EXECUTIVE SUMMARY

The 2009 Periodic Review

This summary of Dee Valley Water's Draft Business Plan for the five year period commencing on 1 April 2010 has been published to give stakeholders the opportunity to comment on our proposals prior to the final determination of prices by the water industry financial regulator, Ofwat, in November 2009.

As a regulated water company, Dee Valley Water has a legal obligation to ensure that it invests sufficiently in its assets to maintain their serviceability. We also have to comply with existing and new legal standards as set by Government. Ofwat has the responsibility for setting the level of charges but must ensure that they are sufficient to enable an efficient company to finance its obligations. This means that companies have to be allowed to make a profit to ensure that they can attract the necessary financing.

Our strategy

We consulted our customers to understand their attitudes and opinions and to inform our investment proposals for the five year period. The messages that we have received to date are:-

- customers are generally happy with the level of service they receive
- customers are not prepared to pay more to improve the current level of service
- customers expect us to ensure that we invest sufficiently to maintain our assets.

We have taken account of these messages in our planning and consequently our investment proposals are limited to those required to maintain the current serviceability of our assets and to comply with legislation.

Capital investment (2007/08 prices)	2005-2010	2010-2015
Asset maintenance	£28.3m	£32.2m
Optional meters	£2.5m	£1.6m
Security improvements	£0.6m	£3.5m
New development/growth	£0.2m	£0.2m
Flood protection	£0m	£0.5m
Total	£31.6m	£38.0m

Asset maintenance investment will consist mainly of two schemes:–

- an investment of £16.65m to replace our largest treatment works, the Llwyn Onn works
- the replacement of 66km of water mains.

Optional meters are for customers who choose to switch from unmeasured to measured charging. We have estimated that we will need to install 8,100 new meters.

Security improvements are required at most of our installations and are required to comply with standards stipulated by Government.

Flood protection work is required at our largest river intake at Bangor on Dee.

Operating costs

Our projected operating costs will increase to cater for the effects of higher power costs and for our succession plan aimed at replacing key employees as they come up to retirement.

Falling industrial demand

The recent announcement by our second largest customer, Flexsys, that they intend to close their factory at Acrefair later this year, coupled with a general decline in demand by other customers, has been taken into account in our plans.

Impact on bills

On the basis of the proposals contained in our Draft Business Plan, we estimate that the average household bill will increase from £120.57 in 2009/10 to £126.87 in 2014/15, excluding the effects of inflation. This is an average increase of 1.23% per year over the five years.

How to respond to our Draft Business Plan

Please send responses to this consultation to Mr Bryn Bellis by 30 November 2008.

Response can be sent by email to contact@deevalleygroup.com or by post to:-

Mr Bryn Bellis
Managing Director
Dee Valley Water
Packsaddle
Wrexham Road
Rhostyllen
Wrexham
LL14 4EH

DRAFT BUSINESS PLAN

OVERVIEW

Dee Valley Water was formed in 1997 with the merger of the former Chester Waterworks Company and Wrexham Water Company. Both of these former companies had roots stretching back to the 1860's.

Dee Valley Water supplies water only and does not deal with sewerage although we do collect sewerage charges on behalf of the sewerage companies in our area. We are the 3rd smallest of the 22 water companies in England and Wales in terms of the population supplied. The area supplied covers 831 square kilometres in north-east Wales centred around Wrexham, and in north-west England centred around Chester. A population of 259,000 and many local industries rely on us for a safe, reliable supply of water.

About 80% of our raw water is derived from the River Dee; 15% is from our own reservoirs situated in the nearby Welsh hills and the remaining 5% is from two underground sources. We operate 6 treatment works and utilise almost 2,000 kilometres of water mains to distribute the water to our customers; we also utilise 37 treated water storage reservoirs and 37 pumping stations to ensure that sufficient capacity is available to supply the daily and summer peak demands.

