WATER SERVICES REGULATION AUTHORITY
WATER INDUSTRY ACT 1991, SECTION 12

SUTTON AND EAST SURREY WATER PLC

Notice of Reference: Substantial Effect Interim Price Determination

5 March 2009

1. (a) Sutton and East Surrey Water plc ("the Company") holds an Appointment as a water undertaker for the purposes of Part II of the Water Industry Act 1991 ("the Appointment");

   (b) on 16 December 2008, the Water Services Regulation Authority ("Ofwat") made a determination ("the Disputed Determination") of the questions set out in sub-paragraph 13.3 of Condition B of the Appointment. The terms of the Disputed Determination are set out in Schedule 1 hereto;

   (c) the Company has required Ofwat to refer the Disputed Determination to the Competition Commission ("Commission"). The terms of the Company's notice are set out in Schedule 2 hereto.

2. Ofwat, as required by section 12(3)(a) of the Water Industry Act 1991 and the Appointment, refers the Disputed Determination to the Commission.

3. The Commission shall report on and determine the Disputed Determination within a period of six months from the date of this reference.

Signed for and on behalf of the
Water Services Regulation Authority

Regina Finn
Chief Executive

Schedule 1

Mr N Fisher
Managing Director
Sutton and East Surrey Water plc
London Road
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RH1 1LJ

16 December 2008

Dear Nick

13.3 Substantial effect application – final determination

Background

On 5 November 2008 we published our draft determination of Sutton and East Surrey Water's application under paragraph 13.3 of Condition B ("the substantial effect clause") of its Appointment ("licence").

Sutton and East Surrey Water submitted its application on 17 September 2008 asking that price limits be increased to 10.2%, before inflation, in 2009–10 to recover costs related to two circumstances which you argued were beyond the company's control:

- increases in power costs, in particular electricity costs; and
- the loss of income from customers using less water than assumed when we last set price limits.

The company had calculated the materiality of these two circumstances to be 65% and 41% of turnover respectively according to the method set out in the licence.

Our draft determination explained that while we found that both circumstances were individually above the 20% materiality threshold, we considered that price limits did not need to change.

Representations received

We received a number of responses to our draft determination. CCWater supported our draft determination decision, arguing that customers should not be required to pay any more for the 2005–10 period than previously agreed. We also received correspondence from Members of Parliament supporting our draft determination.

We received both written and oral representations from Sutton and East Surrey Water. In those representations you explained your position which was that the company's original request to increase price limits in 2009–10 from –1.1%, before inflation, to +10.2%, before inflation, remained valid. You argued that:

- we should restore the return on capital equal to the cost of capital set in 2004 for the entire period 2005–10,
- we had not proven that the company's actions were not prudent,

- our analysis of whether the company could finance its functions was inappropriate,
- we should restore the operating costs (including those unrelated to the substantial effect) and revenue streams for 2008–09 and 2009–10 to the level that the company had forecast, and
- we should correct our determination for inconsistencies identified during the consultation period.

Your Chairman also wrote to Philip Fletcher raising concerns that, while we had listened to the company's representation we had not explained the basis of our decisions. This letter and annex sets out more detail on our reasoning which we hope will be helpful in enabling you to understand our decisions.

Final determination

Having considered the representations, we have retained the approach we used in the draft determination for the reasons set out later in this letter and in the attached annex. However, we have made some adjustments to our analysis based on your representations and these are explained later in more detail.

We maintain the view that the increase in power costs and the revenue shortfall were issues that were within management control, that more could have been done to manage them and that risks taken by management are appropriate business risks for the business to bear as it would have retained any benefit that may have accrued from the decision. We have adjusted your application to reflect our view.

After these adjustments we found the power and revenue circumstances were both individually above the 20% materiality threshold for the substantial effect clause. We calculated the net present value of the power circumstance to be equivalent to 21% of the relevant turnover and the net present value of the revenue shortfall circumstance to be equivalent to 25% of the relevant turnover.

In determining whether price limits need to change we have:

- assessed your financial position for the period until we next set price limits; and
- based our decision on the ability of your company to finance its functions for that period.

Taking this approach and having reviewed the outcome of our financial modelling, our final determination is that your price limit for 2009–10 does not need to change as we believe that Sutton and East Surrey Water will still be able to finance its functions until we reset price limits for the period 2010 to 2015.

Consistent with previous substantial effect applications, we treated your case as one to be based on its own particular set of circumstances and we used the discretion granted by the licence to determine what an appropriate change to your price limits might be.

The remainder of this letter explains our position on the major issues that you raised in your representation. The confidential Annex sets out in detail:

- how we have challenged your application;
- a description of how we have determined whether price limits need to increase;
- explanations of how we have taken your representation into account; and

- explanations of why we have retained our current approach.

We also enclose a disc that contains the financial model and interim determination model used by us.

Analysis of the costs and revenues arising from the circumstances of your application

Power

For the draft determination we explained that we believed that the company could have done more to manage its power costs, in other words, this is an issue that we consider was within management control and it was a choice by management as to the strategy adopted and the risks taken. We said that we had commissioned Atkins and had used our econometric models to support our review of your application. Drawing on this analysis we excluded a proportion of your costs. In your representation you disagreed with this.

- You responded to conclusions in the report written by Atkins and asked Black and Veatch to review your operations. They stated that energy usage was efficiently managed and not being managed 'imprudently'.

- You argued that there was no supporting evidence to our view that the company should have agreed to a two year contract. You further stated that the company took its decision on the basis of advice from recognised experts.

- You believed our use of the power models were flawed, that we had not taken account of the company's special factors and that our use of the benchmark was inconsistent with our approach to setting efficiency targets.

In light of your representation we have made some changes to our analysis of your power claim which have led to higher levels of opex. But our adjustment to 2009–10 costs remains the same as at the draft determination. Our judgement does not rely on any single piece of evidence but draws collectively on our analysis. We have considered your representations but have not been persuaded that we should modify our approach. In particular we would note that:

- The company representation provided additional information to support your argument that the company used power efficiently. However, it is not clear that the company moved towards best practice or made a step change in its approach to energy management in response to the circumstance (i.e. increasing power costs) as we might expect to see where significant cost pressures were exerted.

- While advice from consultants has an important role to play, the company itself is responsible for making its decision in the wider context in which it operates. If the company was concerned that a further rise in power costs might place the company under, what it believed to be, unacceptable financial pressure it could have taken a more cautious approach and taken a two year fixed contract. Such an approach would have reduced the risk to both the business and customers. Consistent with our approach to regulation more generally we do not believe that the risk in such circumstances should lie with customers – it is a business risk and should be borne by shareholders.

- Although we have employed the econometric models in a slightly different way compared to price reviews we believe this is reasonable. We are not seeking to set efficiency targets, nor are we seeking to provide incentives to outperform our assumptions, as we do in price reviews.

Revenue

In our draft determination we explained that we made adjustments to revenue data to ensure Sutton and East Surrey Water recovered costs from all customers in a manner that is consistent with the assumptions we used for setting price limits for 2005–10.

In your representation you explained that our draft determination did not reflect the company's actual position and the decisions it had to make. You stated at the time we set price limits that you did not agree with our assumptions.

The assumptions we made when we set price limits for 2005–10 formed part of the package that Sutton and East Surrey Water chose to accept at that time.

The substantial effect claim on revenue relates to the shortfall against the assumptions we made at that time. While the company has chosen to deviate from these assumptions it is appropriate to continue to measure the revenue recovered against the assumption accepted as part of the price limit determination.

We have not changed our revenue assumptions from the draft determination except to correct for inconsistencies identified during the consultation process.

Other issues

In our draft determination we explained that we would consider whether we should deduct from the claim any offsetting savings associated with the circumstances. Our view remains that the complex interaction between power costs and revenue means that, for the final determination, we cannot calculate the net impact with a great degree of certainty. Our view also remains that any impact is not likely to be material.

In line with our approach to the draft determination we have adjusted your data to ensure that any net additional costs and revenue shortfall is calculated against the correct 2004 final determination assumptions.

Determination of changes to your price limits

In our draft determination we explained that:

- The substantial effect clause confers flexibility and discretion on Ofwat to consider what, if any, change in a company's price limits we need to make in cases such as this.

- In making our decision we must consider our duties under section 2 of the Water Industry Act 1991.

After we published our draft determination, Keith Mason wrote to you on 14 November 2008 to provide additional detail on our position. We have now considered the further points contained in your representation in response to our draft determination and Keith Mason's letter.

In your representation you argued that our approach to determining whether a change in your price limits was needed was incorrect. You:

- disagreed with our interpretation of our duties and the way we had assessed whether the company could finance its functions;

- argued that the substantial effect clause did not provide us with the discretion we claimed; and

- argued that we should restore the return on capital to the levels allowed when price limits were last set.

We believe the approach we took at the draft determination continues to be appropriate for the reasons set out below. Consequently, we have taken the same approach as for the draft determination that is to:

- model the cost changes (after challenge) arising from the circumstances for 2008–09 and 2009–10 using our financial model;

- review the resulting financial indicators and financial position; and

- decide if a change to your price limits was necessary for 2009–10 to ensure Sutton and East Surrey Water could finance its functions.

We do not believe that automatically restoring the return on capital to the 2004 final determination allowed cost of capital would be appropriate, especially if the company's financial position showed that it could finance its functions so no restoration was necessary.

We do not consider that the assumptions underpinning the determination of price limits at the beginning of a regulatory period are underwritten by the regulator for the duration of the regulatory period provided that the 20% materiality threshold is met. To do so would undermine the principles of incentive based medium term regulation. It could also, by definition, allow a company more than it needed to finance its functions in the period until the next review. There is no obligation on Ofwat in the licence or section 2 of the Water Industry Act 1991 to restore Sutton and East Surrey Water to the position it would have been in if all the assumptions made at the time of the 2004 final determination had been realised. Consequently, in the exercise of our discretion, we have only considered your position in 2009–10.

Ofwat's duty is to consider whether an adjustment to price limits is needed in order to discharge its obligations under section 2 of the Water Industry Act 1991. In particular this means satisfying ourselves that the company has sufficient resources until prices are next set, even though this may result in a rate of return on capital lower than originally provided for in the 2004 final determination. Allowing Sutton and East Surrey Water greater resources than those which are needed in order to finance its functions is not consistent with furthering the consumer objective.

The representation raised some concern that our use of financial indicators to determine a company's ability to finance its functions was inappropriate. This misunderstands our approach. In reaching our view on Sutton and East Surrey's ability to finance its functions we have considered the wider context, including the forecast return on capital itself, and not just the company's financial indicators.

We have considered your financing requirements for the remainder of the current period and the fact that price limits (and consequently all assumptions and costs) will be reset in 2010. We consider that in this interim period you would be in a position to raise additional funding if required. The published financial information strongly suggests that you do not currently need to access capital given your high level of cash balances and committed liquidity facilities.

Our methodology papers for both the 2004 price review and 2009 price review clearly set out the way in which we assess a company's ability to access financial markets (through consideration of financial indicators). This is a key strand in our judgements as to whether a

company is able to finance its functions. In this specific case, given the exceptional nature of the substantial effect process, the favourable financial indicators and the short time until prices are reset, we believe the return on capital is reasonable and that it does not need to be equivalent to any previously determined cost of capital. We believe investors would take a longer term view of the position of a company and would not expect to see returns in each year exactly matching the cost of capital allowed at a price review.

