

**RD08/02**

**TO ALL REGULATORY DIRECTORS OF  
WATER AND SEWERAGE COMPANIES  
AND WATER ONLY COMPANIES**

19 March 2002

Dear Regulatory Director

**REGULATORY CAPITAL VALUES 2001 - 05**

**1. Introduction**

The regulatory capital value (RCV) is one of the critical components underlying price limits. In the past we have only published historical RCVs each year in our annual report 'Financial performance and expenditure of the water companies in England and Wales'. The investment community has indicated that it would like future regulatory capital values to be published. It believes that this will increase not only the transparency of regulatory decisions but also their consistency and predictability. Two water and sewerage companies have published the future RCVs we assumed in setting price limits in 1999. All companies were given these numbers as part of the supplementary information to the final determinations.

In MD172 – 'Publishing future regulatory capital values' (September 2001) we sought views on whether future RCVs should be published, and if so, the detail in which they should be provided. Our conclusions, following this consultation, are set out in MD173 'Format and timetable for publishing future regulatory capital values' (December 2001).

Annex 1 reconciles the opening and closing RCV and the average value by company, for each of the years from 2001-02 to 2004-05. This is in the format described in MD173.

The remainder of this letter explains how we use and calculate companies' RCVs.

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## **2. The role of the Regulatory Capital Value**

The RCV has been developed for regulatory purposes and is primarily used in setting price limits. One of the elements we consider in assessing the revenues companies' need is a return on the capital invested in the business. The value of the capital base of each company for the purposes of setting price limits is the RCV. The value of the RCV to investors and lenders is protected against inflation by increasing the value each year by RPI. The RCV is remunerated through price limits at a cost of capital that we set.

Ofwat introduced the concept of RCVs in its 1992 consultation paper 'Assessing capital values at the periodic review'. It was developed during the MMC referrals for gas and water companies between 1993 and 1995. The RCV is now widely used by the investment community as a proxy for the market value of the regulated business and has, in some instances, become enshrined in bond covenants. Increasing interest in the RCV has led to pressure for greater transparency in these calculations and judgements and hence the publication of future RCVs.

## **3. Basis of calculation**

Ofwat has to set price limits at periodic reviews in accordance with its duties under the Water Industry Act 1991 (WIA 1991). One of our primary duties is "to secure that companies are able (in particular by securing reasonable returns on their capital) to finance the proper carrying out of the functions of such undertakers".

There is no definition of 'capital' in the WIA 1991. The current replacement cost (Modern Equivalent Asset or MEA) valuation of companies' assets at privatisation was around £175 billion at today's prices. The proceeds from privatisation of the water and sewerage companies was of the order of £7 billion (today's prices).

In November 1992, as part of the development of the methodology for setting price limits, we consulted on the possible approaches to the capital base to use in setting price limits for the period 1995-2000. We used the same basis of calculation to assess the RCVs at the second price review in 1999.

The RCV starts with a direct measure of the value placed on each company's capital and debt by the financial markets following privatisation. This initial RCV is calculated as the average of the market value of each water and sewerage company for the first 200 days for which the shares were listed plus the total value of debt at privatisation. A proxy for the initial market value was used for the water only companies that were not privatised in 1989 (and hence no market information was available). This initial value was taken as the opening value of the RCV for 1990.

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This initial value is rolled forward each year. The RCV is recalculated annually in outturn prices. The closing value from the previous year is adjusted by the movement in RPI. This inflated figure gives the opening value for the year.

Capital expenditure to enhance and maintain the network which is assumed in setting price limits is added to the RCV. Any capital grants or contributions towards the cost of the new assets are deducted. Current cost depreciation (based on the MEA value of the assets) which is assumed in setting price limits is deducted from the RCV each year.

Expenditure to maintain and replace infrastructure assets (infrastructure renewals expenditure (IRE)) is not added to the RCV but combined with the infrastructure renewals charge (IRC). The balance, the infrastructure renewals accrual/prepayment, is added or deducted each year. This reflects the extent to which more (or less) money has been spent to maintaining the infrastructure asset base than assumed in price limits. Thus increasing (or decreasing) the value of the capital base to be remunerated.

The RCV is also adjusted for any disposal of land by the regulated business. When land is sold, the licence requires that the proceeds are split equally between shareholders and customers. The mechanism for doing this is through the RCV. The customers' share of any net proceeds is deducted from the RCV.

For the period 1990-1995, the net additions to the RCV were based upon the assumptions made by the Secretaries of State in setting price limits for the period immediately following privatisation. For all years from 1995 onwards the movements in RCVs are based on the assumptions we make in setting price limits.

The assumptions about net new expenditure which we made at the 1999 periodic review for each company, for the years 2001-2005, are set out in Annex 1. They are split between

- Capital expenditure;
- Infrastructure renewals expenditure and the infrastructure renewals charge;
- Grants and contributions; and
- Current cost depreciation.

#### **4. Outperformance of regulatory assumptions**

A company has incentives to outperform our regulatory assumptions and earn a higher levels of profit than we assumed when setting price limits. Within a five year cycle, the company had greater incentives to outperform early in the price setting period and to keep the benefits of its efficiencies for longer, before these are returned to customers. This caused unnecessary distortions to the timing of efficiency savings.

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At the 1999 periodic review (PR99) we introduced a mechanism to provide incentives for each company to improve its efficiency and outperform our regulatory assumptions throughout the five year price setting period. (MD145 – ‘The framework for setting prices’ (March 1999)). This mechanism, the “rolling incentive allowance”, allows the company to keep the benefit of outperformance in any given year for five full years before it is passed on to customers and hence removes the distortions caused by the cycle of price reviews.