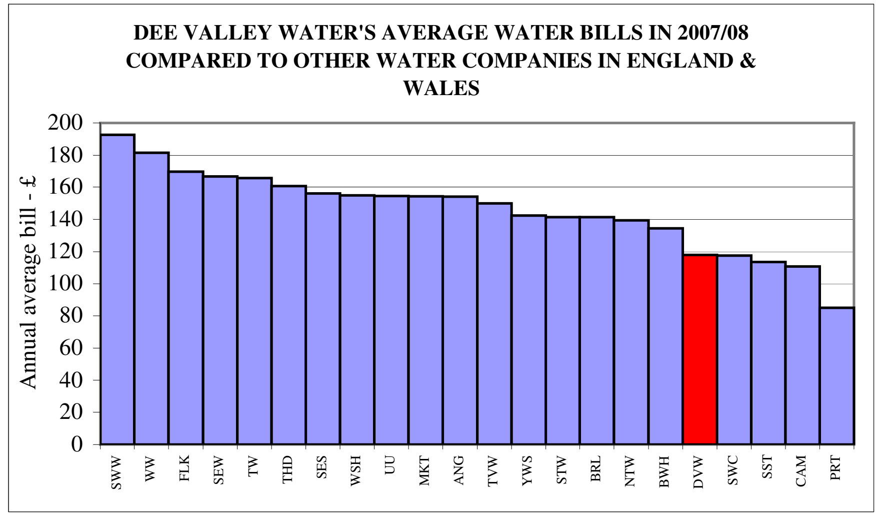
Dee Valley Water's area of supply

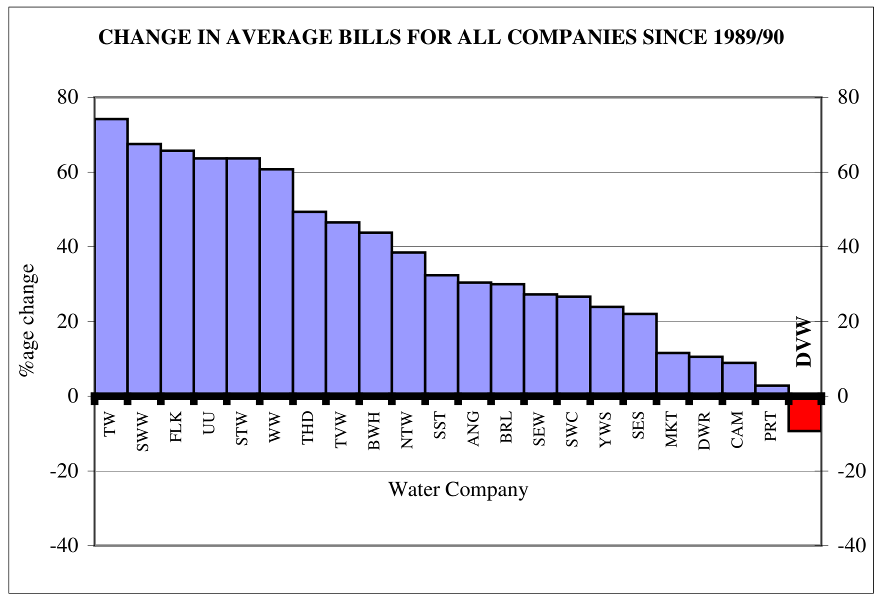
PROGRESS TO DATE

Since privatisation of the water industry in England and Wales in 1989, we believe that we have delivered significant benefits to our customers whilst at the same time actually reducing charges in real terms. We are proud of the fact that Dee Valley Water is the only water company to have achieved this – a reduction of 9% compared to the average of all water companies of a 36% increase over the same period.

In terms of the service we provide, the most recent statistics reveal significant improvements in all areas of the business:-

- water quality – 99.97% compliance at customers' taps
- leakage – at 5.24 m^3/day per kilometre of water mains is the lowest in England and Wales
- water pressure – only 0.1% of our customers are at risk of low water pressure
- interruptions – on average only 0.1% of our customers suffer with supply interruptions of longer than 6 hours
- security of supply – no hosepipe bans in the area since 1989
- customer care – we have significantly improved our performance in all areas where we have an interface with customers including our response to queries and complaints about service and billing matters.