Conclusion

The draft determination we published in November was based on the information available to us at that time and the subsequent consultation period was an important opportunity for us to consider all stakeholders' views on this case.

We are pleased that this provided the company with the opportunity to submit further information to support its case and allowed us to clarify aspects of the application and understand any concerns the company may have had with our approach. For the final determination we have considered all of the representations we received and reviewed the additional data you provided alongside the information in the original application and subsequent query responses.

This letter, the accompanying confidential annex and enclosed disc set out in detail the approach we have taken to your application, how we have considered your representations and the reasons for our decision.

This letter has been copied to Martin Hurst (DEFRA), Jeni Colbourne (DWI), David King (Environment Agency HQ), David Bland OBE (Chairman of CCWater London and South East) and your local Members of Parliament.

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Confidential annex to accompany final determination letter

This confidential annex should be read alongside our final determination letter dated 16 December 2008. It sets out in detail the process we followed in determining your substantial effect application in the context of your representation.

All costs in this annex are in the 2002–03 financial year average price base, which is consistent with the 2004 final determination (FD) price base.

1. Materiality calculation

1.1 Treatment of power costs

We took a two stage approach to assessing the power element of Sutton and East Surrey Water's (SES) application.

- We adjusted your data to ensure that we compared your actual costs and FD assumptions on a consistent basis.

- We considered, in light of all the evidence you provided and our own analysis, whether all of the company's power costs were prudently incurred.

1.1.1 Consistency between actual data and FD data

In our draft determination we made the following adjustments to ensure consistency between SES' actual data and FD data.

- Your estimate of the company's power costs allowed at FD did not include the head office power costs. Your actual power costs did. For consistency we added the company's power costs reported within general and support expenditure to your final determination assumptions. See query CE/SES/001 for more detail.

- Your estimate of FD power costs did not take account of our FD assumptions on the impact of energy price increases on RPI. We assumed that SES' power costs would increase by 40% over 2005–10, but we also believed that the general rise in electricity prices would feed into higher RPI figures. We therefore:

    i. included a proportion of the 40% increase in power costs in the company's operating costs (£0.509m); and

    ii. assumed that it would accrue the remaining proportion (£0.193m) through an RPI higher than we assumed in our financial model at the last price review.

  Consequently, your application should have compared SES' actual costs against a total power cost assumption of £0.701m (i.e. £0.509m plus £0.193m). We adjusted your PR04 final determination assumptions to reflect this.

In your representation you considered that our RPI adjustment was inappropriate because we had not made the same adjustment to the company's revenue. However, our view is that this is necessary because we made an express allowance for the interaction of power prices and RPI (and therefore revenue) in our PR04 final determination assumptions. The adjustment is to ensure that the variance in your power costs properly reflects our allowance at the 2004 final determination.

We have made no changes to our approach in this area.

Table 1 below sets out the impact of these adjustments on your application.

Table 1: Ofwat adjustments to SES FD power cost assumption (£m)

	2005-06	2006-07	2007-08	2008-09	2009-10
SES FD assumption – pre efficiency (1)	**2.263**	**2.263**	**2.263**	**2.263**	**2.263**
Head office adjustment (2)	0.046	0.046	0.046	0.046	0.046
FD efficiency assumptions (3)	-0.043	-0.084	-0.125	-0.166	-0.205
RPI adjustment (4)	0.193	0.193	0.193	0.193	0.193
SES corrected FD assumption (5)	**2.460**	**2.418**	**2.377**	**2.337**	**2.297**

1.1.2 Challenges to power costs

We used several approaches to help us assess how you have managed your power costs.

Independent review

We asked Atkins to review your energy procurement and management strategies based on the evidence you submitted with your application (and in subsequent query responses). A copy of Atkins' report was included with our draft determination letter. In our draft determination we noted that Atkins concluded:

- "With regard to the company's management approach to energy our impression is that this is somewhat ad-hoc, whereas best practice would be a much more coherent and integrated approach within a formal energy management system and the company working to established policy and strategy documents."

- "Whilst the company has undertaken some energy efficiency investments, there is no sense of an on-going effort to identify opportunities and continuously improve."

In your representation you disagreed with Atkins' conclusions and submitted a copy of a report you commissioned from Black and Veatch that reviewed SES' operations in the area of electricity usage. You also included additional information to demonstrate that SES has procedures in place to manage its energy usage efficiently.

The additional information you provided in your representation helps to support your position. However, we still consider that SES has some scope for improving its energy management. We note that:

- Black and Veatch's report does not indicate that SES is a leading company in its management of its energy use; and

- it is not clear that SES' has made the step change in its culture or strategy that we might expect to see from a company that was under significant pressure from rising power costs.

In our draft determination we highlighted that SES' decision to sign a 12 month contract meant that its energy costs in 2009–10 are likely to be around 50–60% higher than they would have been had the company fixed its prices on a 24 month contract. As a result we considered what the company's costs might have been if we capped its 2009–10 costs at its 2008–09 costs. This suggested that SES' 2009–10 costs would have been 36% lower than its application costs.

In your representation you did not believe this to be appropriate. You considered that such a judgement could only be made in hindsight and that you had acted prudently in opting for a one year contract in 2008–09. You explained that:

- the company took its decision on the basis of advice from recognised experts that power costs would fall in 2009–10; and

- the Atkins report we commissioned makes clear positive statements in its assessment of SES' procurement process and strategy.

We have considered your arguments but note the following points.

- The challenge presented by rising power prices is one that all companies have had to face in this period. Other companies have managed their procurement contracts in such a way as to avoid similar overall power costs increases over the period. The price a company pays for its power is not completely out of management control.

- While consultants may have an important role in energy procurement, companies must make their own decisions after considering the wider context in which they operate. SES had the opportunity to fix its costs and eliminate its exposure to further price increases until the next review. It chose not to do so. Instead, the company followed its consultant's advice and chose the less cautious approach, opting for a one-year deal instead of a two-year deal. In your representation meeting, you argued your advisors had said that, in the future, there was a greater chance of securing cheaper rates than those tendered for 2009-10. This is a management decision and it is a business risk that outturn costs will not be as forecast. We consider that a company concerned that further rises in power prices might place it under unacceptable financial pressure would have taken a more cautious approach and reduced the risk to the business. By choosing the less cautious approach the company is seeking to pass on a business risk of further increases to customers.

  We do not believe that this is appropriate. Your representation argued that in a competitive market increases in variable costs are passed on to customers. In such a case the risk remains with the company. Because the market is competitive a company would face the choice between absorbing the costs or increasing its prices and therefore risk losing customers who choose to switch to a supplier who had managed its costs more effectively. In either case the risk of making the decision not to fix prices for a longer term remains with the company, not the customer. Our approach to regulation has always been that we would not expect to protect companies from normal business risk.

We therefore consider that it remains appropriate to take into account what impact capping your costs would have had on your power costs.

Econometric modelling

In our draft determination we used our power econometric model to assess your power costs in relation to other companies' costs for each year of the regulatory period. We used actual costs for the years 2005–06 to 2007–08. For 2008–09 and 2009–10 we used your application costs, but for other companies we used power costs taken from their draft business plans.

In your representation you rejected our use of the power model to assess the level of costs we should consider in determining your application. You felt that:

- our use of the power model to benchmark SES for future years was flawed because SES' apparent inefficiency is driven by procurement timing and price and not by any change in underlying efficiency;

- our modelling was unreliable as it is based on forecast power costs;

- we should not take the company to the benchmark because this is inconsistent with our approach to setting efficiency targets; and

- relative efficiency is not the same as prudent management.

We have considered your arguments but do not agree that our overall approach in this area is incorrect.

Our analysis should take account of the price SES pays for its power when assessing its power costs. A company's power costs are a function of both its usage and the price it pays for that usage. We consider that companies have control over both these aspects of the overall cost – to discount the price companies pay from the model would remove the incentive to procure power as effectively as possible.

Our view remains that it is valid to use SES' position from the benchmark to inform our view of the company's power cost performance. In this case we are not seeking to set efficiency targets, nor are we seeking to provide incentives to outperform our assumptions, as we do as part of the normal price review process. We are using the model to compare the company's power cost performance against the benchmark company and support an overall challenge to your power cost claim.

We therefore consider that it is still appropriate to use our power model to challenge SES' power costs from 2005–06 to 2008–09 and to inform our assessment of its costs in 2009–10.

However, to take account of the potential errors in the data and our statistical process we have made an adjustment of 10% to the gap between actual costs and those the model predicts when taking you to the benchmark in each year. The benchmark company was not the same company in every year of the period.

Overall, our econometric modelling for the final determination suggests a revised gap to the benchmark company of 34% in 2009–10.

Comparison to a 'similar' company

In our draft determination we compared SES' power costs to a company with a similar average pumping head that is also the frontier company on the power model. We took account of the power element of your softening special factor claim when making this comparison.

You argued that taking SES to the frontier was inappropriate because it is inconsistent with our established approach to setting efficiency targets. However, as with our econometric challenge, we are not using our modelling to set efficiency targets. We are using it to inform our assessment of how SES has managed its power costs. This difference in approach reflects our view that a substantial effect determination is not the same as a price review.

We believe this approach remains valid. Moving you to the frontier position of our adjusted model for 2009–10 would reduce the company's 2009–10 power costs by 40%.

A simple unit cost comparison generates a challenge of 50% to SES' 2009–10 costs.

1.1.3 Conclusions on the challenge to your power costs

You put forward a number of arguments as to why our draft determination assessment of SES' power costs was incorrect. We have considered these and set out our response in the paragraphs above.

Although we have accepted some of your arguments, and adapted our approach where appropriate, we still believe that, taken together, our analysis supports the view that more could be done to lower power costs over the regulatory period. Therefore, in our final determination we applied the following challenges to SES' power costs.

- We took you to the benchmark as determined by our adjusted power model for each year in the period 2005–06 to 2008–09.

- We applied a 30% reduction to the company's power costs for 2009–10. This adjustment is based on, and supported by, our consideration of the potential challenges to your 2009–10 costs set out above. It represents a conservative adjustment that takes account of the fact that the analysis we have undertaken for this year was derived from forecast costs.

Overall, the changes to our approach mean that the additional power costs allowed in the final determination are higher than those we allowed in our draft determination.

Table 2 sets out the impact of this approach and Table 3 compares your submitted power data with our challenged data.

Table 2: Ofwat derivation of challenged actual/forecast power costs (£m)

	2005-06	2006-07	2007-08	2008-09	2009-10
Company claim	**2.455**	**3.223**	**2.902**	**3.088**	**4.828**
Benchmark efficiency challenge	-0.273	-0.135	-0.302	-0.296	-
30% challenge 2009-10	-	-	-	-	-1.448
Ofwat challenged costs	**2.182**	**3.088**	**2.600**	**2.792**	**3.380**

Table 3: Comparison of company power claim and Ofwat final determination figures (£m)

Company claim	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**
Actual	2.455	3.223	2.902	3.088	4.828
FD (post efficiency)[1]	2.221	2.180	2.140	2.100	2.062
Additional power costs	**0.234**	**1.043**	**0.762**	**0.988**	**2.766**
Ofwat challenged numbers					
Actual	2.182	3.088	2.600	2.792	3.380
FD (post efficiency)[2]	2.460	2.418	2.377	2.337	2.297
Additional power costs	**-0.277**	**0.670**	**0.223**	**0.455**	**1.083**

Notes:
1 This line is SES' view of its FD power costs after applying our efficiency assumptions to line 1 of table 1.
2 This line is our adjusted view of SES' FD power assumptions as derived for line 5 of table 1.

