for items where it had been known that cost would increase but the detailed figures were not yet known, such as business rates. Only at the last moment had an allowance for business rates been included. The result was that there were likely to be interim price increases before 2005 which was unsatisfactory for both customers and companies.

12.111. The consequence for the review process of the regulator's early decision to go for initial cuts had been that the Director took rigid positions on a number of matters early in the process. The Director was also unwilling to share information despite claiming the process was transparent.

12.112. The main consequence of the excessively tight price limits set by the Director was that service to customers would not improve and would be at risk of deterioration if adverse external events such as drought or flooding occurred. Customers were only keen on price cuts if good-quality service continued. The Water UK survey of 2,000 customers across England and Wales found that a majority of customers (57 per cent) wanted improvements in service and to the environment and were prepared to see bills increase in line with inflation or faster. A smaller proportion (39 per cent) wanted services maintained at the current level for the current bill. The three improvements most favoured by customers were reducing leakage beyond current target levels, minimizing the risk of sewer flooding, and investing to increase supply reliability. A feature of the final determinations was the limited amount of extra work the Director allowed to provide service improvements to customers.

12.113. Customer surveys showed that a high priority was placed by customers on ensuring a reliable supply of water at all times. Many companies put forward proposals for enhancing the security of supply, which had been rejected by the Director—only £113 million of capex over five years and £15 million of opex had been allowed for the whole of England and Wales.

12.114. It was important that the Government and the environmental and quality regulators provided clear guidance to companies on what environmental obligations were required, on a timely basis, and that the economic regulator funded known or anticipated obligations crystallizing over the price review period. A gap of nearly £1 billion of expected investment remained unfunded, despite claims by ministers and the EA that the full programme had been funded.

12.115. Companies were concerned about the continuing arguments between the Director and the EA over what was or was not in the programme, and the failure to define clear outputs on a timely basis. The EA had written to all water company Managing Directors in January 2000 to say that it did not accept Annex E of Ofwat's final determinations report, without explaining what its concerns were. Water UK saw this as a failure of process, and had taken this up with both the EA and the DETR.

12.116. Companies remained concerned that they were exposed to asymmetric risks, and that all the risks were one way because the Director had selected tight assumptions as opposed to central assumptions in every instance. The cost of capital allowed by the Director was too low because the Director had failed to handle risk adequately. It was hardly surprising, therefore, that there had been substantial falls in water share prices. As the *Financial Times* had said on 11 December 1999: 'Water stocks may be a slightly special case given that their fortunes depend on the regulator. But it is unnerving that a sector worth some £20 billion at the start of the year should have lost half its value since, with a drop of 20 per cent in the past week alone.' The final determinations report had set out the financial criteria that the Director adopted to enable companies to raise capital from the markets. It had been silent about the financial consequences and the industry financial position by 2005—there had been no figures quoted on total debt, interest cover, or gearing by that date. Water UK asked the Director to provide these figures in his final determination report and to demonstrate that they remained robust to changes in underlying circumstances. Given the size of the continuing capital programme, it was important that companies remained able to access capital markets.

12.117. There was still a significant gap between the Director's views and those of companies with regard to the cost of capital, and the Director's approach remained inconsistent with the strong regulatory precedent in favour of longer-term averages. The Director had adopted current market data even though current market data were not available for all parameters of the WACC. This was not a robust basis for estimating the cost of capital for the next five years; for example, since the determination the risk-free rate had risen.

12.118. In *Raising the Quality*, the DETR's guidance to the Director published in September 1998, ministers had provided important guidance on capital maintenance. Paragraph 129 said:

> The Government's view is that water and sewerage companies should in principle be required to maintain their assets in a way which will deliver a high absolute standard of serviceability to customers and the environment. It will not be enough in the longer term simply to maintain the current level of serviceability where that is inadequate. It would therefore be appropriate for the Director General to develop absolute standards for serviceability of water distribution and sewerage networks.