REGULATORY REVIEW OF PRICE LIMITS

In common with the other water companies in England and Wales, we are regulated by statute. The economic regulator is the Water Services Regulation Authority, known as Ofwat, which is responsible for setting limits to the prices that we can charge our customers for water. Ofwat is also responsible for monitoring our performance and compares economic and other performance levels between the companies across the industry.

Price limits are reviewed every five years as set out in companies' licences. The next determination of price limits is in November 2009 based on a business plan that each company produces setting out its strategy for the future. These business plans are necessarily large, detailed and technical in order to provide all the information that Ofwat requires to reach its decision.

This document is a public domain version of the business plan and summarises the key issues and challenges for Dee Valley Water and our proposals for dealing with them with particular focus on the period from 2010 to 2015 (referred to as the AMP5 period). The full business plan, which is a draft at this stage to allow for a full consultation, has been submitted to Ofwat.

In compiling our business plan, we have taken note of the guidance issued by the various stakeholder groups such as the Consumer Council for Water, Drinking Water Inspectorate, Natural England, Environment Agency and Welsh Assembly Government. Feedback from consultees on a draft of our *Strategic Direction Statement*, which is referred to below, has also been noted. It is not possible to satisfy every requirement and obligation, but we have tried.

In December 2007, we published a *Strategic Direction Statement* setting out our vision and overall objectives for Dee Valley Water and our customers over the next 25 years or so. This business plan provides the details for the period 2010 to 2015 of how the objectives will be achieved. As set out in our *Strategic Direction Statement*, our key objective is '**to maintain a consistent supply of wholesome water that gives customers good value for money**'.

Our *Strategic Direction Statement* was informed by customer research carried out in July and August 2007 by qualified market researchers. The attitudes and opinions of domestic and industrial customers were investigated on a range of issues including water resources, drinking water quality, customer service and pricing.

We found that the vast majority of our customers were happy with the service that Dee Valley Water provides. Although domestic customers wanted to see some improvements to some of the services we provide (longer customer service opening hours and more frequent meter reading, for example), there was generally no appetite for any increase in customer bills either for these improvements or for any of the other improvements suggested.

Whilst the industrial customers surveyed had some different priorities from domestic customers, they also had no desire to see services improved. Their top priority was reliability of supply.

The findings of this customer research have had a major influence on the strategy set out in our *Strategic Direction Statement* and developed in our business plan, particularly customers' desire for stable prices.

No additional investment is proposed to provide for a stepped improvement in levels of service to our customers. This is not to say that improvements will not be made over the AMP5 period because, as in the past, gradual improvements in our services will be made when opportunities arise.

We have thoroughly reviewed our proposed investments over the AMP5 period and where we consider that the need for investment in our assets can be deferred without increasing the risks to levels of service then we have moved these investments to the following five-year period.

All of our proposed investments are therefore driven by either our statutory duty to maintain the serviceability of our assets or by some other legal requirement such as improving security at our installations.

KEY INVESTMENT DRIVERS

Capital maintenance

The total investment proposed during the AMP5 period is £38m of which by far the largest part, £32m, is for the replacement of existing assets as they approach the end of their useful lives. Without this investment we judge that there is an increased risk of a reduction in the levels of service to our customers

The art of efficient asset management planning has advanced significantly in recent years. We used the new techniques and our detailed knowledge of the assets for our investment programme for the current 2000-2005 (AMP4) period and we have built on this to develop a programme of schemes for 2010 to 2015 that ensures the assets continue to function properly.

We had known that our two largest treatment works, at Boughton in Chester and Llwyn Onn just outside Wrexham, were in urgent need of major refurbishment work if serious supply interruptions to customers were to be avoided. Both works were old and beyond the point where continuing piecemeal refurbishment of the various components would address the fundamental problems economically or effectively.

Refurbishment of the Boughton works was completed recently as the major part of the current AMP4 programme through a successful £15m contract, the largest single contract ever for Dee Valley Water. The result is a modern, reliable works capable of treating River Dee water to the highest standards expected today.