As a result of our challenges, we assessed the materiality of the power element of your application to be 20.7%. This is an increase from our draft determination assessment of 20.4%.

1.2 Treatment of revenue variance

In assessing whether your revenue losses could have been avoided through management action we challenged both your actual and forecast revenue data.

1.2.1 Challenge to actual revenue data

In our draft determination we ensured that the turnover you reported in your application was consistent with the turnover you reported in your June returns.

[✂]

The substantial effect claim on revenue relates to the shortfall against the assumptions we made when we set price limits for 2005–10. The assumptions we made on revenue formed part of the package that SES chose to accept at that time. The company has chosen to deviate from these assumptions. This is a management decision and a business risk and we therefore consider that the company, and not its customers, should bear the cost of this.

Consequently, we have made no change to our approach in this area, which, taking into account your individual circumstances, is consistent with our approach to previous applications.

[✂]

1.2.2 Challenge to forecast revenue data

Our final determination 2008–09 revenue forecast is based on your draft business plan submission, with the following adjustments.

- For the first six months of 2008–09 we adjusted SES' forecasts in line with the information you provided in response to query SD/SES/002.

- For the second six months we adjusted your forecasts (from query SE/SES/002) for the following reasons.

    i. We believe SES' assessment of optional meter switchers for the remainder of the period is too optimistic. The company's forecasts were based on average rates since 2005, but over the last 30 months there has been an overall downward trend in switching rates.

    ii. We believe that the number of selective meters installed will remain in line with the number of selective meters installed in the first six months of 2008–09. SES operates a change of occupancy metering programme and in the current housing market downturn we believe the meters installed in the remainder of the year will remain in line with rates in the first six months of the year.

    iii. We assumed that the average volume per measured household will be the same average volume as in the same period in 2007–08.

We applied the same adjustments for selective and optional meters to your 2009–10 draft business plan revenue forecasts as for 2008–09.

In your representation you argued that our challenges made little material difference. You argued that our two positions were so close that your submitted figures must have been prudent and, consequently, we should have used the numbers in your application. For the final determination we have retained the challenges applied to the draft determination. We continue to believe we should use the assumptions we consider to be the most accurate.

You also argued that we should use the revenue forecasts set out in your 30 October letter in our determination. We did not use these forecasts because we considered that the company's draft business plan figures provided a more robust starting point for assessing its revenue claim. SES has not provided sufficient justification to support the use of the new forecasts above those in the draft business plan, which are derived from the company's statutory 25 year water resource plan.

1.2.3 Conclusions on the challenge to your total revenue shortfall

Table 4 sets out the impact of our final determination challenges and table 5 compares your submitted revenue shortfall with our challenged data.

Table 4: Ofwat derivation of challenged revenue figures (£m)

	2005-06	2006-07	2007-08	2008-09	2009-10
Ofwat FD assumption	**42.478**	**42.989**	**43.537**	**43.736**	**43.805**
JR/DBP revenue data	42.217	42.110	42.359	42.725	42.829
Difference between FD04 revenue forecast (with revised RPI) and JR/DBP	-0.26	-0.88	-1.18	-1.01	-0.98
Under-recovery of special agreement revenue	0.04	0.06	0.07	0.06	0.05
Change to measured household volume	-	-	-	-0.41	-
Change to number of optional meters	-	-	-	-0.12	-0.19
Change to number of selective meters	-	-	-	0.09	0.12
Change to non-household volumes	-	-	-	-0.32	-
Change to special agreement volumes	-	-	-	0.04	0.04
Revised revenue difference	-0.22	-0.82	-1.11	-1.67	-0.96
Ofwat challenged actual revenue	**42.26**	**42.17**	**42.43**	**42.07**	**42.84**

Note:
Ofwat challenged actual revenue figures may not match Table 5 due to rounding.

Table 5: Comparison of company revenue claim and Ofwat draft determination figures (£m)

	2005-06	2006-07	2007-08	2008-09	2009-10
Company claim					
Actual	40.713	40.889	41.508	41.080	41.440
FD	41.163	42.209	42.981	42.752	42.514
Revenue shortfall	**0.450**	**1.320**	**1.473**	**1.672**	**1.073**
Ofwat challenged numbers					
Actual	42.261	42.164	42.422	42.068	42.842
FD	42.478	42.989	43.537	43.736	43.805
Revenue shortfall	**0.217**	**0.825**	**1.115**	**1.667**	**0.964**

In our draft determination financial modelling we erroneously used your draft business plan revenue forecasts rather than our tariff basket model view of revenue as inputs for 2008–09 and 2009–10. We sent you the corrected inputs on 18 November. Tables 4 and 5 have been amended to reconcile with these corrected inputs.

The materiality of the revenue element of your claim is 24.7%. This is an increase from our draft determination assessment of 24.5%.

2. Interaction of circumstances

As explained in the attached letter for our final determination we have not deducted any offsetting savings associated with your circumstances.

3. Modelling

Our confidential draft determination annex set out the approach we followed in modelling SES' financial position. In your representation you raised a number of concerns with how we had carried out our financial modelling. You:

- did not understand why we had excluded additional operating costs for 2008–09 and 2009–10;
- were uncertain as to how we had calculated your modelled tax costs; and
- could not reconcile the capital expenditure underspend we used for 2005–06 to 2007–08.

Operating costs

Your substantial effect application relates to changes in energy costs and revenue. We do not consider that the substantial effect clause is equivalent to a periodic review and we do not believe that it is necessary to take account of possible changes in operating cost inputs outside of the energy and revenue circumstances. While your draft business plan identified some areas where customers had benefited from reduced operating costs, we are mindful that companies have an incentive to focus on identifying possible increases in operating costs rather than decreases.

In light of your representation we have amended our approach to tax so that when we exclude the additional operating costs included in your draft business plan we do not under-state tax paid for 2008–09 and 2009–10.

Capital expenditure

We have reviewed the data underpinning the capital expenditure underspend. We believe differences in our FD assumptions are driven by differences in indexation and the treatment of capex creditors. We have set out how we derived our FD assumption figures, and how we think you derived your figures, in a spreadsheet enclosed with our final determination. We have used our view of SES' capital expenditure underspend in our modelling.

Other issues raised

You raised some concerns with our modelling for the draft determination.

- We clarified the basis of the revenue inputs used in our draft determination financial model in section 1.2.3 of this annex. For our final determination, we used our view of SES' revenue as derived from the PR09 tariff basket model.
- In the process of explaining our assumption on notional debt we identified some minor errors in our calculations, which we corrected and sent to you on 17 November. We used the corrected index-linked debt adjustment in our final determination modelling.
- You were also unclear as to why we had included 30% of index-linked debt in our notional debt position. We made this adjustment to our PR04 notional debt assumptions as we considered that was a reasonable assessment of the current average industry position. Our final determination is based on the same assumption that 30% of debt is index-linked.

Other changes

For the final determination we have made some further adjustments to our modelling approach.

We identified that the tax payments in 2008–09 included the full year tax charge from 2007–08 (which is a creditor in your 2007–08 accounts). In order for the financial model to only pay one year's tax we therefore adjusted the 2007–08 corporation tax creditor by 50%, thereby reducing the tax paid in 2008–09.

We used the PR04 final determination dividend assumptions to maintain consistency with the notional gearing assumption rather than the company's draft business plan dividend forecast we used in the draft determination modelling.

We have set out our detailed assumptions for our final determination modelling below.

- We adjusted the PR09 financial model to reflect the notional gearing assumptions we made for you at FD after adjusting for actual revenue and expenditure to 2007–08.

- From this position we adjusted for any material differences between our capital expenditure final determination assumptions and your outturn figures.

- We also assumed that 30% of your existing debt is index linked. We assumed a real interest rate for this debt of 2.87%, which is equivalent to the actual rate you pay.

- We used your 2008–09 and 2009–10 business plan data in the model, except:

    i. We based our 2008–09 and 2009–10 total opex forecasts on your JR08 data adjusted for our challenged power costs.

    ii. We did not include any of the additions to, or reductions in, base opex in 2009–10 that you proposed in your business plan.

    iii. We have drawn on our own view of forecast revenue (see above).

In your representation you felt that our modelling had 'cherry picked'. We do not believe this to be the case. We consider that our final determination modelling reflects the specific circumstances of your application. We consider that the adjustments we made properly reflect both SES' opening position and the impact of the challenged costs on the company's financial position in 2008–09 and 2009–10.

We have enclosed a disc that contains our modelling results with this letter. This includes the IDoK model used for materiality, the PR09 financial model, the modelling inputs and, for completeness, the reconciliations we sent you between our draft and final determination.

4. Determination of change to price limits

In our draft determination we considered that we should not make an adjustment to your price limits for 2009–10. Our decision reflected our assessment of our section 2 duties.

In your representation you considered that we had misinterpreted our duty under section 2(2A)(c) of the Water Industry Act 1991 (WIA91) and the discretion that the substantial effect clause gives us. In particular you thought the following.

- That disregarding the cost of, and return on, capital was inconsistent with our section 2 duties. It was not acceptable for us to determine your financeability solely on the company's financial indicators.

- That we do not have the wide ranging discretion we claim and should therefore restore the return on capital equal to the cost of capital set in 2004 for the entire period 2005–10.

We have considered your arguments on our duties.

We have not disregarded the cost of capital when assessing SES' ability to finance its functions and so we do not consider that our approach is inconsistent with section 2(2A)(c) of WIA91. As set out in more detail below, we considered the company's return and indicators as an overall package when reaching our decision that SES would be able to raise additional funding if required, even though you told us in your representation meeting that you do not need to raise further finance or refinance any debt in 2009–10.

We do not accept your points on the discretion that we have under section 2(2A)(c) of the WIA91 or that we should restore SES' cost of capital to our FD assumptions for each year of the period. As we set out to you in our letter of 14 November, we consider that the substantial effect clause is an exceptional jurisdiction and that if it is invoked, it is invoked on the basis of a defined substantial effect in relation to turnover. There is nothing in the regulatory regime that sustains the argument that the assumptions underpinning the determination of price limits at the beginning of the period are underwritten for the duration of the period provided that the 20% materiality threshold is met. Section 2(2A)(c) does not set out an obligation on our part to restore SES to the position it would have been in if all the assumptions made at the last review had been realised. Such an obligation would undermine the principles of incentive based, medium term regulation. It would, by definition, allow a company more than it needed to finance its functions in the period until the next review. We might also need to reassess significantly our view of the risks faced by the industry and any risk premiums paid in returns to debt and equity investors.

Once a substantial adverse effect has been identified, by reference to the stipulated criteria, Ofwat has discretion, within the confines of section 2 of WIA91, to determine what if any change should be made to price limits. Our section 2(2A)(c) duty means that Ofwat must exercise and perform the powers and duties vested in it in a manner that *it considers* (note the broad discretion) is best calculated to *ensure* that companies are able to finance the proper carrying out of their functions. This means no more than assessing the situation at the time of the substantial effect application and satisfying ourselves that there are sufficient resources in being, even if this results in a rate of return on capital lower than originally provided for in the earlier determination. Allowing Sutton and East Surrey Water greater resources than those which are needed in order to finance its functions cannot be consistent with furthering the consumer objective.

