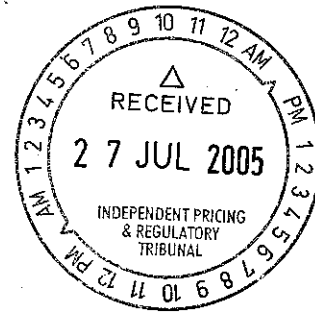


27 July 2005



Mr James Cox
Chief Executive Officer and Full-Time Member
Independent Pricing and Review Tribunal of NSW
Level 2, 44 Market Street
Sydney NSW 2000

Dear Mr Cox

Response from Sydney Water Corporation to the draft report and determination

Sydney Water Corporation welcomes the opportunity to comment on the draft report and determination on prices of water, wastewater and stormwater services of the Independent Pricing and Review Tribunal of NSW. Please find our submission attached.

For further information, please feel free to contact Dr Chris Guest, Director, Water Reform Project on (02) 9350 4819.

Yours sincerely

DAVID EVANS
Managing Director

Sydney Water Submission to the
Independent Pricing and Regulatory
Tribunal of NSW:
Response to the Draft Report and
Draft Determination on Prices of Water
Supply, Wastewater and Stormwater
Services

July 2005

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Executive summary

BACKGROUND

This Submission is a response to the Independent Pricing and Regulatory Tribunal's draft report and draft determination on prices of water supply, wastewater and stormwater services. The draft report and draft determination followed extensive, inter-related work by the Tribunal, Sydney Water and consultants over the past eighteen months.

In January 2004, Sydney Water provided its first submission to the Tribunal. A second submission was provided in November 2004. To review this second submission, the Tribunal engaged independent consultants WS Atkins. In March 2005, to both address comments in the Atkins report and provide new information, Sydney Water provided a third submission. The Tribunal once again engaged consultants WS Atkins to review Sydney Water's March 2005 submission. In June 2005, the Tribunal released its draft determination for water pricing, which incorporated recommendations from the first Atkins report but not the matters raised in the submission Sydney Water lodged in March. Earlier this month, the Tribunal received a report by WS Atkins in relation to the submission Sydney Water lodged in March. This present Submission provides Sydney Water's response to the Tribunal's draft determination.

Sydney Water considers that the draft determination does not adequately take into account a number of critical issues presented in the submission lodged in March 2005. In addition, a number of policy decisions have occurred since March 2005, which will generate additional expenditures by the Corporation.

CRITICAL ISSUES OUTSTANDING FROM THE MARCH 2005 SUBMISSION

The forecast of demand over the four years of the Determination is an important factor in the price determination. The draft determination is premised on the drought breaking early. This has not occurred. The demand forecasts the Tribunal uses in the determination must take into account the latest available information on demand levels. This Submission contains Sydney Water's most recent demand forecast (July 2005), which takes into account water storage levels at June 2005. The forecast anticipates a low probability of demand returning to normal levels during 2005/06 and 2006/07. The demand forecast proposed in the draft determination is 6.9 per cent higher than this recent Sydney Water forecast.

Sydney Water does not support the capital and operating expenditure estimates in the draft determination. These expenditures represent a \$117 million reduction compared with the position presented in our March submission (\$49 million in operating and \$68 million in capital expenditure).

The draft determination does not take account of the cost pressures Sydney Water's capital program will have to bear. Sydney Water has reviewed its capital works program to take account of the consequences of these cost increases. Based on consultants Evans and Peck's most likely scenario of real increases in construction costs of 3.4% in 2006 rising to 13.4% in 2009, Sydney Water's capital costs would increase by \$204 million over the four years. Evans and Peck's higher scenario of real increases of 9.7% in 2006 rising to 43.4% in 2009 would result in capital costs increasing by \$634 million over the four years.

Evans and Peck also found that 23% of Sydney Water's operating costs would be directly impacted by construction price increases over the next four years. On this basis, Evans and Peck's most likely scenario would increase operating costs by \$16.8 million over the four years.

Clearly, cost escalations will have a significant impact on Sydney Water's capital program. The Tribunal ought to take account of this impact in making its final price determination.

As an alternative to taking account of the increased costs that Sydney Water's capital program will bear over the next four years, the Tribunal could reconsider the capital efficiency target. In light of Sydney Water's productivity improvements over the last three years and forecast efficiencies over the next four years, it would be unreasonable to expect Sydney Water to achieve the Tribunal's efficiency targets on top of the projected increases in building and construction prices in Sydney, which are beyond Sydney Water's control.

Taking account of lower demand, the draft determination would yield a 5 per cent average rate of return. While setting the rate of return is a matter for the Tribunal, it is noted that a 5 per cent rate of return is below the 6.1 per cent allowed in the draft determination.

ADDITIONAL EXPENDITURE AND REVENUE SINCE MARCH 2005

Since lodging the submission in March 2005, a number of additional expenditure/revenue matters have arisen which Sydney Water will need to fund. These matters should be taken into account in the Tribunal's final determination.

With the continuation of the drought, the Government has decided to undertake preliminary work in relation to a desalination plant. This work is a contingency measure to ensure security of water supply in the event of a prolonged drought, and is one of a number of measures being implemented under the Metropolitan Water Plan. The expenditure required for this preliminary work relates to design and planning, site acquisition, the tender process and the construction and operation of a pilot plant, and is estimated to be \$94 million.

New expenditure totalling \$55.8 million will be necessary in relation to: the 2005–2010 Operating Licence; adjustments to Australian standards on superannuation; land tax; and the implementation of step pricing. Specifically:

- There are a number of new provisions in the 2005–2010 Operating Licence. The Licence includes provisions that Sydney Water sets and meets targets for responding to breaks and leaks in water mains. In addition, under the terms of the Licence, Sydney Water will increase the recycling of water at Malabar, North Head and Bondi sewage treatment plants and all its other treatment plants. The costs of these measures are estimated to be \$16 million in operational expenditure for breaks and leaks in mains, and \$6.2 million in capital and \$2.2 million in operating expenditure in relation to the recycling targets.
- Sydney Water is required to comply with new methods of calculating the unfunded liability of superannuation, as determined by the Australian Equivalents to International Financial Reporting Standards. The operational costs of this change are estimated to be \$23.5 million.

- The Corporation will pay increased land tax rates as a result of changes to land tax introduced in the May 2005 Budget. The increase is estimated to be \$3.5 million in operating expenditure.
- The implementation and administration of step pricing will cost in the order of an additional \$4.4 million over four years. This expenditure is to enable Sydney Water to meet increases in business functions arising from the introduction of step pricing, such as responding to a significantly greater number of customer inquiries.

Price increases proposed in the draft determination would take effect from 1 October 2005, rather than 1 July 2005. Based on the prices set out in the draft determination, the revenue loss of this delay would be \$23 million. Sydney Water submits that the Tribunal take account of the revenue impact of the delay in the prices that are set for 2005/06.

In the context of the reduction in revenue due to lower demand, Sydney Water expects that as a consequence bulk water costs would be \$23.5 million lower.