Refurbishment of the Llwyn Onn works is now proposed for the AMP5 period. The Llwyn Onn works was built in the late 1930's by the then Ministry of Works to supply water to the munitions factory on what is now known as the Wrexham Industrial Estate. This was acquired in the 1950's and it has now become the largest water treatment works operated by Dee Valley Water. The main problem at this works is that the structural concrete in the foundations and forming the water retaining tanks has reached the end of its useful life. There is no alternative to a major reconstruction of the works, which will have to be achieved whilst the existing works is kept running. At an estimated cost of £16.6m, this is by far the largest single scheme proposed in our AMP5 investment programme. The outcome will be the assurance of a reliable treatment works producing water to modern standards.

The second major item of expenditure on the maintenance of assets is for renewal of our water mains, the oldest of which date back to pre-1870. As the mains age, the frequency of bursting increases which disrupts supply to customers and increases leakage. Our objective is to renew the mains as cost-effectively as possible to prevent the numbers of bursts from rising. The rate at which we have renewed mains since 2005 has successfully achieved this objective. It will have to increase in the AMP5 period and will continue to increase in subsequent five-year periods until it levels off in about 2025.

The estimated cost for renewing mains in the AMP5 programme is £7m. Techniques such as pipe insertion (threading a new smaller pipe inside the old pipe) are used to replace pipes wherever possible to minimise cost and disruption to the public.

Proposed capital maintenance investment by asset type

Asset Type	Asset Value (£m)	Proposed Investment AMP5(£m)
Impounding reservoirs	32.1	1.0
Treatment works	51.7	17.2
Water mains	298.3	9.6
Pumping stations	12.7	0.2
Storage reservoirs	25.8	1.0
Other assets (IT/telemetry systems etc)	7.1	3.2

The Llwyn Onn scheme and the mains renewal programme together account for about 75% of the entire investment proposed for maintaining assets in the AMP5 period. The remaining £8m or so comprises a series of smaller items of work on the various assets to ensure that they continue to function properly. It will typically cover such work as:-

- replacing pumps
- replacing waterproofing membranes on service reservoirs
- maintaining and renewing IT systems such as the billing system
- maintaining, renewing and extending the telemetry system
- replacing vans
- maintaining reservoirs and dams.

Other investment schemes

Capital expenditure other than for maintenance is termed 'enhancement expenditure' although it does not always result in an improvement that directly benefits customers.

Supply/demand balance expenditure is for schemes that ensure available water resources are sufficient to meet the growth in demand from existing and new customers. We have assessed our supply/demand balance for the next 25 years and set out our findings in a *Water Resources Plan*, which is awaiting clearance from the Welsh Assembly Government before a draft can be released for consultation.

Our assessment is that the margin between available supply and demand will continue to be adequate without any major new schemes and without resorting to frequent restrictions on the use of water by customers, through hosepipe bans for example.

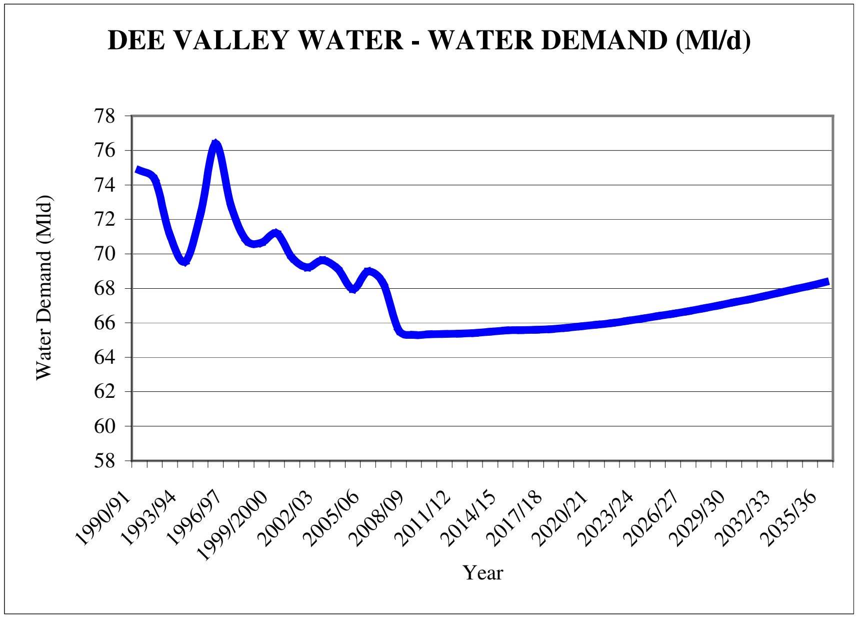
Consumption of water is expected to stay about level overall over the 25 years of the forecast despite the predicted high increase in housing and uncertainties about the effects of climate change.