Table 6 compares the rate of return and the financial indicators produced from our modelling for the final determination (following the process set out in section 3 of this annex) with those produced for the 4 November draft determination and the 2004 final determination of price limits.

Table 6: Comparison of FD, draft and final interim determination

	Level allowed at FD		Draft interim determination		Final interim determination	
	2008-09	2009-10	2008-09	2009-10	2008-09	2009-10
Post tax return	6.61	6.62	5.49	5.57	5.18	5.26
Cash interest cover (FFO)	3.99	3.96	3.85	3.81	3.90	3.88
Adjusted cash interest cover I (post maintenance charges)	1.63	1.60	1.48	1.45	1.42	1.40
Adjusted cash interest cover II (post maintenance expenditure)	1.94	2.09	1.01	1.61	1.02	1.63
Ratio of debt to RCV (%)	57.7	57.6	60.1	62.4	59.0	61.1
Debt payback (RCF/debt) (%)	15.7	16.0	11.9	11.0	12.8	11.5

In your representation you raised some concerns regarding our assessment of the company's financial position. You commented that:

- our approach to assessing SES' indicators was inconsistent with our approach to a price review and with our approach to previous substantial effect determinations;
- the ratios in our draft determination do not meet our preferred level set out at PR04;
- in recent discussions rating agencies have indicated to SES that their adjusted cash interest cover (I) requirement for SES would be around 2.0x; and
- our judgement was based on a hypothetical company, not SES' actual position.

We considered your comments when assessing our final determination view of the company's financeability. We have modelled consistent with PR04 on the basis of a notional structure.

We consider our approach in the final determination is consistent with our approach at a price review, recognising the nature of the application. Our methodology papers for both the 2004 price review and 2009 price review clearly set out that we judge a company's ability to finance its functions on both its ability to earn the cost of capital and to access financial markets. In assessing your application we have given less weight to the return on capital than we might at a review, but this does not equate to ignoring the return on capital. It merely reflects the exceptional nature of the substantial effect provision and the short time period to the next review. We consider that investors take a long term view and are not influenced by changes in the return in individual years, particularly when a company's indicators are adequate.

We note your comments on how we assessed the modelled indicators in comparison to PR04, but considered that:

- our PR04 ratios did not represent a floor below which we considered companies un-financeable as we accepted that returns and indicators would vary over the period;
- our policy position over a number of periodic reviews has been to consider the overall package of indicators rather than target a specific indicator; and
- we did not underwrite the indicators over the period.

You had concerns on our use of a notional structure when modelling. This approach is in line with our approach at previous substantial effect applications and our approach at both PR04 (as set out in 'Future water and sewerage charges 2005–10: Final determinations') and previous price reviews. We have been clear that we model all companies against an assumed structure and make no special allowance for highly geared structures as the choice of capital structure and corresponding risk sits with companies. We do not propose to change this approach for the final determination.

Based on your actual structure the rating agencies believe your financial position to be consistent with comfortable investment grade status. Moody's consider that you remain well in line with its expectations for its current rating category of Baa1 – two notches above the lowest investment grade rating. Your long term rating from Fitch's Ratings is currently BBB+ on stable outlook. S&P's corporate rating is BBB+ 1 stable, and whilst it views the company as having very little headroom on this rating, its assessment methodology does not take account of SES' high proportion of index-linked debt.

In reaching our decision on whether SES needed an adjustment to its price limits we considered your representations on both our interpretation of our section 2 duties and our assessment of SES' financial indicators. However, for the reasons set out above we considered that:

- our final determination of your application should be forward looking; and
- that on this basis, SES' return on capital is reasonable and that, as a package, its financial indicators are consistent with investment grade status.

We therefore believe that the company can finance its functions for the rest of the review period, and so have made no adjustment to its price limits for 2009–10.

Schedule 2

Sutton and East Surrey Water plc

Water Industry Act: Section 12

Notice to the Water Services Regulation Authority ("OFWAT") of requirement for reference to the Competition Commission: Price Determination

Pursuant to Condition B, Part V, paragraph 15(3), (c) and (ii) of the Company's Appointment as a water undertaker ("Licence"), we hereby give you notice that:

(a) we dispute your Final Determination dated 16 December 2008 of our application dated 17 September 2008 for an adjustment to our price limits under paragraph 13.3 of Condition B (the substantial effect clause) of our Licence; and

(b) we require you to refer the disputed determination to the Competition Commission for determination by it.

DATED this 9th day of February 2009

(signed) **Nick Fisher**
Managing Director
Sutton and East Surrey Water plc

Condition B of SES's licence—subparagraphs 13.1, 13.2 and 13.3

13. *References to the Water Services Regulation Authority relating to Notified Items and Relevant Changes of Circumstance and circumstances having a substantial effect on the Appointed Business*

13.1 The Appointee may from time to time refer to the Water Services Regulation Authority for determination by it (having considered the proposals of the Appointee) the questions set out in sub-paragraph 13.2 or, as the case may be, sub-paragraph 13.3. Such reference shall be made by notice given to the Water Services Regulation Authority, which, in the case of the questions set out in sub-paragraph 13.2, shall be given in accordance with sub-paragraph 13.4. For the purposes of sub-paragraph 13.2 a single reference may be made in respect of any number of Notified Items and Relevant Changes of Circumstance and sub-paragraph 13.2 shall be construed accordingly.

13.2 In the case of a Notified Item or where there has been or is to be a Relevant Change of Circumstance all of the following:

(1) what are, or are likely to be, the costs, receipts and savings reasonably attributable to the Relevant Item and also, in the case of a Relevant Change of Circumstance falling within sub-paragraph (2) of the definition, the costs, receipts and savings reasonably connected with the Relevant Disposal of Land;

(2) except in the case of a Relevant Change of Circumstance falling within sub-paragraph (2) of the definition, to what extent:

(a) are the costs determined under (1) reasonably recoverable through charges for services provided, functions carried out by, and other activities of, the Appointee in its capacity as a water undertaker which are not Standard Charges for Basket Items (not being Excluded Charges);

(b) in the case of receipts and savings, is the Relevant Item relevant to services provided, functions carried out by, and other activities of, the Appointee as a water undertaker which are not Basket Items in respect of which the Appointee makes Standard Charges (not being Excluded Charges)

and where it is determined that such costs are reasonably recoverable as aforesaid or, as the case may be, that the Relevant Item is relevant as aforesaid, either in full or to an extent, then references hereafter to costs, receipts and savings reasonably attributable to a Relevant Item are to those costs, receipts and savings except to that extent;

(3) both of the following:

(a) what costs reasonably attributable to, or connected with, the Relevant Item as determined under (1) and what timing of incurring of such costs are appropriate and reasonable for the Appointee in all the circumstances to incur and programme, or, as the case may be to have incurred and programmed, by reason of the Relevant Item; and

(b) what receipts and savings reasonably attributable to, or connected with, the Relevant Item as determined under (1) and what timing of such receipts and savings is appropriate and reasonable for the Appointee in all the circumstances to achieve and programme or, as the case may be, to have achieved and programmed, by reason of the Relevant Item

and for the purpose of determining the separate amounts under (a) and (b), but without prejudice to the generality of the foregoing:

(i) no account shall be taken of:

(A) any trivial amounts;

(B) any costs, to the extent that they would have been, or would be, avoided by prudent management action taken since the transfer date (and for this purpose what constitutes "prudent management action" shall be assessed by reference to the circumstances which were known or which ought reasonably to have been known to the Appointee at the relevant time);

(C) any savings achieved by management action taken since the transfer date over and above those which would have been achieved by prudent management action (and for this purpose what constitutes "prudent management action" shall be assessed by reference to the circumstances at the relevant time); or

(D) any amounts attributable to matters allowed for in making a Relevant Determination, except to the extent that such amounts otherwise fall to be taken into account as amounts reasonably attributable to, or connected with, the Relevant Item under this sub-paragraph (3) and sub-paragraph (1) by virtue of the definition of a Notified Item and a Relevant Change of Circumstance; and

(ii) in the case of a Relevant Change of Circumstance falling within sub-paragraph (1) of the definition, regard shall be had to whether either:

(a) the Secretary of State has notified the Water Services Regulation Authority of any change of policy, concerning any environmental or water-quality standard, which has been made since the Adjustment Factor was last determined; or

(b) the Appointee has itself given notice to the Water Services Regulation Authority of the application to it of, or any change to, any legal requirement, before referring that legal requirement to the Water Services Regulation Authority under sub-paragraph 13.1;

(4) having determined under (3) the separate amounts of costs and of receipts and savings in respect of each Relevant Item, what are the annual cash flows thereof (costs being netted off against the amount of receipts and savings for this purpose) over each Charging year included in the timing determined under (3) (those annual cash flows being hereinafter referred to as **"the Base Cash Flows"**);

(5) what is the annual aggregate of:

(a) one half of the Base Cash Flows in respect of Relevant Changes of Circumstance falling within sub-paragraph (2) of that definition; and

(b) the Base Cash Flows in respect of all other Relevant Changes of Circumstance and Notified Items

in both cases the subject of the notice or notices under sub-paragraph 13.4 or paragraph 14;

(6) (a) where any part of an annual aggregate derived under sub-paragraph (5) consists of items to which (b) below does not apply, what is the Net Present Value of that part of the annual aggregate, calculated up to the start of the first of the Charging Years for which the next Periodic Review falls to be carried out;

(b) where any part of the annual aggregate derived under sub-paragraph (5) consists of revenue and/or Operating Expenditure, what is the Net Present Value of that part of the annual aggregate, calculated over 15 years; and

(c) what is the aggregate of the Net Present Values calculated under (a) and (b) (**"the Materiality Amount"**);

(7) is the Materiality Amount equal to or does it exceed ten per cent of the turnover attributable to the Appointed Business in the latest financial year for which accounting statements have been prepared and delivered to the Water Services Regulation Authority under Condition F, as shown by those accounting statements, and for this purpose where the Materiality Amount is a negative figure it shall be treated as though it were a positive figure;

(8) if so, for each year, (**"the relevant year"**) until the first of the Charging Years for which the next Periodic Review falls to be carried out (having regard to any Review Notice or Reference Notice which has been given at the time when the reference is made),

(a) what are the following amounts:

(i) all Base Cash Flows at Outturn Prices attributable to the creation or acquisition of depreciable assets (**"Allowable Capital Expenditure"**);

(ii) all the Base Cash Flows at Outturn Prices (save in respect of Relevant Changes of Circumstance falling within sub-paragraph (2) of that definition, where one half of the Base Cash Flow at Outturn Prices shall be used) attributable to the creation, acquisition or disposal of non-depreciable assets (**"Allowable Infrastructure Asset Expenditure"**);

(iii) all other Base Cash Flows at Outturn Prices (**"Other Allowable Expenditure"**);

(iv) the sum of the Current Value of all Allowable Capital Expenditure occurring up to and including the relevant year, divided by the weighted average expected life of the assets attributable to that Allowable Capital Expenditure at the time those assets were or are expected to be created or acquired (**"Allowable Depreciation"**);