Finally, it is noted that the draft determination proposed a way of ameliorating the impact of higher and step pricing on large, low-income families. The Department of Energy, Utilities and Sustainability is making a separate submission to the Tribunal about social welfare measures to address this issue.

CONCLUSION

Sydney Water submits that the Tribunal ought to take account of the factors identified in this Submission in making its final determination. Specifically, it is submitted that the Tribunal's review of its draft determination should take account of:

- The revenue outlook for Sydney Water over the next four years;
- The expenditures that have arisen since March 2005, driven by factors external to Sydney Water; and
- Sydney Water's capital expenditure program, in relation to the impact of the expected cost escalations and the prospect of efficiency gains beyond those already targeted by Sydney Water.

In the event of the Tribunal determining price increases beyond those proposed in the draft determination, Sydney Water suggests such an increase be recovered in the early years of the determination period to provide a water conservation signal to customers. Furthermore, an additional price increase could be recovered through the first tier of the water usage charge, so that all customers would receive an incentive to conserve water.

1 Introduction

1.1 SYDNEY WATER'S INPUT TO THE PRICE REVIEW

The Tribunal's review of metropolitan water prices has been undertaken over the last eighteen months.

It has involved a specific review by the Tribunal of how water prices could be structured to promote water conservation in Sydney.¹ This review found that an inclining block tariff or 'step price' for water usage is the most suitable price structure for Sydney at the present time, as it sends a strong signal to save water, particularly discretionary water consumption. The review also supported increasing the usage charge to send a stronger signal about the scarcity of all water, recommending the charge be set with reference to the long-run cost of managing demand and supply in Sydney.

In responding to the Tribunal's findings, the Government's Metropolitan Water Plan, released in November 2004, recognised that water pricing can help reduce the demands on Sydney's finite supplies by sending important signals to the community about the true value of water. In considering price reform, the Government undertook to ensure that programs are in place to protect low income and large families and people with special needs.²

These findings have been reflected in the Tribunal's draft determination, which proposes the introduction of a step price for households that use more than four hundred kilolitres each year and a 19 per cent increase in the usage component of household water bills, which are to be supported by appropriate programs to protect vulnerable customers from unacceptable bill impacts.³

In addition to the price structure review, the Tribunal has also commissioned four independent reviews of different elements of Sydney Water's proposal for prices over the next four years. These reviews have included:

- Two reviews by WS Atkins of Sydney Water's proposed expenditure program as originally submitted in November 2004 and then updated in March 2005. WS Atkins found that Sydney Water is applying asset management practices that are consistent with best practice and has the resources to complete its proposed investment program. WS Atkins did find, however, that Sydney Water's expenditure forecasts have experienced some slippage over 2004/05, which justify later phasing of forecast expenditure than proposed by Sydney Water. WS Atkins also found that Sydney Water has greater capacity to make continuing savings in its capital works and operating costs despite Sydney Water's assumed efficiencies and the forecast increases in Sydney's construction prices, which are outside Sydney Water's control. Sydney Water has responded separately to WS Atkins' review of its March 2005 submission, which was undertaken in June 2005.
- McLennan Magasanik Associates (MMA) review of the appropriateness of Sydney Water's demand management forecast. This found that Sydney Water's forecast, which was based on drought conditions, was reasonable. Despite this finding MMA proposed an alternative, higher forecast for the purposes of the price review;⁴

¹ The Independent Pricing and Regulatory Tribunal (July 2004), *Investigation into Price Structures to Reduce the Demand for Water in the Sydney Basin, Final Report*, Other Paper OP24.

² Department of Infrastructure Planning and Natural Resources (October 2004), *Meeting the Challenges – Securing Sydney's Water Future*, p.19.

³ The Independent Pricing and Regulatory Tribunal (June 2005), *Draft Report and Draft Determination on Prices of Water Supply, Wastewater and Stormwater Services (Draft Report)*, p.16.

⁴ The Independent Pricing and Regulatory Tribunal (June 2005), *Draft Report*, p27-28.

- RSM Bird Cameron's review of the reasonableness of Sydney Water's miscellaneous charges price proposal, which found that Sydney Water's proposal is supportable; and
- GHD's review of service quality and performance indicator data provided by Sydney Water to assist the Tribunal in future price reviews.

Sydney Water has actively engaged in the Tribunal's process for this price review. This has included making detailed submissions in January 2004, November 2004 and March 2005, backed by detailed supporting information. Sydney Water has actively participated in the two public hearings and stakeholder forums that the Tribunal has conducted throughout this process. Sydney Water has responded quickly and cooperatively to the Tribunal's data and information requests throughout this review and has also sought to actively support the Tribunal's consultants in the independent reviews that have been undertaken throughout this process.

1.2 STRUCTURE OF THIS SUBMISSION

This Submission finalises Sydney Water's position for the determination of prices from 1 October 2005. It presents Sydney Water's updated expenditure forecasts, which appropriately reflect prudent investment in its service obligations over the next four years. It also presents Sydney Water's latest demand forecasts, which reflect the impact of the ongoing drought on forecast water sales over the next four years. The Tribunal should use these forecasts in finalising its determination of new prices from 1 October 2005.

The Submission provides information in relation to Sydney Water's expenditure and demand forecasts, which the Corporation believes the Tribunal ought to take into account in its final determination.

The Submission is structured as follows:

- Section 2 discusses Sydney Water's capital expenditure forecasts.
- Section 3 discusses Sydney Water's operating expenditure forecasts.
- Sydney Water's demand forecast is presented in Section 4.
- The implications for revenue and prices are considered in Section 5.
- The attachments cover Sydney Water's comments on:
 - the Tribunal's proposed output measures;
 - notional credit rating calculations;
 - the schedules to the Tribunal's draft determination; and
 - capital expenditure program.

2 Capital expenditure

In its draft determination, the Tribunal set capital expenditure allowances for Sydney Water based on the recommendations of its consultants – WS Atkins. Sydney Water recognises the importance of setting expenditure targets that include incentives to undertake expenditure efficiently. However, it is important that these expenditure targets are realistic and enable Sydney Water to meet its service obligations over the next four years.

This Section discusses the Tribunal's proposed capital expenditure targets and sets out the additional expenditure requirements arising from recent policy decisions. It also responds to the Tribunal's comments on developer charges and its proposed output targets.

2.1 THE TRIBUNAL'S CAPITAL EXPENDITURE TARGETS

The Tribunal's draft determination allowed Sydney Water capital expenditure of \$2,276 million (\$ of 04/05) over the next four years based on WS Atkins' review of Sydney Water's November 2004 submission. WS Atkins' review involved two steps:

- a review of Sydney Water's allowable capital expenditure; and
- the application of capital efficiency targets to the allowable capital expenditure to formulate a recommended capital expenditure target.

2.2 SYDNEY WATER'S ALLOWABLE CAPITAL EXPENDITURE

Sydney Water's November 2004 submission outlined a need to invest approximately \$2,600 million to meet the Government's required service outcomes over the next four years. This expenditure was required to meet existing and new standards and to ensure the delivery of services to new customers.