Dee Valley Water has about the lowest level of leakage from its water mains of all the water companies in England and Wales. Continuing low levels of leakage, an optional metering scheme and increased promotion of water efficiency all help to keep the overall consumption of water down.

Our future water demand will also be significantly affected by a reduction in demand from our major industrial customers as a result of action on their behalf to increase water efficiency and due to closure of one of our largest customers.

As stated above, part of our strategy to minimise expenditure to satisfy higher demand by existing customers and to cater for new customers in the area is the availability of the meter option scheme. Our forecasts suggest that the demand from customers to switch to metered charging will result in additional capital investment of about £1.6m over the AMP5 period.

Laying mains and connecting pipes for new housing is the other large activity in the supply/demand balance expenditure category. It has minimal impact on investment requirements and prices as the cost is covered by contributions from the developers and increased revenue from the new customers.



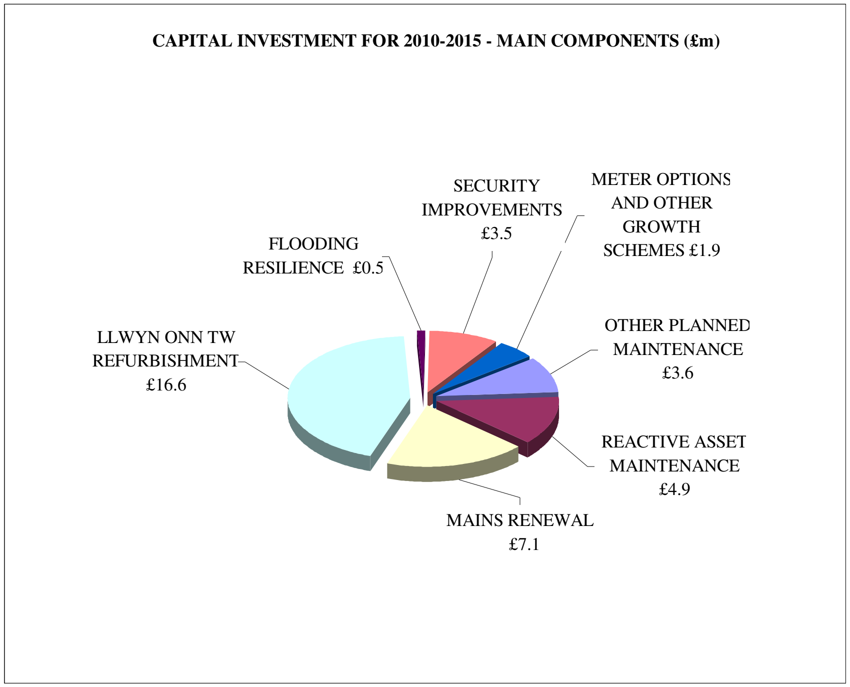
A second category of enhancement is quality enhancement, which is for new assets or enhancements to existing assets to comply with legal obligations or guidance by the Secretary of State or the Welsh Assembly Government.

One area where a large investment is required and which is treated as a ‘quality enhancement’ is improving security at most of our sites. The driver for this is the Security and Emergency Measures Direction (SEMD) reinforced by the Welsh Assembly Government in its *Social and Environmental Guidance to Ofwat* in which it states that it expects companies to ‘*carry out security work on vital* *installations, and protect other installations and facilities according to guidance issued by Government to water companies*'.