(v) the sum of the Current Value of all Allowable Capital Expenditure occurring up to and including the relevant year less the sum of the Current Value of all Allowable Depreciation occurring up to and including the relevant year (**"Allowable Net Asset Value"**);

(vi) the sum of the Current Value of all Allowable Infrastructure Asset Expenditure occurring up to and including the relevant year (**"Allowable Infrastructure Asset Value"**);

(vii) the Appropriate Discount Rate, adjusted so as to exclude any allowance for changes in the Retail Price Index, multiplied by the sum of:

(A) the Allowable Net Asset Value for the relevant year; and

(B) the Allowable Infrastructure Asset Value for the relevant year;

(the **"Allowable Return"**); and

(b) what is the sum of:

(i) Other Allowable Expenditure;

(ii) Allowable Depreciation; and

(iii) the Allowable Return;

(the **"Annual Allowable Amount"**);

(9) what change to the Adjustment Factor over the period from the beginning of the first of the Charging Years referred to in sub-paragraph 13.4(1) (in any case where a Reference Notice has been given in respect of sub paragraph 13.2) or sub-paragraph 14(1) (in any other case) until the first of the Charging Years for which the next Periodic Review falls to be carried out (having regard to any Review Notice or Reference Notice which has been given at the time when the reference is made) (the **"Relevant Period"**) is most likely to allow, or, as the case may be, require, the Appointee to make such charges over the Relevant Period (**"Adjusted Charges"**), in such a manner as to secure that the increase, or, as the case may be, the decrease, in revenue attributable to the making of Adjusted Charges would, in each year of the Relevant Period, be equal to:

(i) the Annual Allowable Amount for that year,

plus

(ii) where Base Cash Flows at Outturn Prices have occurred prior to the first year of the Relevant Period, the amount, which, calculated as a constant annual amount over the Relevant Period, would result in the sum of the Net Present Values of these amounts equalling the sum of the Net Present Values of the Annual Allowable Amounts for each of the years prior to the Relevant Period,

Provided that—

(a) where costs have been allowed for in determining the Annual Allowable Amount, it shall be assumed that those costs will be financed other than by the proceeds of an issue of equity share capital and

(b) the revenue attributable to the making of Adjusted Charges over the relevant period shall not result in interest cover which, measured both by its level in any one year and by trends in that level over time, is less than that appropriate to the financial position and performance which investors and creditors would reasonably expect of a properly managed company holding the Appointment, whose sole business consists of being a water undertaker and having its equity share capital listed on the London Stock Exchange.

13.3 All of the following:

(1) whether any circumstance (other than a Relevant Change of Circumstance) has occurred which has or will have:

(a) a substantial adverse effect on the Appointed Business or on its assets, liabilities, financial position, or profits or losses, not being one which would have been avoided by prudent management action taken since the transfer date; or

(b) a substantial favourable effect on the Appointed Business, or on its assets, liabilities, financial position, or profits or losses, being one which is (i) fortuitous and (ii) not attributable to prudent management action; and

(2) if so, what change should be made to the Adjustment Factor.

For this purpose:

(i) what constitutes “prudent management action” shall be assessed by reference to the circumstances which were known or which ought reasonably to have been known to the Appointee at the relevant time;

(ii) an effect shall not be regarded as a substantial adverse effect or a substantial favourable effect in any case unless, if the questions set out in sub-paragraph 13.2 were to be asked in relation to the circumstance giving rise to it, the answer to that in 13.2(7) (taking the reference in it to ten per cent as a reference to twenty per cent) would be in the affirmative.

SES's SAE claim

Our Ref: NJF/LAT/Ofwat

Your Ref:

17th September 2008

Ms R Finn
The Water Services Regulatory Authority
Centre City Tower
7 Hill Street
Birmingham
B5 4UA

Dear Ms Finn

Special Adverse Effect Application under clause 13.3 of the SESW Licence—Power and Income

We refer the following matter to the Authority for determination by it.

During the current five-year regulatory period SESW has suffered increases in power costs, in particular increases in electricity costs, and losses of income which have and will have a substantial adverse effect on the Appointed Business and could not have been avoided by prudent management action. In order to correct for this substantial adverse effect, SESW's k factor for the year 2009/10 needs adjusting by 11.3 from –1.1 to 10.2.

Materiality

The increased power costs and loss of income pass the materiality test specified in paragraph 13.3(ii) of SESW's licence.

As requested we have submitted to Ofwat a soft copy of the materiality calculation using its IDOK model. For completeness we have also included our calculation as Appendix 1 to this letter.

Increased power costs

The increase in power costs is due to the increases in the unit cost of electricity. The impact of these increases on SESW for the five years of the current regulatory period is given in the table below. By 2009/10 SESW's power costs, even on lower than anticipated volumes, will be almost two and a half times the amount allowed for in the 2005/10 price determination.

Power costs *(2002/03 prices, £000)*	2005/06	2006/07	2007/08	2008/09	2009/10
Final Determination	2,221	2,180	2,140	2,100	2,062
Actual	2,455	3,223	2,902	3,088	4,828
Difference	234	1,043	762	988	2,766
Actual as % of Final Determination	111%	148%	136%	147%	234%

Attached as Appendix 2 is a description of SESW's approach to minimising the use and cost of electricity and information relating to the increase in the cost of electricity. For convenience, the format of the appendix generally follows the matters relating to power costs raised in Ofwat's letter of 1 July 2008.

Loss of income

Over the current five-year period SESW's water income is expected to be almost 3% less than assumed by Ofwat in its Final Determination. In essence, this loss of income has arisen because SESW's customers have used and are using less water than was assumed by Ofwat in its Final Determination. This is particularly clear from the lower than assumed average amount of water used by metered domestic customers. In addition, the rate at which customers have opted to switch to meters occurred sooner than was assumed in the Final Determination.

The following tables provide a good picture of the financial impacts of the reduction in water used and where the reduction has occurred.

Water income *(2002/03 prices, £m)*	2005/06	2006/07	2007/08	2008/09	2009/10
Final Determination	41.163	42.209	42.981	42.752	42.514
Actual/Forecast	40.713	40.889	41.508	41.080	41.440
Difference	.450	1.320	1.473	1.672	1.073
Actual as % of Final Determination	98.9%	96.9%	96.6%	96.1%	97.5%

Unmeasured income *(2002/03 prices, £m)*	2005/06	2006/07	2007/08	2008/09	2009/10
Final Determination	27.956	27.633	27.374	26.133	24.471
Actual/forecast	27.821	27.364	26.463	25.452	24.292
Difference	.135	.268	.911	.681	.180
Actual as % of Final Determination	99.5%	99.0%	96.7%	97.4%	99.3%

Measured income *(2002/03 prices, £m)*	2005/06	2006/07	2007/08	2008/09	2009/10
Final Determination	13.208	14.576	15.606	16.618	18.042
Actual	12.892	13.525	15.044	15.628	17.149
Difference	.315	1.051	.563	.991	.894
Actual as % of Final Determination	97.6%	92.8%	96.4%	94.0%	95.0%

Number of Domestic Meters *(000)*	2005/06	2006/07	2007/08	2008/09	2009/10
Final Determination	50.906	56.661	63.916	73.171	84.426
Actual	49.695	57.714	67.243	74.995	82.569
Difference	–1.211	1.053	3.327	1.824	–1.857
Actual as % of Final Determination	97.6%	101.9%	105.2%	102.5%	97.8%

Consumption per domestic meter *(m^3)*	2005/06	2006/07	2007/08	2008/09	2009/10
Final Determination	130.1	132.3	134.0	135.9	138.0
Actual	124.2	113.8	120.6	115.6	127.9
Difference	5.9	18.5	13.4	20.3	10.1
Actual as % of Final Determination	95.5%	86.0%	90.0%	85.0%	92.7%

Total metered consumption *($000m^3$)*	2005/06	2006/07	2007/08	2008/09	2009/10
Final Determination	15,899	16,773	17,838	19,221	20,930
Actual	15,377	15,480	17,287	17,951	19,882
Difference	522	1,293	551	1,270	1,048
Actual as % of Final Determination	96.7%	92.3%	96.9%	93.4%	95.0%

Total water consumption *($000m^3$)*	2005/06	2006/07	2007/08	2008/09	2009/10
Final Determination	53,886	54,146	54,105	54,261	54,355
Actual	52,063	48,835	49,030	49,887	52,830
Difference	1,823	5,310	5,075	4,374	1,525
Actual as % of Final Determination	96.6%	90.2%	90.6%	91.9%	97.2%

Appendix 3 provides more information about the loss of income. Again for convenience, the format of Appendix 3.1 generally follows the matters relating to water income raised in Ofwat's letter of 22 August 2008. Appendix 3.2 includes a full comparison between the assumptions in Ofwat's Final Determination and Actuals of all the elements of the tariff basket and other water income. The tables above have been extracted from Appendix 3.2.

Adjustment/k factor

A k factor adjustment of 11.3, adjusting SESW's k factor for 2009/10 from –1.1 to 10.2, is required to reinstate the returns over the current five-year regulatory period that were determined by Ofwat in its Final Determination. In arriving at this figure we have adjusted for outperformance and underspend outside the areas of power and water income. We have also included an adjustment relating to the increases during the period 2005/10 to SESW's RCV resulting from Ofwat's application of the COPI index to capex (R Lee's letter to N Fisher dated 2 May 2008).

The following table shows the relative magnitude by year of the impacts of increased power costs and reduced income and the various offsets we have made against them.

Figures are discounted at the cost of debt and in 2002/03 prices (£000)	2005/06	2006/07	2007/08	2008/09	2009/10	Total
Income—water	–430	–1,204	–1,284	–1,391	–855	–5,164
Income—other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Opex—power	–224	–952	–664	–823	–2,200	–4,861
Opex—other	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Tax paid	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Capex—excess return	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Capex—excess CCD	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
COPI increase to RCV—return	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

In order to correct for the net discounted loss of £[✂], arising as outlined in the above table during the five-year period 2005/06 to 2009/10, additional income of £[✂] (in 2009/10 prices), or a k factor 10.2 as opposed to the existing k factor for 2009/10 of –1.1, is required in 2009/10.

The supporting information to this table is included as Appendix 4.1.

The required k factor has been calculated using the tariff basket in the Target model that SESW is using for the forthcoming price review. A copy of the output is attached as Appendix 4.2.

CCD and RCV

As can be seen from the previous table, the calculation of the k factor gives credit for the return on the underspend of capex, and the associated reduction in CCD, during the five-year period 2005/06 to 2009/10. However, if these credits are included in the k factor adjustment a corresponding increase of £[✂] (in 2002/03 prices) is required to SESW's RCV at the end of 2009/2010. The calculation of the increase in RCV is included in Appendix 4.1 (Table S4).

The alternative to not adjusting SESW's RCV is to leave the RCV unchanged and to allow the adjustments associated with the delayed capex to flow through in the normal way after five years. However, if this approach is adopted it does require the two capex lines to be deleted from the above table. This would significantly increase the income requirement in 2009/10 and therefore the required k factor for 2009/10. This is not our preferred approach.

For your information a calculation of the income shortfall based on omitting capex and CCD is included as Appendix 4.1 Table S2(a).