12.119. In the Director's final determination report he had cut spending on capital maintenance to levels 13 per cent below current levels and 25 per cent below proposed levels in company business plans. Water UK saw this as damaging to the long-term sustainability of the industry, and another factor increasing risk to customer service. Water UK thought that it was inconsistent with the DETR guidance.

12.120. The Director had also applied the BE principle to limit the CCD allowed in price limits to a level based on average maintenance spending over the recent past. This methodology only worked properly if maintenance spending was at steady state levels. In practice, no company was near a steady state.

12.121. On efficiency targets, Water UK said that the Ove Arup/EC Harris report had established that the Director's cost base methodology was fundamentally flawed and not a robust basis for setting catch up. One reason had been that the technical specification for the standard costs required subjective interpretation by companies leading to variability unrelated to efficiency. Another had been that the range of standardized projects was not sufficiently representative of real life projects. Although the Director had made changes to his methodology in the light of this report, these failed to resolve the problems.

12.122. In the final determination companies had been set the target, immediately in 2000/01, of reducing capital maintenance unit costs by 50 per cent of the gap between their actual unit costs and the lowest unit cost discovered by Ofwat anywhere in the industry. For capital enhancement expenditure, the requirement had been to reduce by 75 per cent of the gap. These were much tougher targets than set in 1994. Companies pointed out to the Director that it was impossible to achieve efficiency gains on existing contracts for projects already let.

12.123. The Director had set company-specific operating efficiency targets ranging from 1.4 to 4.9 per cent a year, and averaging nearly 3 per cent. The Director's projected industry average had been essentially an extrapolation of efficiency gains achieved up to 1998/99. As input prices were falling over the period 1995 to 2000, it was unlikely that this rate of improvement would be repeated. The efficiency targets were applied to total costs, without recognition that many costs were of a fixed nature (such as business rates) and that some costs (for example, EA charges) were rising in real terms, ahead of inflation.

12.124. The work by Bosworth and Stoneman on behalf of Thames Water showed that the Director should have adopted a lower set of targets. Given that both unit labour costs and materials prices were likely to rise in real terms after 2000, high rates of labour or materials productivity growth were required to achieve Ofwat targets, well in excess of past industry performance. In advance of final determinations Water UK had warned both the Director and government ministers that the Director's efficiency targets would lead to substantial job losses, of the order of one in four staff, and that reductions in staffing would put both customer service and the industry's good safety record at risk.

12.125. The early announcement by the Director that he would impose one-off price cuts from 2000 onwards had immediately had a damaging effect on incentives. The share of efficiency gains retained by shareholders had been reduced below that available in the 1994 review, and the incentive to achieve efficiency improvements in the period immediately before April 2000 had been sharply reduced.

12.126. At a relatively late stage of the review, March 1999, the Director had introduced a new incentive allowance in MD145. This went some way to restoring incentives on the operating cost side. However, companies remained concerned that incentives were less than following the 1994 review, but the Director had at the same time tightened efficiency targets. Few saw any scope for outperformance following the review.

12.127. Water UK said that Ofwat had indicated that it would exercise judgement with regard to the promotion of meters. There was a risk that, if companies decided to promote meters to meet the targets agreed with the EA, then Ofwat could decide that it was a management decision and not therefore allowed as part of Ofwat price limits.

Others

Abbey Development Ltd

12.128. Abbey Development Ltd (Abbey Development) said that it operated throughout the South-east of England, currently with sites under development in Lincolnshire, Hertfordshire, Suffolk, Essex and Kent. These developments brought it into contact with Anglian Water Services, Three Valleys Water, ESW, Southern Water and Folkstone & Dover Water, together with MKW. In Abbey Development's experience, costs and charges levied by MKW were higher than those charged by the other water companies that it dealt with. In addition, its conditions for supply were more draconian than others, for example, imposing substantial charges for short-notice attendance or delays. Its off-site reinforcement costs were also higher than those charged by the other companies.

Mr S G Beale

12.129. Mr S G Beale said that the most significant aspect of the price limits set for MKW was the addition or surcharge that was intended to finance the quality improvement programme. Even at a conservative estimate, these quality surcharges accounted for more than one-third of the 1999/2000 revenue for the water companies of England and Wales. They were introduced with privatization in 1989 and to date, even where overall charges had come down, the quality charges had continued to increase.