The Government guidance comes in the form of a series of Advice Notes issued by the Centre for the Protection of National Infrastructure (CPNI). We have estimated the total cost of complying with all the Advice Notes that have been issued to date as £6m.

If all the security improvements were carried out in the AMP5 period, it would have a large impact on prices and would be a major undertaking for Dee Valley Water from an operational and project management point of view. We are therefore proposing to spread it over as long a period as allowable. Even so, expenditure on security work during AMP5 will be £3.5m, with a further small amount in the current AMP4 period and the balance in 2015-20.

The third category of enhancement is service enhancement, which is an identifiable, measurable, and permanent stepped improvement in service levels to customers. There is one scheme that we are proposing in this enhancement category. It is to reduce the vulnerability of some of our key assets to flooding which could disrupt the supply of water. Our intake at Sesswick on the River Dee is particularly vulnerable to flooding, the loss of which would cause widespread supply interruptions to the Wrexham area. We are proposing to improve the flood defence at this intake, and to check several more sites where a possible risk of flooding has been identified, at an estimated total cost of £0.5m.



Operating expenditure

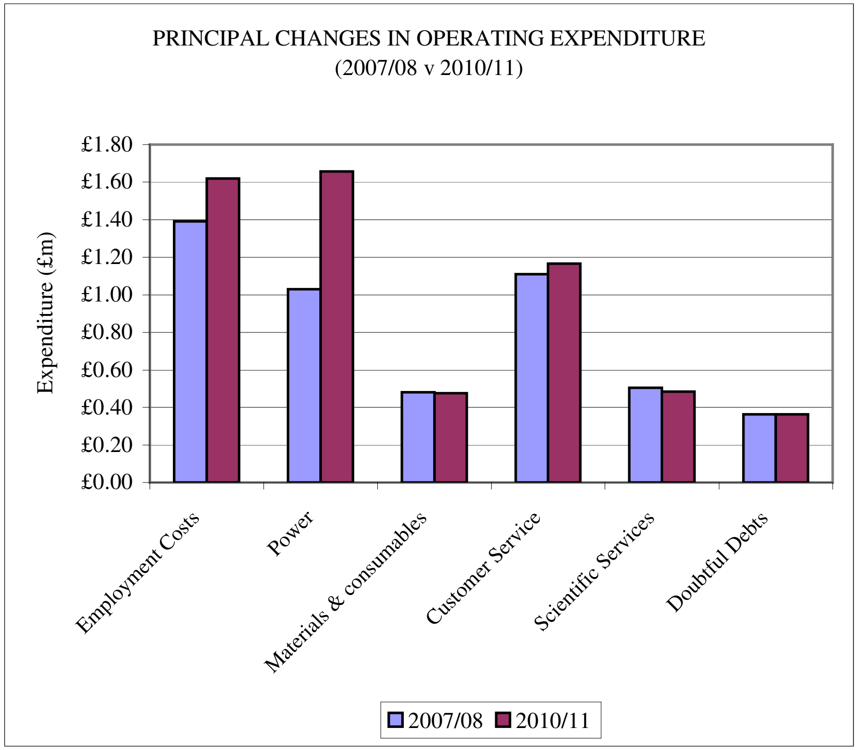
Our operating costs have increased significantly lately compared to the level assumed at the last price setting in 2004. Compared to the forecast then for costs in 2007/08, we have seen an overall increase of just over 6% in real terms; over 50% of this increase can be attributed to power costs. In 2003/04, power costs represented 6% of our total operating costs; in 2007/08 this had risen to over 10% and we forecast that by the start of the AMP5 period power costs will increase still further so that they will represent over 15% of total operating costs in 2010/11.

We have also had to include additional costs in our forecasts to cater for the following requirements:-

- additional costs associated with a staff succession programme to ensure that we retain sufficient skills within the business
- additional costs to cater for the ever increasing burden of regulation facing us in the future
- additional costs to cater for the introduction of competition into water supply.