CCD has been calculated using the average asset life of 18.2 years used by Ofwat in its Final Determination for SESW. A copy of our calculation of this average asset life is also included in Appendix 4.1 after the tables.

Figures and assumptions

Most of the figures in this application and which are summarised in the above shortfall table will already be known to Ofwat.

Actual figures for 2005/06, 2006/07 and 2007/08 agree with Regulatory Accounts, June Returns, etc. The only adjustment we have made is in the Opex—other figures in the above table where we have removed the FRS 17 adjustments in 2005/06, 2006/07 and 2007/08 (none have been anticipated in the forecasts for 2008/09 and 2009/10). The FRS 17 adjustment to accounts is a non-cash adjustment and is not part of Ofwat's determination which deals with pensions on a contributions paid basis. Appendix 5 is copies of the regulatory documents referred to in this application.

The forecasts for 2008/09 and 2009/10 agree with the Draft Business Plan ("DBP") with the exception that, because of the wet summer, we are now forecasting significantly lower (6.8% lower) water consumption in 2008/09 than was assumed in the DBP. This has resulted in lower income and power costs than those included in the DBP. The water income figures come from the Target model SESW is using to prepare for the forthcoming determination. As explained in our DBP, the water income figures produced by Ofwat's Reservoir model are incorrect.

You will be aware that this application has already been substantially reviewed on your behalf by SESW's Reporter and that this review will be completed in the near future. We believe the application includes everything needed for the Authority to arrive at its determination. However, please contact us if you require any further information.

Yours sincerely

Nick Fisher
Managing Director

Ofwat's power model

Summary of the model

1. Ofwat's power model is one of a number of models it uses at price reviews in setting efficiency targets. These models allow Ofwat to compare the costs of the water and sewerage companies by estimating the extent to which differences in their costs are due to the differences in their characteristics.

2. Ofwat considers that a water company's power costs are largely driven by its need to pump water. In the power model this is measured by distribution input and average pumping head. Distribution input is the total amount of water being put into the system and the average pumping head is how much, on average, this water has to be pumped.

3. The regression used in the model is (Ofwat notation):

$$\ln(pc) = \alpha + \beta \ln(H \times V)$$

   where *pc* is spend on functional power, H is distribution input and V is average pumping head. As this is a log-linear model, β gives the percentage change in *pc* that would arise from a 1 per cent change in H x V. Ofwat uses a log-linear specification to allow for economies of scale.

4. Ofwat uses the estimated equation to calculate predicted power costs for each company. The difference between the predicted and actual power costs, the residuals from the regression, are then calculated as a percentage of the predicted costs. The residuals are reduced by 10 per cent to account for statistical errors.

5. Finally, for each company, Ofwat calculates the difference between its residual (expressed as a percentage of predicted costs) and that of the benchmark company. The benchmark firm is the most efficient firm relative to its pumping requirements that satisfies the following criteria:[1] Ofwat has no concerns about the company's data meeting their reporting criteria; the company has no special characteristics that are outside the control of management and which significantly reduce costs relative to the sector norm; and the firm represents a reasonable proportion of the sector. Ofwat considers that this gives a measure for each company of the extent to which its actual costs exceed those that it would achieve were it to perform as efficiently as the benchmark firm.

6. Table 1 shows the inputs to the model and the results for the year 2007/08.

TABLE 1 **Results from the Power Model using 2007/08 data**

[✂]

Source: Power model 2008—SES FD 171208.

[1]Relative efficiency assessments 2007/08—supporting information.

Ofwat's use of the model in the assessment of SES's SAE claim

7. In assessing SES's claim, Ofwat compared SES's performance on power costs in each year of the price control period with that of the benchmark company. The results are given in Table 2. For the years 2008/09 and 2009/10, Ofwat used information from the draft business plans for 2009 and 2010 power costs. For 2009/10, the percentage reduction was also informed by comparison with a similar company.

TABLE 2 **SES efficiency relative to the benchmark firm, 2003/04 to 2009/10**

Year	*Benchmark firm*	*SES efficiency relative to the benchmark firm %*
2003/04	[✂]	–4.15
2004/05	[✂]	–1.96
2005/06	[✂]	11.14
2006/07	[✂]	4.19
2007/08	[✂]	10.44
2008/09	[✂]	9.58
2009/10	[✂]	[✂]

Source: Extracts from results provided by Ofwat for power model run using power costs reported in June Returns 2004 to 2008 and Draft Business Plans for 2008 and 2009.

Note: The residual for 2003/04 and 2004/05 has not been adjusted by 10 per cent.

Comments

8. The CC has concerns with how Ofwat has used the power model in the assessment of SES's SAE claim.

9. Our main concern is that SES's performance is compared with that of different benchmark companies in different years and that the effect of this is to compare SES against a level of performance over the price control period that no single company achieved.

10. Table 3 shows the results of the power model for SES and the benchmark companies for the years 2003/04 to 2009/10. The figures in brackets are the position of the companies when ranked by their relative performance in the year. We can see from this that the benchmark company changes in each year and that the relative performance of each benchmark company has varied over the period—each has slipped to two-thirds of the way down the rankings in at least one year.

TABLE 3 **Efficiency of SES and the three benchmark firms for years 2003/04 to 2009/10**

	2003/04	*2004/05*	*2005/06*	*2006/07*	*2007/08*	*2008/09*	*2009/10*
SES	–4.15 (5)	–1.96 (3)	11.14 (6)	4.19 (12)	10.44 (7)	9.58 (5)	33.83 (20)
[✂]	**0** **(6)**	17.43 (9)	19.6 (13)	**0** **(6)**	18.03 (15)	8.51 (4)	**0** **(2)**
[✂]	13.05 (15)	24.58 (13)	**0** **(2)**	9.5 (14)	**0** **(3)**	3.04 (3)	3.17 (5)
[✂]	1.75 (8)	**0** **(4)**	11.6 (7)	2.8 (8)	9.99 (6)	**0** **(2)**	28.72 (14)

Source: Extracts from results provided by Ofwat for power model run using power costs reported in June Returns 2004 to 2008 and Draft Business Plans for 2008 and 2009.

11. Over short periods such changes in relative performance will be driven by the differences in the prices paid-for electricity—technical efficiency will not change significantly year-on-year. Some of the differences in the prices paid may be simply due to the timing of contracts. The effect of this is to judge SES against a benchmark that no company actually achieved over the period of the price control and which may not have been achievable.

Other comments

12. To run the model for 2008/09 and 2009/10, Ofwat used power costs taken from draft business plans.[2] Ofwat made a 10 per cent adjustment to the power model residuals to account for possible errors in the data and in its statistical processes. The assessment of SES's efficiency is therefore vulnerable to other firms' estimations of their future power costs.

13. The price review settlement for each company will be based on targets for improving efficiency. For most firms these targets will require it only to narrow the efficiency gap compared with the benchmark companies. To then compare SES, as Ofwat has done, with the benchmark company and 'disallow' any difference in residuals could be to compare SES against a target that it was not expected to achieve when the price controls were set. In this particular case this may not be a problem as the results above suggest that SES was in 2003/04 performing well compared with the benchmark firm.

14. Ofwat attributes all the difference between the adjusted residuals to inefficiency. It is possible that the gap might be due to other factors that affect the amount of electricity used that are not included in the model. This possibility is recognized by Ofwat in its criteria for the selection of the benchmark company. In this particular case Ofwat has recognized that SES has special characteristics and in 2009/10 compared its performance against that of 'a similar company'.

[2]Ofwat SES final determination 16 December 2008.

Materiality threshold sensitivity analysis

Results on the sensitivity of the materiality test to alternative assumptions for the impact of the circumstances in the years 2010/11 to 2019/20.

1. In Section 3 we explained that the materiality test requires us to calculate the NPV of the impact of the relevant circumstances over fifteen years. Both SES and Ofwat calculated the NPV by using actual results and current estimates[1] for the five years of the current pricing period and then projecting forward the figures estimated for the year 2009/10 for the remaining ten years. This approach is not required by the licence and so we considered the sensitivity of the materiality finding to alternative assumptions.

2. In relation to power, SES's forecast excess costs, if adjusted for 2010/11 to 2019/20, would need to be reduced to leave an excess of £0.385 million (2008/09 prices) (all other inputs being held the same) in order to give a materiality amount of 20 per cent (equal to the materiality threshold). This compares with an excess of £3.438 million used by SES.

3. In relation to income, SES's forecast shortfall, if adjusted for years 2010/11 to 2019/20, would need to be reduced to a shortfall[2] of £0.270 million (2008/09 prices) in order to give a materiality amount of 20 per cent. This compares with a shortfall of £1.788 million used by SES.

[1]Both Ofwat and SES use actual results for 2005/06, 2006/07 and 2007/08. Ofwat uses best estimates for 2008/09 and 2009/10 for both power and income; SES uses best estimates for 2008/09 and 2009/10 power costs but rolls forward the 2007/08 actual income data for 2008/09 and 2009/10.
[2]Using actual data (2004/05–2007/08) and latest forecasts for 2008/09 and 2009/10.

Financial analysis

1. This appendix sets out further detail of our financial analysis of SES's claim; it expands on paragraphs 4.69 to 4.88 of our final determination. It includes details of our assessment of the methods of calculating return on RCV, analysis of weighted average cost of capital (WACC), the definitions of the other financial indicators used by Ofwat as part of the 2004 regulatory settlement and current investment grade guidelines from a credit rating agency.

Method for calculating return on regulatory capital value

SES's submission

2. SES stated that our assessment should be based on RCV set in 2004 as part of the regulatory settlement and a return calculated using infrastructure renewals charge (IRC) and current cost depreciation (CCD) as assumed in 2004 and not actuals. We use the term 'depreciation' to cover both IRC and CCD.

3. We do not agree with this approach as it ignores the effect that SES's choice of capital expenditure profiling has had on its return and on its RCV. Including a charge in the return for depreciation on an asset that has not yet been acquired or brought into service is not reflecting the cost to the business of providing services in that period. The depreciation charge in the regulatory accounts, whilst a non-cash item, reflects SES's estimate of the diminution in value of assets in the period and has been calculated based on the regulatory accounting guidelines.

Ofwat method

4. The RCV was set by Ofwat at the beginning of the 2005–2010 price control period for each year within that period, based on assumed capital expenditure and an assumed depreciation charge. This RCV is used by Ofwat to derive the return on capital component of K in each year. RCV is not updated by Ofwat[1] until the end of the pricing period when it is updated to reflect actual capital expenditure,[2] but not actual depreciation charges. This is a regulatory device designed to achieve incentive effects (ie allowing companies to keep efficiency gains for a period of time) and to match customers' bills with capital expenditure (within a five-year period) so as to avoid customers paying for assets twice.

5. We note that in Table 7 of our final determination Ofwat calculates return on RCV using this hybrid method: actual depreciation is used when calculating the return but depreciation and capital expenditure (as assumed as part of the 2004 regulatory settlement) are used when calculating RCV. This creates a mismatch between the numerator and denominator.

Our method

6. We believe that for our purposes under the section 2(2A)(c) duty assessing return on RCV within a five-year period should be assessed based on opening RCV updated

[1]Except for adjusting to reflect actual RPI.
[2]Reduced by an assumed depreciation charge based on average asset lives.

with actual capital expenditure and actual depreciation charges, and a return calculated using actual depreciation. This reflects the actual position of the company.