In March 2005, Sydney Water updated this position by reducing its capital expenditure forecast to \$2,344 million over the next four years to deliver the same outcomes set out in the November 2004 submission. This reduction was the result of the staged delivery of new services to Sydney's growth areas in line with the Government's land release program, and cost reductions that reflect efficiencies identified through Sydney Water's ongoing asset planning processes.

2.3 CAPITAL EFFICIENCY TARGET

Sydney Water's capital works program is based on its asset management plans, which establish clear and detailed links between the drivers for investment and service delivery outcomes. It is also based on project evaluation that ensures that investment proposals are based on robust business cases that are subject to rigorous review to ensure the method of delivery is the most cost effective solution. Significant efficiency is also being driven through the design, procurement and contract management processes that underpin the delivery of the capital works program.

In its review of Sydney Water's capital works program, WS Atkins acknowledged these factors, and endorsed Sydney Water's asset management approach as best practice, recognising the ongoing efficiencies it will deliver.

Sydney Water purchases over 90 per cent of its capital program from the marketplace, but represents only six per cent of the building and construction market in Sydney. This means that Sydney Water costs are vulnerable to movements in prices within the building and construction market. In January 2004, Sydney Water advised WS Atkins and the Tribunal of the substantial likely increases in building and construction prices in Sydney that will require significant additional efficiencies if service levels and/or financial outcomes are not to be put at risk.

Sydney Water reiterated this point at the Tribunal's March 2005 public hearing: it noted that the engineering construction price index is growing by 1.5 per cent each year in real terms, which is above the historical annual average of 0.6 per cent.

WS Atkins' response to Sydney Water's concerns regarding the proposed continuing efficiency target was to note that there is no appropriate index to reflect price changes in the water and wastewater sector and that work by the NSW Department of Commerce should be helpful in future years.⁵

In response, Sydney Water commissioned consultants Evans and Peck to review the forecast escalation of prices in the building and construction sector, and to outline their possible impact on Sydney Water's capital and operating program over the next three years. Evans and Peck developed a model for extrapolating escalation factors based on historical data from 2002/03-04/05 for price movements in labour and materials costs that better reflect the water and wastewater industry.⁶

Evans and Peck's cost escalation forecasts suggest that building and construction costs are likely to rise in real terms by approximately 3.1 per cent per annum over the next three years with a worst case, though not unrealistic, scenario suggesting real price rises of up to 9.7 per cent per annum.

Sydney Water has calculated the impact of projected construction price increases on its capital works program. Based on Evans and Peck's most likely scenario of real increases in construction costs of 3.4% in 2006 rising to 13.4% in 2009, Sydney Water's capital costs would increase by \$204m over the four years. In comparison, Evans and Peck's higher scenario of real increases of 9.7% in 2006 rising to 43.4% in 2009 would result in capital costs increasing by \$634 million over the four years. Sydney Water's capital works program incorporating these price increases is at Attachment 1, which presents the capital program in relation to Sydney Water's activities and investment drivers.

Evans and Peck also found that 23% of Sydney Water's operating costs would be directly impacted by construction price increases over the next four years. On this basis, Evans and Peck's most likely scenario would increase operating costs by \$16.8 million over the four years.

To provide an understanding of the long-term trend in Sydney's construction market, the last 10-20 years of building construction price index are attached in Attachment 2.

Clearly, cost escalations will have a significant impact on Sydney Water's capital program. The Tribunal ought to take account of this impact in making its final price determination.

In light of Sydney Water's productivity improvements over the last three years and forecast efficiencies over the next four years, it would be unreasonable to expect Sydney Water to achieve the Tribunal's efficiency targets on top of the proposed increases in building and construction prices in Sydney, which are beyond Sydney Water's control.

As an alternative to directly taking account of the increased costs Sydney Water's capital program will bear over the next four years, the Tribunal should reconsider its continuing capital efficiency target to reflect expected movements in water and wastewater building and construction costs.

⁵ WS Atkins/Cardno (February 2005), *IPART Capex, Asset Management and Opex Review, Sydney Water Corporation, Final Report*, p.19.

⁶ Evans and Peck looked at a typical large sewage treatment plant to assess what costs are relevant to materials and other inputs in the water industry.

2.4 ADDITIONAL CAPITAL EXPENDITURE IDENTIFIED SINCE MARCH 2005

Since March 2005, additional matters have arisen that Sydney Water will need to fund, and therefore that the Tribunal should take into account in its final determination.

2.4.1 Preliminary work for a desalination plant

With the continuation of the drought, the Government has decided to undertake preliminary work for a desalination plant. This work is a contingency measure to ensure security of water supply in the event of a prolonged drought, and one of a number of measures being implemented under the Metropolitan Water Plan. The expenditure required for this preliminary work relates to planning, site acquisition, the tender process and the construction and operation of a pilot plant, and is estimated to be \$94 million.

2.4.2 Recycling at sewage treatment plants: new licence target

In late March 2005, Sydney Water's Operating Licence was amended to include new targets for water recycling at Bondi, North Head, Malabar and most other sewage treatment plants (STPs).

Sydney Water estimates it will need to spend an additional \$6.2 million to meet these provisions. This includes an additional \$2 million for a potable water reuse plant at Bondi STP and \$4.2 million to implement the actions arising from the water conservation plans that Sydney Water is to develop after conducting a water efficiency audit at its STPs in line with the requirements of section 7.3 of the renewed Operating Licence.

Sydney Water notes that the capital requirements for meeting these targets at North Head and Malabar STPs were covered in the March 2005 submission on the basis that potable water reuse projects were already planned at these STPs as sound operational practice. Additional operating costs for these two sites were omitted from Sydney Water's March 2005 submission and are outlined in Section 3.

2.5 SUMMARY

Accounting for these factors, Sydney Water's forecast capital expenditure is \$2,444 million over the next four years, which is 7.4 per cent higher than the capital expenditure target set in the Tribunal's draft determination. This increase is based on the additional expenditure required based on service obligations set on Sydney Water since March 2005. If Evans and Peck's most likely cost escalations are included, the capital program would be over \$200 million higher.

3 Operating expenditure

The Tribunal has set operating expenditure allowances for Sydney Water, based on the recommendations of its consultants, WS Atkins. As with capital expenditure, Sydney Water supports the Tribunal's approach to setting expenditure targets that encourage efficiency. However, for this regime to be effective it is important that these forecasts are set on the basis of realistic operating expenditure forecasts.

This Section outlines Sydney Water's response to the Tribunal's proposed operating expenditure targets and considers the additional operating expenditure arising from recent policy decisions. The operating expenditure forecast presented in this Section is prudent, and should form the basis of the Tribunal's final determination.