All of the above additions amount together to less than a 3% increase in operating costs.

Additional costs will also be incurred as a result of the capital expenditure required, for example as more customers are connected to the supply system so additional resources will be required in terms of meter reading, billing etc.



FINANCIAL PROJECTIONS

In preparing this plan we have used information produced by consultants to assess what we consider to be the required rate of return that allows us to be able to finance our investments.

We have also included a "small company premium" in deriving the required rate of return. This premium is justified on the basis of both higher borrowing costs for small companies like Dee Valley Water and higher returns required from providers of equity finance.

Based on an actual gearing level of 60% debt to 40% equity, we have incorporated the following key assumptions into this plan:-

Pre tax cost of debt	4.3%
Cost of equity	9.6%
Pre tax cost of capital	6.42%
Post tax cost of capital	5.7%

UNCERTAINTIES

This Draft Business Plan is presented on the basis of our best estimate of requirements to ensure that we meet our statutory responsibility to supply water.

We will incorporate into our Final Business Plan, which is due for submission in April 2009, any new evidence that appears between now and then. There are currently areas of uncertainty or high risk which could change as described below:-

- **Power costs**. We have already alluded to the important issue of power costs and how this has a significant effect on our operating costs and hence our charges in the future. It is a difficult cost to be able to estimate with any degree of certainty and this may well be an area where Ofwat will consider the inclusion of a "Notified Item" for variations not allowed for in the price limits. Power costs also influence costs in other areas of the business notably for treatment chemicals which have experienced double digit percentage cost increases recently.
- **Lane rental.** No allowance has been made in our estimates of capital or operating costs for the possible introduction of lane rental charges.
- **Pension costs.** We have included in our estimates our current best estimate of the ongoing Company pension costs. Once the current scheme valuation has been completed we will update our projections.
- **Environment Agency charges.** We have not made any allowance for increases above inflation in the costs of abstracting raw water from the rivers and reservoirs.
- **Carbon Reduction Scheme.** We have not allowed for the unknown effect of this proposed scheme on the cost of power.
- **Bad debts.** We have not allowed for any increase in the level of bad debts in the future. This is seen as a major risk given the current economic climate.
- **Optional meter numbers.** They have been estimated on the basis of current understanding. Activity in this area could change markedly in response to various influences.

PRICE LIMITS FOR 2010-2015

The net effect of the various pressures on bills is that an increase is unavoidable over the period from 2010 to 2015. We have kept the increase to a minimum but even so, we are proposing that average bills will have to increase by an average of 1.23% per year over the five years.

The profile of the average increase relative to RPI (called the K Factor) and what it means to customers' bills at 2007/08 prices are as follows:-

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
K	1.3%	2.6%	2.2%	2.2%	-0.2%	-0.6%
Average household bill	£121	£123	£126	£128	£128	£127
Measured household bills						
- 60m^3 annual consumption	£78	£79	£81	£82	£82	£82
- 110m^3 annual consumption	£123	£125	£127	£129	£129	£129
- 160m^3 annual consumption	£168	£170	£173	£176	£176	£175
Unmeasured household bills						
-£100 RV	£107	£110	£113	£115	£115	£114
-£200 RV	£156	£161	£165	£169	£168	£166
-£300 RV	£205	£213	£217	£222	£221	£219

The factors driving the change in average household bills for 2009/10 to 2014/15 are summarised as follows:-

WHAT IS DRIVING CHANGES IN BILLS? (2007/08 PRICES)		£
Average household bill in 2009/10		120.57
Plus	(1) Effect of reducing industrial demand	3.62
	(2) Higher costs of maintaining assets	0.72
	(3) Changes in operating costs	0.23
Less	(4) Reduced financing costs	-0.69
Equivalent household bill 2014/15		124.44
Plus	(5) Optional meters and new developments	1.25
	(6) Security improvements	1.05
	(7) Flood protection	0.14
Average household bill 2014/15		126.87