7. It happens that in this particular period for SES, the actual depreciation is less than the assumed depreciation. However, over its lifetime an asset will usually be fully depreciated. For example, if an asset is brought into life three years later than assumed, then in the final three years of its life there should be actual depreciation charges even though there should be no assumed depreciation charges (as the asset is no longer recognized in Ofwat's RCV). As a result, it is possible, even when capital expenditure is systematically deferred, for actual depreciation to be greater than assumed depreciation in a particular period.

8. We agree with SES that Ofwat's hybrid calculation using actual depreciation for the return but assumed depreciation and capital expenditure for the RCV is inconsistent. However, it is using the calculation for a different purpose to ours.

9. Table 1 below sets out the figures calculated on an actual and hybrid basis. The returns (numerator) are the same but the RCV (denominator) is calculated on an actual basis in line 1 and an assumed basis in line 2. This results in little difference as the difference between actual and assumed RCV is very small in comparison with the total size of the RCV. We therefore agree with Ofwat that when assessing trends across the industry, the data in Table 7 of our final determination is adequate for its purpose and that the hybrid and actual basis are broadly similar.

TABLE 1 **SES's real return on RCV—comparison of actual basis with hybrid basis**

per cent

	Actual				*Forecast*	*Average**	
	2005/06	*2006/07*	*2007/08*	*2008/09*	*2009/10*		
SES—out-turn pre-tax (actual)	7.3	7.4	6.7	6.2	4.2	6.4	Line 1
SES—out-turn pre-tax (hybrid)	7.1	7.0	6.5	6.1	4.1	6.1	Line 2
Difference	0.2	0.4	0.2	0.1	0.1	0.3	

Source: Ofwat and CC based on data supplied by SES.

*This is an equally weighted mean of the five preceding annual figures.

10. SES's view is that the figures for SES's returns on RCV in the first row of Table 1 above (and Table 6 of our final determination) are only correct if a cumulative adjustment is made to SES's regulatory RCV so that the RCV carried forward into the 2010–2015 price control period is the actual RCV. SES's view is that, unless this is done, the figures for its returns on RCV as calculated by us are meaningless because otherwise the depreciation charge would not correspond to the change in RCV. We disagree, as we have used these figures to assess reasonableness of return in a given period and not for price-setting purposes. For the avoidance of doubt, in calculating the return on RCV in this manner we are not suggesting that Ofwat adjusts the RCV to reflect this approach or uses such a calculation in its own annual assessment of return on RCV.

Estimates of WACC

11. Vanilla WACC represents the weighted average of the pre-tax cost of debt and the post-tax cost of equity. In considering the post-tax returns on RCV against estimates of the cost of capital, the vanilla WACC rather than post-tax WACC is the relevant comparator.

12. In assessing the section 2(2A)(c) duty, we considered SES's post-tax returns on RCV for 2005/06 to 2008/09 and forecast post-tax returns on RCV for 2009/10 in relation to estimates of WACC. We have considered estimates made as part of the PR04 review and recent estimates which have been made as part of the forward looking PR09 review.

13. Ofwat sets the cost of capital for each five-year price control period. The PR04 review set the cost of capital for 2004/05 to 2009/10 and Ofwat published its provisional determination for the PR09 price control period (2010/11 to 2014/15) in July 2009. We noted SES's view that, if assessing current cost of capital, Ofwat's analysis of the cost of capital for the water sector as part of the PR09 review was the most relevant point of reference. Ofwat's PR09 determination of the cost of capital for the PR09 period is not complete and we have not reviewed the individual submissions of each water company. We have considered information from the NERA Cost of Capital report for PR09 prepared for Water UK in January 2009 (the 'NERA report')[3] and also information from Ofwat's 'Future water and sewerage charges 2010–15: Draft determinations' report[4] (the 'PR09 draft determination'). We have not come to an independent view of the merits of either NERA's or Ofwat's PR09 calculations or on the size of the small company premiums suggested within them. We are using the two reports to establish a range, reflecting the views of the industry and the preliminary views of the regulator.

14. The PR04 and the PR09 cost of capital calculations both used gearing assumptions that were different to SES's actual gearing. SES's actual gearing is generally higher than the 55 per cent assumed in 2004 and assumed by both Ofwat and NERA in their estimates of the PR09 cost of capital—see Table 2.

TABLE 2 **SES gearing throughout the PR04 price control period**

	Actual 2005/06	*Actual 2006/07*	*Actual 2007/08*	*Actual 2008/09*	*Forecast 2009/10*
Gearing (%)	59	68	71	77	77

Source: SES.

15. We would generally expect a company with a higher level of debt in its financial structure to have done this to take account of the tax advantages of debt compared with equity and thus reduce its overall cost of capital. We have not attempted to quantify this benefit for SES, we consider the effect to be small and that it would not affect our assessment. Nevertheless, we note that the cost of capital faced by SES may be expected to be lower than the benchmarks we considered.

Ofwat—PR04 review

16. The vanilla WACC set for SES in 2004 was 6.6 per cent, which comprised 5.8 per cent for the industry as a whole and a small company premium of 0.8 per cent for SES. Ofwat assumed gearing to be 55 per cent.

NERA—PR09 review

17. Table 3 sets out the estimated ranges for vanilla WACC from the NERA report.

[3]January 2009, *Cost of Capital for PR09, A Final Report for Water UK* (the NERA report).
[4]Report released 23 July 2009.

TABLE 3 **NERA's estimates of WACC for the PR09 price control period (real)**

	Vanilla estimates
WACC estimates	
NERA*	5.3–5.8
Small company premium	1.4–1.5
NERA adjusted for small company premium	6.7–7.3

Source: NERA report.

*NERA-estimated WACC based on a combination of the results from its Capital Asset Pricing Model (CAPM) and Dividend Growth Model (DGM) analysis. NERA assumed a gearing of 60 per cent and a tax rate of 28 per cent.

Ofwat—draft PR09 estimates

18. Table 4 sets out the estimated ranges for vanilla WACC from the PR09 draft determination.

TABLE 4 **Ofwat's draft estimates of WACC for the PR09 price control period (real)**

	Vanilla
WACC estimates	
Ofwat*	5.1
Small company premium for SES (debt only)	0.4
Ofwat adjusted for SES	5.5

Source: Ofwat.

*Ofwat has assumed 52.5 per cent gearing for water-only companies in the PR09 draft determination. Ofwat assumed 57.5 per cent for water and sewerage companies.

PR09 estimates of vanilla WACC

19. The Ofwat estimate for SES is 5.5 per cent, which compares with a range from the NERA report of 6.7 to 7.3 per cent. A large part of this difference is due to the difference in view regarding the size of the small company premium. The overall range of estimates is therefore 5.5 to 7.3 per cent.

20. Both Ofwat and NERA are estimating lower cost of capital for the PR09 price control period than in 2004 as part of the PR04 review. Ofwat's PR04 fully post-tax cost of capital was 5.1 per cent compared with 4.5 per cent in its PR09 draft determination. NERA's PR04 fully post-tax cost of capital was 5.5 per cent compared with a PR09 range of 4.6 to 5.1 per cent.

Risk-free rate

21. We also compared SES's return on RCV with NERA's estimates of the risk-free rate of 2.5 per cent to assess whether SES is forecast to provide a return to investors above this rate.[5] Ofwat has assumed a risk-free rate of 2.0 per cent in the PR09 draft determination report. We note that SES's returns in 2005/06 to 2008/09 and forecast returns in 2009/10 are above these estimates.

[5]It is implicit within the equity risk premium that realized returns can from time to time go below the risk-free rate.

Other financial performance indicators

22. The following financial indicators were considered by Ofwat as part of the PR04 review along with return on RCV. We have used this package of indicators along with return on RCV in our analysis of both the section 2(2A)(a) and 2(2A)(c) duties.

TABLE 5 **PR04 financial ratios**

Ratio	*Description*
Cash interest cover	(FFO)/gross interest
Adjusted cash interest cover I (capital maintenance charges basis)	(FFO less current cost depreciation and infrastructure renewals charges)/gross interest
Adjusted cash interest cover II (capital maintenance expenditure basis)	(FFO less capital maintenance expenditure)/gross interest
Debt/regulatory capital value (also termed 'gearing')	A company's net debt expressed as a percentage of its total capital. This is calculated as: net debt/RCV
Debt payback	(FFO less dividends paid)/net debt

Source: Ofwat.

Note: FFO represents funds from operations: a financial measure defined as the cash flow from a business's operations plus interest received less tax paid.

Investment grade guidelines

23. The NERA report sets out Moody's position on investment grade guidelines —see Table 6 below. SES is currently rated Baa1 (equivalent to Fitch's and S&P's BBB+ ratings). Reviewing SES's forecast total business performance against these requirements, the debt payback levels are better than the Baa1 ranges and the adjusted cash interest cover I ratio is within the range in all years but 2009/10, where it is below. In 2009/10 the adjusted cash interest cover I ratio is also below the Baa2 guidelines. Gearing exceeds the 75 per cent limit in 2008/09 and 2009/10 but is within Moody's Baa2 range, which is still classed as investment grade.

TABLE 6 **Moody's ratio guidelines Baa1**

	Baa1	*Baa2*
Adjusted cash interest cover I	>1.4 & < 1.6	>1.2 & < 1.4
Gearing (%)	>68 & <75	>75 & <85
Debt payback (%)	>6 &< 8	>4 &< 6

Source: NERA cost of capital for PR09, *A Final report for Water UK*, January 2009.

Small company ratios

24. SES argued in response to the provisional determination that 'financial ratios for small companies should be used, and each year's ratios tested against them'. In particular, SES argued that:

> The NERA report on the small company premium identified that rating agencies consider different ratio levels for smaller companies. Moody's had provided evidence to NERA that adjusted cash interest cover ratios would need to be higher for a water only company than a water and sewerage company to achieve the same rating.[6]

[6]SES's response to provisional determination, paragraph 63.

NERA report

25. We reviewed the NERA report on the small company premium supplied by SES.[7] We note that NERA's conclusions focus on the post-maintenance interest cover ratio (PMICR), which we consider equivalent to adjusted cash interest cover I as both these ratios reduce funds from operations by capital maintenance charges. NERA notes that:

    [✂]

26. In terms of other financial ratios the NERA report on the small company premium is less conclusive. NERA notes that 'while Moody's have not made explicit statements about the uplift required for other ratios or for other ratings categories [ie those other than Baa1-Baa3], our analysis indicates that some uplift is required'.

27. NERA's analysis of S&P's ratings considers that:

    [✂]

28. [✂]

29. NERA itself notes under this analysis that 'while the difference in FFO Interest Cover identified is not necessarily indicative of any ratio uplift required by S&P—and as such should not be relied upon by Ofwat or others as an indication of the actual size of the uplift required—we note the difference is not inconsistent with evidence from the other rating agencies'.[8]

30. With regard to evidence from Fitch, there is very little, and the comments NERA quoted from Fitch appear consistent with a small company premium rather than being explicitly in regard to financial ratio guidelines, they conclude with 'we would expect uplifts in revenue allowances'. .

31. Our review of the NERA report does not suggest that the ratio guidelines used by Ofwat need to be adjusted significantly, although we note the evidence for a [✂] on the adjusted cash interest I ratio.