3.1 THE TRIBUNAL'S OPERATING EXPENDITURE TARGETS

The Tribunal has allowed Sydney Water operating expenditure of \$3,512 million (\$04/05) over the next four years, based on the WS Atkins' review of Sydney Water's November 2004 submission. This is WS Atkins' lower expenditure forecast. In March 2005, Sydney Water updated its operating expenditure forecasts, in response to WS Atkins' review of its November 2005 submission, and also to reflect more recent information on its expenditure requirements over the next four years. The changes outlined in the March 2005 submission resulted in an additional \$49 million in operating expenditure compared to WS Atkins' recommendation.

The key drivers for Sydney Water's increased operating expenditure forecast included:

- moderate increases in operating costs to service new growth areas – in recommending these increases, Sydney Water took account of WS Atkins' findings regarding the later delivery of new services to growth areas. However, these were offset by increased costs for plumbing inspectors to carefully check and certify recycled water schemes to be handed over by developers;
- retention of the proposed expenditure on operating projects, such as periodic maintenance, which WS Atkins had reduced due to current delays in expenditure on these projects – Sydney Water's position on this was based on the need for this expenditure as set out in its asset plans and its capacity to deliver on these requirements within the next four years;
- exclusion of the reductions arising from WS Atkins' proposed operating efficiency targets, given the 17 per cent reduction in controllable operating costs already built into Sydney Water's forecasts;
- updating of Sydney Water's proposed expenditure on its demand management program and on the advertising and enforcement actions required as part of the measures to address the impact of the ongoing drought;
- updating of Sydney Water's proposed labour costs due to a 4 per cent salary increase agreed to over the next two years under Sydney Water's award, which was finalised in November 2004; and
- reductions in employee provisions due to changes in assumptions on earnings and withdrawals from Sydney Water's various superannuation schemes taking into consideration the impact of the 4 per cent salary increase noted above.

The Tribunal should endorse Sydney Water's additional operating expenditure requirements, as set out in its March 2005 submission. The draft determination does not provide any analysis to refute these factors.

3.2 ADDITIONAL OPERATING EXPENDITURE SINCE MARCH 2005

Since March 2005, additional service obligations totalling \$26.1 million have arisen that need to be funded, and so should be taken into account in the Tribunal's final determination. These include:

- new sewage treatment plant recycling and main break response targets that were included in the renewed Operating Licence in April 2005;
- adjustments to the calculation of superannuation entitlements under the Australian Equivalent of the International Financial Reporting Standard (AEIFRS);
- adjustment to the calculation of land tax expenses due to adjustments made in the May 2005 State Budget; and
- the cost of implementing and administering the Tribunal's step price for residential customers.

The Department of Energy, Utilities and Sustainability is developing a separate submission for the Tribunal on the recommended social programs to assist pensioners and large, low-income families to manage the impact of price increases from 1 October 2005.

As externally driven costs, these expenditures should be allowed by the Tribunal in setting prices.

3.2.1 Recycling at sewage treatment plants: new licence targets

Section 7 of the amended Operating Licence includes new targets to increase water recycling at Sydney Water's sewage treatment plants. To meet these requirements, Sydney Water will need an additional \$2.2 million in operating funding to cover:

- electricity, chemicals, maintenance and labour for the potable water reuse plants at North Head, Bondi and Malabar STPs;
- costs of undertaking detailed audits at seven STPs and simplified audits at the other STPs covered by the new targets; and
- an allowance for operating projects to implement audit recommendations.

These additional costs reflect the actions required to ensure that potable water reuse is increased to the target levels specified in the licence and that Sydney Water can implement the actions for improved water efficiency that will be set out in the water conservation plans, required under the new targets.

3.2.2 Main break response times: new licence targets

The new main break response targets set out in section 4 of the amended Operating Licence will apply to breaks and leaks on water mains and to significant breaks and leaks (defined as Priority 5 and 6 under clause 4.13.1 of the Operating Licence) on the valves and hydrants that are fitted to Sydney Water's water mains. The cost of meeting these requirements is \$16 million over the determination period (\$4 million per annum).

Sydney Water wrote to the Tribunal on 16 June 2005 to set out these requirements for complying with these new targets, which will include additional resources for:

- 'First caller' response crews to attend breaks and leaks in order to rapidly turn off the main within the response time target - this 'first caller' response will also assess whether critical customers would be affected (eg. hospitals, key business customers, dialysis patients, etc) (\$1.4 million per annum).
- Support crews to attend repair breaks and leaks in line with customer and asset requirements (\$2.1 million per annum).

- Schedulers to ensure that first response and repair resources are deployed effectively against clear criteria for categorising breaks and leaks in light of Sydney Water's main break and water continuity standards (\$100,000 per annum).
- Real-time data systems for scheduling work and tracking compliance with the new targets (\$400,000 per annum).

Sydney Water will work with the Tribunal over the next five months to confirm how it will comply with the new targets, including how to procure the additional required resources most effectively from the marketplace.

3.2.3 2005 State Budget Land Tax (Property)

Sydney Water's total land value is \$676 million, most of which will be subject to the new land tax rates. Based on the new rates, Sydney Water's land tax will increase in 2005/06 by \$500,000 followed by \$1 million each year in the following three years.

3.2.4 Calculation of superannuation entitlements

This adjustment to superannuation results from obtaining late clarification on the impact of Australian Equivalents to International Financial Reporting Standards (AEIFRS) adjustments relating to the superannuation expense. As for all reporting entities in both the private and public sectors, Sydney Water is required to comply with the new Standards from 1 July 2005.

Changes to the mandates issued by NSW Treasury on AEIFRS were notified on 15 March 2005. The change in calculation of the unfunded liability, and hence expense, reflects the adoption of the new Australian Accounting Standard: AASB 119 Employee Benefits. Under existing Treasury guidelines, the unfunded liability is calculated using a discount rate reflecting the long term expected rate of return on plan assets. Under AASB 119, the discount rate that must be used is the Government Bond rate, which is currently a lower rate. This results in a higher liability and hence, a higher superannuation expense. Actuarial information received by Sydney Water on 12 July 2005 suggests that this change will result in \$23.5 million in additional operating expenditure over the next four years.

Sydney Water has included this change in its additional expenditure forecast on the basis that a material change has been made after the March 2005 submission that has altered Sydney Water's expenditure forecast.

3.2.5 Implementing the step price and social programs

The Tribunal's draft determination has proposed an additional measure to allow low-income families with more than six people to offset the impact of the step price for water use above 400 kilolitres a year by allocating an additional 80 kilolitres a year to each person in the household. The Department of Energy, Utilities and Sustainability is to provide a separate submission to the Tribunal on its draft determination that will outline the proposed social programs to manage the impact of price increases and the proposed step price on vulnerable customers.

It will cost in the order of over \$1.0 million each year to implement and administer the step price that has been proposed in the Tribunal's draft determination. This expenditure is to enable Sydney Water to meet increases in current business functions arising from the introduction of step pricing, such as responding to a greater number of customer inquiries, and new requirements such as an additional business analyst to manage the step-pricing component of the bill output system. See Attachment 3 for more detail.