The RCV is the mechanism used to reflect past capital outperformance and hence transfer the benefit of this to customers through lower price limits. In broad terms the level of outperformance is assessed by comparing net actual capital expenditure and depreciation in the year with our projections. The outperformance adjustment is deducted from the RCV. The reduction in the RCV reduces the capital base on which investors earn a return resulting in lower bills for customers. In effect the benefits of the outperformance are passed on to customers five years after they have been made.

The outperformance adjustment is shown in Annex 1. The RCV in 2001-02 is adjusted for outperformance in 1995-96. In 2002-03 it is adjusted for outperformance in 1996-97 and so on.

The outperformance adjustment is calculated by comparing the capital expenditure (excluding IRE but net of grants) actually incurred in a given year with that assumed in setting prices (plus any agreed logging up for new legal obligations – see section 5 below). This difference is then adjusted for depreciation using an average asset life for the industry. The difference between the movement in the infrastructure renewals accrual actually reported in the year and that assumed in setting price limits is the final element of the calculation. For one or two companies a positive movement in the infrastructure renewals accrual may outweigh the outperformance in capital expenditure.

The outperformance adjustment is calculated separately for the water and sewerage services.

Provided that in total the company’s capital expenditure was less than that assumed in setting price limits in 1994, the annual adjustments relating to 1995-2000 were calculated as set out above with no smoothing of the profile. For some companies the adjustments show reductions in the RCV in one year for outperformance but an increase in the next. However, for 2000-05 as a whole the overall total is a net reduction reflecting the overall outperformance.

Where the total actual expenditure for the period exceeded that assumed in setting price limits, the actual expenditure over and above the amount we assumed is not as a rule included in the RCV.

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Where expenditure exceeded the projected level for the service, but at a company level aggregate expenditure was less than projected, the company was required to explain why the additional expenditure (above the service level) should be included in the regulatory capital value. This needed to both justify the work, and show that the costs involved would stand scrutiny by comparative analysis. Where expenditure exceeded the projected level for the company as a whole, then the company needed to provide clear and incontrovertible evidence to show why the additional expenditure should be included in the regulatory capital value

## **5. Roll forward of the RCV at periodic reviews**

In calculating the opening RCV for a new price setting period a number of adjustments are made. These are set out below:

- Logging up/down

This deals with changes to the water specific legal obligations placed on a company since price limits were last set. Where a change, either in terms of additional obligations or the removal of obligations, is material this can trigger an interim determination of price limits. If the change is not sufficient to trigger an interim determination (or the company chooses not to seek an interim determination) we 'log up' any reasonable net additional costs to be taken into account at the next periodic review. Similarly reductions in outputs are 'logged down'

Capital expenditure which is logged up is added to the opening RCV. These amounts are scrutinised and challenged by us to ensure the addition to the RCV reflects what would be expected from an efficient company. The RCV is reduced by the amount of any logging down.

Where a company has failed to meet the outputs determined when prices were set the RCV is also reduced to take account of this. Customers should not continue to finance services which they have not received.

We will be consulting on the logging up process, its objectives, and the interaction with the interim and final determination processes later this year.

- Inflation

The RCV which is determined at each periodic review reflects our assumptions about the movements in construction price inflation for the price setting period. The licences of some companies protect them against movements in the construction price index between periodic reviews. We have recently consulted in MD174 – 'Consistency review of licence conditions' on whether this protection should be extended to all companies. The net capital expenditure which is added to the RCV reflects assumptions about the movement in the construction price index (COP1)

relative to the movement in RPI.

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When calculating the opening RCV for a price setting period we adjust for the difference between the movement in COPI assumed at the last periodic review and the actual movement in COPI over the period.

## **6. Basis of the RCVs included In Annex 1**

The RCVs in Annex 1 are in 2000-01 prices.

The reconciliation of the opening and closing RCVs uses year end RPI to index from 1997-98 prices to 2000-01 prices. (1997-98 was the base year for PR99 and therefore all assumptions about inflation are made relative to that point). The average RCV is presented using year average RPI to index to 2000-01 prices. The average RCV cannot therefore be calculated as the simple average of the opening and closing RCVs.

The indices which have been used to inflate the RCVs to 2000-01 prices are:

	<b>1997-98</b>	<b>2000-01</b>
Financial year end RPI		172.2
Financial year average RPI	158.8	171.3

The RCVs for the majority of companies are those we determined at PR99. Exceptions to this are:

- Mid Kent Water Ltd and Sutton & East Surrey Water plc who referred their price limits to the Competition Commission in 1999 and, consequently these RCVs were reassessed.
- Dwr Cymru and Tendring Hundred Water Services Ltd to reflect the interim determinations in 2000.
- South West Water Ltd, Bournemouth & West Hampshire Water plc and Dee Valley Water plc to reflect the interim determinations in 2001.

## **7. Publication in future years**

We will publish RCVs in this format every year. The values presented will be updated to reflect an additional year's inflation. Change to the RCV between periodic reviews only occurs if a company has an interim determination of its price limits. We will publish RCVs in March each year once the interim determination process is complete. This will allow us to reflect the latest changes in the values presented.

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RCVs set at subsequent periodic reviews will be published once companies have accepted the determination.

We also propose that each company should include details of its RCV in their regulatory accounts each year. Changes to the regulatory accounts are the subject of a separate consultation exercise. RD 02/02 – 'Review of the Regulatory Accounting Guidelines', published 30 January 2002, sets out our proposals for changing the regulatory accounts. The consultation closes on 25 March 2002. We propose that the RCV the companies include in their accounts is the amount assumed by us and used in setting price limits. The format will be the same as used here.

Yours sincerely

**Keith Mason**  
**Director of Regulatory Finance**