12.130. This method of raising new capital at no cost to 'investing' shareholders, and with no issue of shares by way of compensation, might be argued to be in the public interest but the secrecy surrounding the arrangement was not in the interests of the public on whom the charges were levied. This secrecy was evident in the lack of meaningful references in the Ofwat and water company documentation. For example: the Ofwat 1994 report on future water charges made no reference to previous K increases just as the 1999 report made no reference to the K, Q and X factors set in 1994, nor did it give any report on the progress of the companies in meeting the efficiency targets set by the X factor. Whilst the target 1999/2000 utility/quality balances were in the public domain, the actual figures were unknown and, since the presentation of the 1999 revisions did not relate to them, the future utility/quality balances could not be sensibly estimated. Similarly, the MKH report and accounts for 1998/99 proclaimed the company's praises for its record profit levels but included no acknowledgement for the estimated £10 million quality element in its profits—representing an average 1998/99 surcharge of £40 on each of its 250,000 customers.

12.131. Mr Beale said that this arrangement for the financing of the quality investment programme was an extremely valuable concession, worth £50 billion over the 15 years 1990 to 2005, which should, in the public interest, be conditional on obligations of accountability and candour. The quality programme over the last ten years had cost individual water customers an average of over £1,500 and over the next five years would cost a further £700. Yet, despite the Ofwat claims of open and transparent regulation, and despite widespread concern about high water charges, the public was not sufficiently informed for there to be any sensible debate about the cost of the quality programme and whether, after ten years, it should continue on the same terms.

Ms Catherine A Hinch

12.132. Ms Catherine A Hinch said that she was sorry to learn that MKW was being required to reduce charges to customers by 18.3 per cent. She would rather have seen the company with its income at a higher level for investment which would ensure an adequate supply of water for an increasing population. She set a high value on a supply of clean water and considered that she received good value for money.

Mr J N Hudgell

12.133. Mr J N Hudgell said that, because MKW overcharged customers, it got into debt. MKW charged £100 for installing meters. Mr Hudgell said that when houses were down-rated MKW did not reduce water charges to them. Mr Hudgell said that he had endeavoured via a court case, to prove that MKW were overcharging but he had not been successful.

Mr A E Lindsay

12.134. Mr A E Lindsay said that he was both a shareholder and a customer of MKW. He said that MKW should not be allowed any relief from the new price limits and charges until it gave customers the service that was available in other areas. He said that he was particularly concerned that MKW made customers responsible for repairs to supply pipes back to their mains. This might involve expensive work on public highways. Further, if a meter were installed then customers were required to take out insurance to cover repairs to supply pipes from the mains to the meter. Mr Lindsay said that in his case the premiums would amount to over £100 a year even though he lived in a built-up area.

Mr K M J Loftus

12.135. Mr K M J Loftus said that he lived alone in a two-bedroom flat in a block of flats for which he was the caretaker. He was, therefore, the only person who paid an individual water bill. The other residents of the block, some of them with large families, paid a communal charge for water and sewerage disposal which approximated to £2 each week. Mr Loftus said that his charge, based on the old rating system, was in excess of £350 a year, for water and sewerage disposal.

12.136. Mr Loftus said that when he discussed this with MKW its attitude was not sympathetic, which he believed was because it was a monopoly. He had discussed this with Ofwat which expressed the opinion that currently there was little it could do except to have a water meter installed. MKW and one other water company were the only ones which charged to have a meter installed. However, Ofwat said that there would be changes in the near future due to the involvement of the Water Regulator. Mr Loftus said that he looked forward to this involvement.

Mr A G Raffield

12.137. Mr A G Raffield said that he was a small MKW shareholder. Mr Raffield said that it was clear to him that Ofwat was ignorant of the water situation in Kent. As far as he knew, MKW extracted water from rivers and aquifers, as it did not have the benefit of numerous reservoirs.