3.2.6 Bulk water costs

Sydney Water's March 2005 submission included bulk water costs of \$627 million over the next four years. These were based on Sydney Water's demand forecast of March 2005 and its estimates of bulk water costs, which are also subject to the current price determination. Applying the draft determination prices to Sydney Water's latest demand forecast results in forecast bulk water costs of \$604 million, which is \$23.5 million below the March 2005 submission.

3.3 SUMMARY

In summary, Sydney Water's forecast operating expenditure is \$3,588 million over the next four years, which is 2.2 per cent higher than the operating expenditure target set in the Tribunal's draft determination. This increase is based on the additional expenditure required to meet the service obligations that have arisen since March 2005.

4 Sydney Water's Demand Forecast

The Tribunal's draft determination proposes to apply a higher demand forecast that does not include the impact of the current ongoing drought on forecast water sales over the next four years.

Experience has shown that demand is likely to take some time to recover to normal levels once drought conditions ease. Using realistic demand forecasts as the basis for setting prices is necessary to ensure that the Tribunal properly takes account of Sydney Water's revenue outlook and also to send a strong conservation signal to customers. Sydney Water has highlighted the need for realistic demand projections throughout the price review process.

Over time, dam levels have fallen further. Sydney Water has subsequently updated its demand forecasts based on water storage levels in June 2005, assuming average rainfall and inflow conditions from June 2005.

The total difference between Sydney Water's demand forecast and the forecast set out in the Tribunal's draft determination is 162 gigalitres (or 6.9 per cent difference).

Continuing dry weather conditions could extend the period of reduced demand. It is accepted that over the long run there will be under and over estimations of demand. However, demand forecasts ought to be based on the best available information and expectations at the time of the determination.

5 Cost Recovery Issues

5.1 SYDNEY WATER'S REVENUE BASED ON THE TRIBUNAL'S BUILDING BLOCK APPROACH

Based on the updated expenditure forecasts as set out in this Submission, and assuming a 6.5 per cent rate of return on capital investments each year, Sydney Water's notional revenue requirements totals \$6,274 million (\$ of 04/05) over the next four years.

The building blocks that underpin this revenue requirement are set out in Table 1.

Table 1: Sydney Water's notional revenue requirements (\$04/05)

Notional revenue requirements (\$m – 2004/05 dollars)	2005/06	2006/07	2007/08	2008/09	Total
Operating Costs	903	899	889	891	3,583
Depreciation	110	114	119	124	467
Return on Assets (including working capital)	517	543	569	595	2,223
Total	1,530	1,556	1,577	1,611	6,274

5.2 IMPACT OF THE TRIBUNAL'S DRAFT DETERMINATION

If the Tribunal were to implement the prices set out in its draft determination based on its high demand forecast, Sydney Water's total revenue outcome would be \$6,022 million over the four years.

However, application of Sydney Water's demand forecast to the prices set out in the Tribunal's draft determination results in a revenue outcome of \$5,801 million, which is \$473 million below Sydney Water's revised notional revenue requirement. This shortfall is summarised in Table 2.

Table 2: Revenue shortfall (\$04/05)

The Tribunal Draft (\$m – 2004/05 dollars)	2005/06	2006/07	2007/08	2008/09	Total
Notional Revenue Requirement	1,530	1,556	1,577	1,611	6,274
Revenue Achieved	1,340	1,422	1,509	1,530	5,801
Revenue Shortfall	(190)	(134)	(68)	(81)	(473)

5.2.1 Rate of return outcome

The \$5,801 million revenue outcome from the Tribunal's draft determination, assuming Sydney Water's demand forecasts, would result in an average return on assets of just 5.0 per cent over the next four years, which is well below the 6.1 per cent proposed by the Tribunal in its draft determination. This is because the revenue shortfalls noted above will flow almost entirely through to Sydney Water's earnings, given that its costs are largely fixed.

The rate of return outcome on a year-by-year basis is shown in Table 3.

Table 3: Rate of return outcome (%)

The Tribunal Draft (%)	2005/06	2006/07	2007/08	2008/09
Rate of return	4.0	4.8	5.6	5.5

5.2.2 Financial impacts

If implemented, the draft determination would have a detrimental impact on Sydney Water's financial position, resulting in Sydney Water's notional stand-alone credit rating remaining below investment grade (i.e. below 'BBB') over the next four years, as shown in Table 4.

The notional credit rating outlined in the above scenario illustrates the impact of the revenue shortfall under the Tribunal's draft determination. It is based on the 1995 Standards and Poor credit rating criteria and applies equal weighting to the four ratios outlined above. The detailed calculations underpinning this scenario are at Attachment 4.

This analysis has been undertaken based on the Tribunal's approach to analysing financial impacts as set out in the draft determination. The analysis is based on Sydney Water's existing debt levels, representing an opening debt gearing level of around 33 per cent based on the regulatory asset value. Notional credit rating outcomes are significantly worse under the Tribunal's 'benchmark financial structure' assumption of 60 per cent gearing.

Table 4: Impacts on Sydney Water's financial position (\$04/05)

The Tribunal Draft (\$m – 2004/05 dollars)	2005/06	2006/07	2007/08	2008/09
FFO Interest Cover	2.3	2.3	2.4	2.3
Pre-tax Interest Cover	1.9	2.1	2.3	2.1
FFO / Total Debt (%)	7%	8%	8%	8%
Internal Financing Ratio (%)	26%	30%	30%	33%
Notional Credit Rating	BB+	BB+	BB+	BB+

5.3 SUMMARY OF ALLOWABLE EXPENDITURES

Sydney Water asks that the Tribunal takes account of the factors identified in this Submission, as follows:

- \$23 million to compensate for the revenue foregone as a consequence of new prices being deferred from 1 July 2005 to 1 October 2005;
- \$72 million to partly address the current demand estimates;
- \$58 million to reflect the revised expenditure forecasts as set out in this Submission, which are 7.4 per cent higher for capital expenditure and 2.0 per cent higher for operating expenditure than the draft determination; and
- \$68 million if Sydney Water were to achieve a 6.5 per cent rate of return by 2008/09. This is the subject of a separate submission by NSW Treasury.

Allowing these costs would improve Sydney Water's credit rating over the next four years, with the credit rating increasing to investment grade (BBB) over the final three years of the price path.

Sydney Water suggests that any additional price increase above that in the draft determination be recovered in the early years of the determination period to send a strong water conservation signal to customers. Furthermore, the additional price increase should be recovered through the first tier of the water usage charge so all customers receive the 'user pays' signal.

6 Other matters

6.1 LATE PAYMENT FEE PROPOSAL

The Tribunal's draft determination does not respond to Sydney Water's proposal to introduce a late payment fee to encourage its customers to pay their bills on time.

Sydney Water's November 2004 submission set out Sydney Water's proposal for a late payment fee. In response, the Tribunal asked consultants RSM Bird Cameron to review Sydney Water's proposed miscellaneous service charges, which supported Sydney Water's approach to applying these charges though it incorrectly found that Sydney Water's credit process is already included in its general overhead rate.