Ofwat PR09 draft determination

32. In the PR09 draft determination, Ofwat proposed a different approach to the financial indicators for the WOCs—see Table 7 below.

[7]March 2009. *The Evidence for a Small Company Premium on the Cost of Capital at PR09. A Report for the Water Only Companies*. NERA Economic Consulting.
[8]p48 March 2009. *The Evidence for a Small Company Premium on the Cost of Capital at PR09. A Report for the Water Only Companies*. NERA Economic Consulting.

TABLE 7 **Ofwat ranges for financial indicators for WOCs—PR09 draft determiantion**

	PR09 range	*PR04 range (for comparison)*
Cash interest cover	Around 3.5x	Around 3
Adjusted cash interest cover I	Around 1.8x	Around 1.6
FFO:debt	Around 17 %	N/A
Debt payback	Around 10%	>7%
Gearing	Under 60%	<65%

Source: Ofwat PR09 draft determination and PR04 final determination.

Note: N/A = not applicable.

33. Ofwat told us that for its PR09 draft determination, it had considered the view of the credit rating agencies that smaller companies were higher risk due to their exposure to company-specific risk. Although Ofwat thought the arguments for the different treatment of the WOCs were not clear cut, it considered, given the rating agencies' approach and the context of a forward-looking five-year price review, that it was appropriate to provide greater headroom in the financial indicators for the WOCs.

34. We note that in the PR09 draft determination, Ofwat has not included the adjusted cash interest cover II ratio in its core package of financial indicators and has included the funds from operations to debt ratio instead. Ofwat has increased the ranges for financial indicators used as part of the PR04 review for cash interest cover, adjusted cash interest cover I and debt payback; and has reduced the range for gearing.

35. Assessing SES's performance across the current price control period against the draft PR09 ranges for financial indicators shows that the cash interest cover and debt payback remain above the increased ranges throughout. Adjusted cash interest cover I is above the draft ranges in all years except for the forecast performance in 2009/10.

36. SES's gearing is above the range proposed by Ofwat; as noted in our final determination, the gearing is high but falls within Moody's investment grade guidelines.

37. The core package of ratios used as part of the PR04 review did not include FFO:debt. However, we note that SES's position across the current price control period would range from 28 per cent (2005/06) to 16 per cent (2009/10); we consider this acceptable when compared with a guideline of around 17 per cent.

Glossary

Adjusted cash interest cover I	Capital maintenance charges basis. This is calculated as: (**FFO** less **CCD** and **IRCs**)/gross interest.
Adjusted cash interest cover II	Capital maintenance expenditure basis. This is calculated as: (**FFO** less capital maintenance expenditure)/gross interest.
Adjustment Factor	See **'K factor'**.
Appointed Business	The business consisting of the carrying out of the functions of a water or water and sewerage company appointed by **Ofwat** for the purposes of Part II of the **WIA91**.
Appointee	A water or water and sewerage company appointed by **Ofwat** for the purposes of Part II of the **WIA91**.
Atkins	Atkins Limited. An engineering consultancy.
Atkins report	Energy cost review report, prepared by **Atkins** for **Ofwat** (dated November 2008).
Average pumping head	The average height that water needs to be pumped to transport it from source to customer.
Black & Veatch	Black & Veatch Corporation. An engineering, consulting and construction company.
Black & Veatch report	Energy efficiency report, prepared by **Black & Veatch** for **SES** (dated November 2008).
BWH	Bournemouth & West Hampshire Water plc.
Cash Interest Cover	This is calculated as: (**FFO**)/gross interest. See also **Adjusted cash interest cover I** and **Adjusted cash interest cover II**.
CC	Competition Commission.
CCWater	The Consumer Council for Water. A statutory, consumer body representing water and sewerage consumers in England and Wales.
Charges Limit	The maximum amount a water company may charge under the terms of its **licence**. Condition B 3.2 of **SES's licence** defines the Charges Limit as **RPI** + **K** where RPI is the percentage change in the Retail Prices Index between November in the prior year and the immediately preceding November, and **K** is the **Adjustment Factor**.
Cost of capital	See **WACC**.
Current Cost Depreciation (CCD)	The current cost depreciation charge on non-infrastructure assets.

Debt payback (RCF:debt (%))	This is calculated as: (**FFO** less dividends paid)/net debt.
FD	Final Determination. A final determination by **Ofwat** on what adjustment should be made to the **Adjustment Factor**.
FFO	Funds from Operations. A financial measure defined as the cash flow from a business's operations plus interest received less tax paid.
FFO: debt (%)	This is calculated as: (**FFO**)/net debt.
Gearing (%)	A company's net debt expressed as a percentage of its total capital. This is calculated as: net debt/**RCV**.
IDoK	An interim determination of **K** as outlined (ie outside of a normal periodic review) under **licence** Condition B.
Infrastructure renewals charge (IRC)	The accounting charge to reflect the depreciation of infrastructure assets.
Jacobs	Jacobs Consultancy UK Limited. A management consultancy. Jacobs is the **Reporter** appointed by **SES** to review documents submitted to Ofwat, eg June Returns and Business Plans.
'K' or 'K factor'	At each periodic review **Ofwat** determines K factors for each year of the five-year price control period. K factors are different for each water company and represent the amount by which a company is allowed to increase customers' bills in real terms. The price limits **Ofwat** sets for companies are accompanied by a set of outputs that **Ofwat** expects the company to deliver within those price limits. The K factor may be changed through an **IDoK** between price reviews. Also known as an **Adjustment Factor**.
Licence	An instrument appointing a water undertaker (or water and sewerage undertaker) under Part II of the **WIA91**.
Materiality amount	The **NPV** of the total impact on a company's base cash flows, of costs and savings reasonably attributable to the **Relevant Items** or circumstance. For income/operating expenditure, the **NPV** is calculated over a 15-year period. For capital expenditure, the NPV is calculated over a five-year period.
Materiality threshold	The qualifying criteria for interim determinations. For a **Standard IDoK** the **Materiality Amount** must be equal to at least 10 per cent of the turnover attributable to the **Appointed Business**. For a **substantial effect IDoK** the threshold is 20 per cent of turnover.
Moody's	Moody's Investors Service. A provider of credit ratings, research and risk analysis.
NERA	National Economic Research Associates, Inc. An economic consultancy.

NERA report	NERA. 'Cost of Capital for PR09. A final report for Water UK, January 2009.'
NERA report on small company premium	NERA. 'The evidence for a small company premium on the cost of capital at PR09. Report for the water-only companies, March 2009.'
NES	Northumbrian Water Limited.
Notified Item	Any item notified by **Ofwat** to the **Appointee** as not having been allowed for (either in full or not at all) in the determinations at the most recent price review. Also known as an **'NI'**. Notified Items for the **2004 Price Review** were: • a difference (up or down) in the expected uptake of optional meters; • increased levels of bad debt or debt management costs arising from the companies' disadvantaged position, including their inability to disconnect household customers for non-payment of bills; • increases in charges for abstraction and discharges to controlled waters; • increases in costs arising from lane rental or the Traffic Management Act; and • the impact of International Financial Reporting Standards on the taxation of infrastructure expenditure.
Notional gearing	An assumption made as to the level of '**gearing**' (debt/**RCV**) of a business. At the **2004 Price Review**, **Ofwat** assumed a level of notional gearing of 55 per cent for water companies.
NPV	Net present value.
Ofwat	The Water Services Regulation Authority. The economic regulator of water and sewerage companies in England and Wales.
Operating profit	Current cost profit before interest.
Oxera	Oxford Economic Research Associates Ltd. An economic consultancy.
Post-tax WACC	The weighted average real post-tax cost of debt and real post-tax cost of equity, where tax is UK Corporation Tax.
PR04	The process of setting water companies' price limits which concluded in 2004 and set price limits for the current price control period (ie 1 April 2005 to 31 March 2010).
PR09	The process of setting water companies' price limits which will set price limits for the period 1 April 2010 to 31 March 2015.
PR09 draft determination	Ofwat's draft determination with regard to price limits for the 2010–15 control period.

RCF	Retained cash flow. The cash retained in a company each year from funds generated. Calculated as operating cash flow, less any tax and financing payments (dividends and net interest).
RCV	Regulatory capital value. The capital base used in setting price limits. The RCV was the market value initially assigned to each company prior to the 1994 Price Review and now includes the net movement from this opening position of any additional net capital expenditure, less current cost-depreciation and infrastructure renewal charges.
Rechargeable works	Works performed by one water company on behalf of a third party (eg a developer or fire brigade); and so 'recharged' to the third party.
Relevant Change of Circumstance	Variations in circumstances, as laid down in **licence** Condition B. Also known as an **'RCC'**. **RCCs** fall into four categories: • RCC(1): The application or change to specified legal requirements. • RCC(2): A change in the values received or expected from sales of land. • RCC(3): A change where a company has not delivered an output assumed when price limits were set. • RCC(4): [Not relevant].
Relevant Item	Either a **Notified Item** or a **Relevant Change of Circumstance**.
Reporter	In the context of the regulated water sector in England and Wales: Reporters are independent professionals who are appointed by each water company but have a duty of care to **Ofwat**. **Ofwat** approves the Reporter appointments and the Reporters act as professional commentators and certifiers on the regulated activities of the water companies.
Return on RCV	This is calculated as: operating profit/**RCV**.
RPI	A general purpose domestic measure of inflation in the UK. Also known as the **Retail Prices Index**.
SAE	See **substantial adverse effect**.
SES	Sutton and East Surrey Water plc.
Small company premium	A premium on the basic cost of capital for **WOC**s. At the **2004 Price Review**, **Ofwat** gave a small company premium of 0.7 per cent (post-tax) to **SES**.
Spot price	Price quoted for immediate settlement of a contract.
Standard IDoK	An **IDoK** concerning a **Relevant Change of Circumstance** or **Notified Item** (see Condition B 13.2 of **SES**'s **licence**)—in contrast to a **substantial effect IDoK**.
Substantial adverse effect	See Condition B 13.3 of **SES's licence**—'a substantial adverse effect on the **Appointed Business** or on its assets, liabilities, financial position, or profits or losses, not being one which would

	have been avoided by prudent management action'.
Substantial effect	Either a **substantial adverse effect** or a **substantial favourable effect**.
Substantial favourable effect	See Condition B 13.3 of **SES**'s **licence**—'a substantial favourable effect on the **Appointed Business,** or on its assets, liabilities, financial position, or profits or losses, being one which is (i) fortuitous and (ii) not attributable to prudent management action'.
Substantial effect clause	The clause in an **Appointee's licence** concerning **substantial effects**. See Condition B 13.3 of **SES's licence**.
Substantial effect IDoK	An **IDoK** concerning a **substantial effect**.
Utilyx	Utilyx Limited. An energy advisory firm.
Vanilla WACC	The weighted average real pre-tax cost of debt and real post-tax cost of equity, where tax is UK Corporation Tax. Also referred to as cost of capital.
WACC	The weighted average cost of capital of a company, taking account of its various sources of finance. There are various approaches to calculating this and the appropriate method depends upon the context. In this report we use the **Vanilla WACC**.
WASC	Water and sewerage company. WASCs provide water and sewerage services.
Water UK	A water industry association, representing UK statutory water supply and wastewater companies.
WIA91	Water Industry Act 1991 (as amended).
WOC	A water-only company. WOCs provide water but not sewerage services.