12.138. Mr Raffield said that, when he moved to Ashford in 1970, an application was in hand to build a reservoir at Broadoak near Canterbury. This was rejected by the same body which now wanted to reduce the cost of water at the same time as insisting on prodigious maintenance. It seemed to escape its notice that the population of Ashford was 93,800 and Mr Prescott (Secretary of State for the Environment, Transport and the Regions) wanted to increase it to 150,000. It appeared to him that the two ideas were incompatible. He said that it would be more effective if a national water grid were built.

Mrs J Sheepwash

12.139. Mrs J Sheepwash said she did not consider that MKW should be allowed to appeal against reductions in price limits and infrastructure charges.

12.140. Mrs Sheepwash said that MKW was an inefficient company. MKW's attitude to customers was poor and there was the underlying threat that customers would be cut off. Water bills were now so high that most consumers had to resort to monthly instalments. The Weald area was a 'wet' area with high water tables and yet customers were constantly faced with shortages, and MKW's blasé attitude towards the high percentage of water leakages did not give confidence.

12.141. The dividends and salaries to MKW directors were too high. Despite many years of large increases in MKW water bills when complaints are made concerning dirty/discoloured water and leakages MKW said that it did not have the resources. Southern Water was cheaper than MKW for the supply of water. Competition should be allowed as with gas and electricity.

Professor Anthony Steele

12.142. Professor Anthony Steele drew attention to some recent work by John O'Hanlon and himself about to be published in the *Journal of Business Finance and Accounting* on a new estimate of the ERP drawn from accounting fundamentals.

12.143. The problem that analysts had in estimating the equity premium based on financial market data was that there was a great deal of volatility in market prices, and consequently scope for dispute about the estimate. He estimated the equity premium to be 5.0 per cent with a standard error of 0.7 per cent, which allowed calculation of a 95 per cent confidence interval. The standard error was particularly noteworthy, being smaller than had been achieved hitherto in empirical studies. It was achieved by a new technique which estimated the cost of capital directly from the accounts. It relied on the observation that a company would only have positive goodwill if it earned more than its cost of capital. The higher the rate of return on capital employed, the higher would be the market value of a company and, it followed, the higher would be the goodwill (being the difference between market value of capital employed and book value).

12.144. Given that the task of the price determination was to enable the company to properly finance its functions, a return on capital employed consistent with zero goodwill was sufficient. A business which earned such a return would be able to issue equity or debt as appropriate to fund its capital expenditure knowing that the market value of the assets reflected the cost, but also that the market value did not capitalize any 'super profits', or 'monopoly rents'.

12.145. Professor Steele said that their research estimated the cost of capital from a sample of 180 companies for the years 1973 to 1989. The smallest estimate of the cost of capital was 4.5 per cent and the largest was 32.3 per cent. Since each estimate of the cost of capital for each company had some measurement error, they reduced the error by grouping the companies into ten portfolios and estimating the relationship between the betas for each portfolio and the derived costs of capital. The regression result may be stated as the cost of capital consistent with zero goodwill (8.8 per cent plus beta × 5 per cent).

12.146. Professor Steele told us that long time periods of data were needed to provide reliable estimates and that economists suspected that the premium itself varied over time.

Thistle Pipelines Ltd

12.147. Thistle Pipelines Ltd (Thistle Pipelines) said that one of its subsidiary companies, A H Ball & Co Ltd, had recently completed some £1.5 million worth of infrastructure renewal work in Whitstable. This work was won in open competition with rates which had been used successfully applied in other locations and should have afforded it a reasonable profit margin and given a full contribution to overheads. In the event, it suffered a considerable financial loss and was having to submit claims in an attempt to mitigate this.

12.148. Thistle Pipelines said that, because of the circumstances pertaining in Whitstable, rates for undertaking work there (and presumably in other MKW areas of supply) were materially more than would be considered normal elsewhere. The high cost of infrastructure renewal should be taken into consideration when fixing new price limits for MKW.

P G CORBETT *(Chairman)*

R A RAWLINSON

J B K RICKFORD

D PARKER

M R WEBSTER

P A BOYS *(Secretary)*

4 August 2000