On 30 May 2005, Sydney Water wrote to the Tribunal to highlight RSM Bird Cameron's error and to set out its costs of credit recovery, which are not recovered as part of general overheads.

Sydney Water's proposal for a late payment fee is primarily based on providing a greater incentive for the 59 per cent of customers who currently do not pay their bills on time. Sydney Water has not proposed a cost-reflective price for this fee of \$9.50 but rather supports a \$5.50 fee in line with the fees charged by the energy sector.

The Tribunal's approval of this fee is in line with Sydney Water's objective of improving operating efficiency, which was endorsed by WS Atkins in its February 2005 report where it specifically supported efforts to reduce the expenditure on issuing 1.6 million reminder notices each year to late paying customers.

6.2 SCHEDULES TO THE DETERMINATION

Sydney Water also welcomes the opportunity to comment on the schedules to the draft determination that set out in much greater detail than the 2003-05 price determination the proposed legal definitions of the charges proposed for the next price path.

Sydney Water provides the following specific comments on the proposed definitions in Attachment 5, noting that these comments are based on how the definitions apply to current prices. Sydney Water would welcome the opportunity to work with the Tribunal to confirm their application to future prices in time for the price determination to be finalised in late August 2005.

6.3 REVENUE ADJUSTMENT MECHANISM

The Tribunal's draft determination supports the introduction of a mechanism to adjust for the difference between actual and forecast water consumption over the determined period. Where the difference is above or below a defined 'deadband', the Tribunal would consider adjusting for any losses or gains in revenue resulting from this difference.

The Tribunal proposes to set the deadband based on variations between:

- actual and forecast consumption over the last five years; and
- forecast consumption over the price determination period based on assumptions of higher demand and drought conditions.⁷

The Tribunal proposes to assess the variation and approve any adjustments at the next review of prices. It is unclear in the draft determination if the Tribunal intends to consider the difference between actual consumption and the deadband as a year on year variation or as

⁷ The Independent Pricing and Regulatory Tribunal, (June 2005), *Draft Report*, p.20.

an average variation over the determination period. Moreover, the way in which the Tribunal is likely to adjust for this difference is unclear.

Sydney Water supports the Tribunal's proposal that there should be appropriate risk sharing for revenue volatility with Sydney Water's customers. Accordingly, it supports a revenue adjustment mechanism that allows Sydney Water to recover revenue for variations above and below a deadband that is calculated on an annual rather than a four-yearly basis. Under this proposal, forecast risk within the deadband is borne by Sydney Water and variations outside the deadband are borne by the customer during the determination period.

6.4 DEVELOPER CONTRIBUTIONS AND CAPITAL EXPENDITURE OUTPUT MEASURES

The Tribunal's draft determination sought more information about why increases in growth-related capital expenditure are not matched by similar increases in forecast revenue from developer charges. It also proposed a set of output measures that the Tribunal proposes to use to track the proposed service outcomes upon which new prices are set.

In April 2005, Sydney Water wrote to the Tribunal to outline how the developer charge methodology provides for the gradual recovery of growth-related capital expenditure as urban development occurs - generally a 30-year period.

Given the lumpy nature of water-related services, growth expenditure is generally staged in large increments, often prior to the commencement of development. This means that expenditure to service new growth tends to precede the collection of both developer contributions and payments from customers. There is therefore no direct correlation between growth capital expenditure and developer contributions for a given year. Over a 30-year period, however, the methodology results in the present value of developer contributions equating to the present value of growth capital expenditure (calculated with a discount rate of 7 per cent), less the operating surpluses generated by the new urban development.⁸ This means that the cost of growth capital expenditure is recovered through a mixture of developer contributions and customer charges once the scheme is operational.

Figure 1 outlines the forecast trends in the capital expenditure required to service growth over the next 10 years and compares this to the collection of developer contributions. The spike in capital expenditure over the next four years reflects the investment required to provide infrastructure to new growth areas in Western Sydney. Once this upfront investment has been made, capital expenditure reduces and developer contributions increase as these areas are developed.

Developer service plans, which apply the developer charges methodology, are updated every five years to ensure developer charges reflect latest information in relation to the timing of developments and regulated prices. A periodic review of developer services plans is currently underway.

Sydney Water considers that the developer charge methodology is an effective mechanism for the recovery of growth related capital expenditure. The methodology allows for the recovery of growth capital expenditure from the developers creating the demand for the new services, whilst providing a clear signal to the industry in relation to the cost of servicing different areas.

Sydney Water welcomes the opportunity to work with the Tribunal to confirm its forecast developer contributions as part of the process to update its developer service plans by June 2006.

⁸ Based on regulated prices less operating expenses for each service.

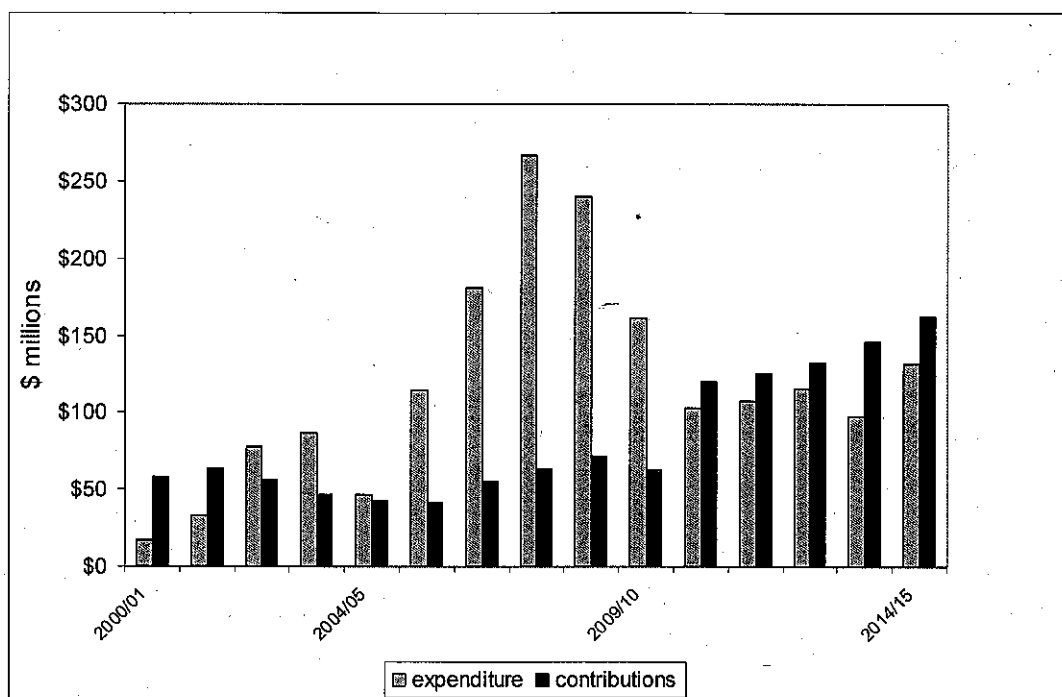


Figure 1: Growth related capital expenditure and developer contributions (nominal dollars)

The draft determination proposes that Sydney Water is to report annually to the Tribunal on the capital spending and asset management output measures that were recommended by WS Atkins.

Sydney Water notes that it will already be required to report to the Tribunal on the system performance and service quality indicators that have been developed with the Tribunal for the next determination period. It will also continue to provide its Annual Information Return for each year of the determination and its Special Information Return as an input to the next price review process. These requirements are in addition to the system performance and service quality indicators that have been included in Sydney Water's renewed Operating Licence and its requirement to participate in a comprehensive audit of its asset management plans and processes over the same period.

In relation to the output measures that have been proposed by WS Atkins, the draft determination does not specify how they will be used to assess prudent and efficient investment over the determination period or how Sydney Water will be held accountable against these measures.

There is a risk that focusing on output measures may be at the expense of a regular and robust reassessment of capital expenditure priorities and efficiencies. While Sydney Water understands the importance of linking expenditure to output measures, it notes that its expenditure priorities may need to change from time to time as circumstances require. Sydney Water has processes in place to regularly consider and review expenditure to ensure available funds are directed to priorities. It is appropriate that the price determination should allow Sydney Water the flexibility to optimally manage its investment program over the medium term, with the Tribunal periodically assessing the prudence and efficiency of its past investment when setting prices.

Sydney Water is happy to provide the Tribunal with feedback on its achievement in delivering outputs at this time and attaches comments on WS Atkins' output measures for consideration. However, it emphasises the importance of combining robust processes with examination of outputs, and requests more detail on how these measures are proposed to be used to assess outcomes over the determination period.

Attachments

A1 Sydney Water's capital works program incorporating potential price increases against Sydney Water's activities and investment drivers

Evans and Peck – most likely scenario (SW capital program by product)

Product	2005/06	2006/07	2007/08	2008/09	Total
Recycled Water	9	30	70	82	191.0
July forecast	9.7	33.5	71	83	197.2
E&P forecast	10.0	35.7	78.1	94.1	218.0
Difference	0.3	2.2	7.1	11.1	20.8
Water	109	153	170	178	608.0
July forecast	198	158	170	178	702.0
E&P forecast	204.7	168.4	187.0	199.8	759.7
Difference	6.7	10.4	17.0	23.6	57.7
Wastewater	328	357	357	283	1325.0
July forecast	328	357	357	283	1325.0
E&P forecast	339.2	380.8	392.7	320.9	1433.3
Difference	11.2	23.6	35.7	37.9	108.3
Stormwater	15	9	6	6	36.0
July forecast	15	9	6	6	36.0
E&P forecast	15.8	9.6	6.6	6.8	38.5
Difference	0.5	0.6	0.6	0.8	2.5
Corporate	49	55	49	31	184.0
July forecast	49	55	49	31	184.0
E&P forecast	50.7	58.0	53.9	35.2	198.4
Difference	1.7	3.6	4.9	4.2	14.4
Total	510.0	604.0	652.0	578.0	2344.0
July forecast	599.7	612.5	653.0	679.0	2444.2
EP forecast	620.1	652.9	718.3	656.6	2647.9
Difference	20.4	40.4	65.3	77.6	203.7

EP most likely scenario	2005/06	2006/07	2007/08	2008/09
Annual increase	3.40%	3.10%	3.10%	3.10%
Cumulative effect	3.40%	6.60%	10.00%	13.40%

IPART CPI	2.7%	2.4%	2.4%	2.4%
	1			

E&P Nominal	5.90%	5.90%	5.90%	5.90%
E&P Nominal esc	1.059	1.121	1.188	1.258
	10.2723	37.5535	84.348	104.414

Operating licence	0.7	3.5	1	1
Desalination	89	5		

100.2
203.7

Evans and Peck – most likely scenario (SW capital program by driver)

Driver	2005/06	2006/07	2007/08	2008/09	Total
Mandatory Standards	47	44	63	80	234.0
July forecast	47.7	47.5	64	81	240.2
E&P forecast	49.3	50.6	70.4	91.9	262.2
Difference	1.6	3.1	6.4	10.9	22.0
Existing standards	284	292	282	261	1119.0
July forecast	284	292	282	261	1119.0
E&P forecast	293.7	311.3	310.2	296.0	1211.1
Difference	9.7	19.3	28.2	35.0	92.1
Growth	112	172	248	217	749.0
July forecast	112	172	248	217	749.0
E&P forecast	115.8	183.4	272.8	246.1	818.0
Difference	3.8	11.4	24.8	29.1	69.0
Business efficiency	22	30	16	17	85.0
July forecast	22	30	16	17	85.0
E&P forecast	22.7	32.0	17.6	19.3	91.6
Difference	0.7	2.0	1.6	2.3	6.6
Discretionary Standards	0	3	0	0	3.0
July forecast	0	3	0	0	3.0
E&P forecast	0.0	3.2	0.0	0.0	3.2
Difference	0.0	0.2	0.0	0.0	0.2
Revised NSW Government Programs	45	63	43	3	154.0
July forecast	134	68	43	3	248.0
E&P forecast	138.6	72.5	47.3	3.4	261.7
Difference	4.6	4.5	4.3	0.4	13.7
Total	510.0	604.0	652.0	578.0	2344.0
July forecast	599.7	612.5	653.0	679.0	2444.2
EP forecast	620.1	652.9	718.3	656.6	2647.9
Difference	20.4	40.4	65.3	77.6	203.7

EP most likely scenario	2005/06	2006/07	2007/08	2008/09
Annual increase	3.40%	3.10%	3.10%	3.10%
Cumulative effect	3.40%	6.60%	10.00%	13.40%

IPART CPI	2.7%	2.4%	2.4%	2.4%
	1			

E&P Nominal	5.90%	5.90%	5.90%	5.90%
E&P Nominal esc	1.059	1.121	1.188	1.258
	50.5143	53.2475	76.032	101.898

Operating licence	0.7	3.5	1	1
Desalination	89	5		

100.2
203.7

Evans and Peck – high scenario (SW capital program by product)

Product	2005/06	2006/07	2007/08	2008/09	Total
Recycled Water	9	30	70	82	191.0
July forecast	9.7	33.6	71	83	197.2
E&P forecast	10.6	40.2	93.1	119.0	262.9
Difference	0.9	6.7	22.1	36.0	65.7
Water	109	153	170	176	608.0
July forecast	198	158	170	176	702.0
E&P forecast	217.2	189.4	222.9	252.4	881.9
Difference	19.2	31.4	52.9	76.4	179.9
Wastewater	328	357	357	283	1325.0
July forecast	328	357	357	283	1325.0
E&P forecast	359.8	428.0	468.0	405.8	1661.7
Difference	31.8	71.0	111.0	122.8	336.7
Stormwater	15	9	6	6	36.0
July forecast	15	9	6	6	36.0
E&P forecast	16.5	10.8	7.9	8.6	43.7
Difference	1.5	1.8	1.9	2.6	7.7
Corporate	49	55	49	31	184.0
July forecast	49	55	49	31	184.0
E&P forecast	53.8	65.9	64.2	44.5	228.4
Difference	4.8	10.9	15.2	13.5	44.4
Total	510.0	604.0	652.0	578.0	2344.0
July forecast	599.7	612.5	653.0	579.0	2444.2
EP forecast	657.9	734.4	856.1	830.3	3078.6
Difference	58.2	121.9	203.1	251.3	634.4

EP most likely scenario	2005/06	2006/07	2007/08	2008/09
Annual increase	9.70%	9.30%	9.30%	9.30%
Cumulative effect	9.70%	19.90%	31.10%	43.40%

IPART CPI	2.7%	2.4%	2.4%	2.4%
	1			
E&P Nomina	5.90%	5.90%	5.90%	5.90%
E&P Nomina	1.059	1.121	1.188	1.258
	10.2723	37.5535	84.348	104.414

Operating li	0.7	3.5	1	1
Desalination	89	5		

100.2
634.4

Evans and Peck – high scenario (SW capital program by driver)

Driver	2005/06	2006/07	2007/08	2008/09	Total
Mandatory Standards	47	44	63	80	234.0
July forecast	47.7	47.5	64	81	240.2
E&P forecast	52.3	57.0	83.9	116.2	309.3
Difference	4.6	9.5	19.9	35.2	69.1
Existing standards	284	292	282	261	1119.0
July forecast	284	292	282	261	1119.0
E&P forecast	311.5	350.1	369.7	374.3	1405.6
Difference	27.5	58.1	87.7	113.3	286.6
Growth	112	172	248	217	749.0
July forecast	112	172	248	217	749.0
E&P forecast	122.9	206.2	325.1	311.2	965.4
Difference	10.9	34.2	77.1	94.2	216.4
Business efficiency	22	30	16	17	85.0
July forecast	22	30	16	17	85.0
E&P forecast	24.1	36.0	21.0	24.4	105.5
Difference	2.1	6.0	5.0	7.4	20.5
Discretionary Standards	0	3	0	0	3.0
July forecast	0	3	0	0	3.0
E&P forecast	0.0	3.6	0.0	0.0	3.6
Difference	0.0	0.6	0.0	0.0	0.6
Revised NSW Government Programs	45	63	43	3	154.0
July forecast	134	68	43	3	248.0
E&P forecast	147.0	81.5	56.4	4.3	289.2
Difference	13.0	13.5	13.4	1.3	41.2
Total	510.0	604.0	652.0	578.0	2344.0
July forecast	599.7	612.5	653.0	579.0	2444.2
EP forecast	657.9	734.4	856.1	830.3	3078.6
Difference	58.2	121.9	203.1	251.3	634.4

EP most likely scenario	2005/06	2006/07	2007/08
Annual increase	9.70%	9.30%	9.30%
Cumulative effect	9.70%	19.90%	31.10%

IPART CPI	2.7%	2.4%	2.4%
	1		
E&P Nomina	5.90%	5.90%	5.90%
E&P Nomina	1.059	1.121	1.188
	50.5143	53.2475	76.032

Operating li	0.7	3.5	1
Desalination	89	5	

100.2
634.4

A2 Trends in Sydney construction price index

Measures of Construction Industry Costs

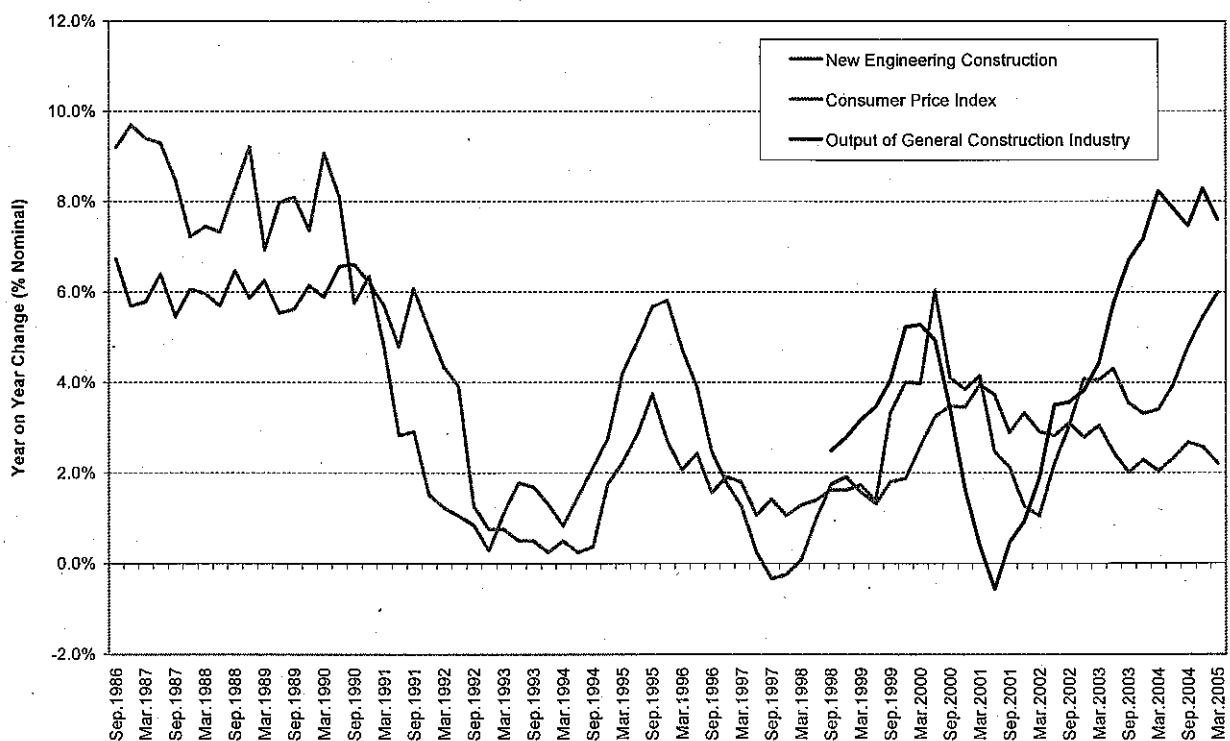
The Australian Bureau of Statistics (ABS) publishes a range of price index data relating to construction industry costs. These include:

- *Output of the General Construction Industry* (ABS Catalogue 6427.0, Table 15).
This series measures changes in the selling prices charged by constructors during a quarter, excluding the Goods and Services Tax (GST). The scope includes the construction of residential and non-residential buildings, as well as non-building construction work (eg, roads, bridges, and other engineering projects). Data for this series is available from September 1997 onwards.
- *Chain Price Index for New Engineering Construction* (ABS Catalogue 5206.0, Table 10).
This series measures changes in the value of engineering construction work physically undertaken during a quarter. The series excludes the construction of any type of building, as well as machinery and equipment not integral to the engineering works being undertaken. Data for this series is available from September 1985 onwards.

Historical Trends

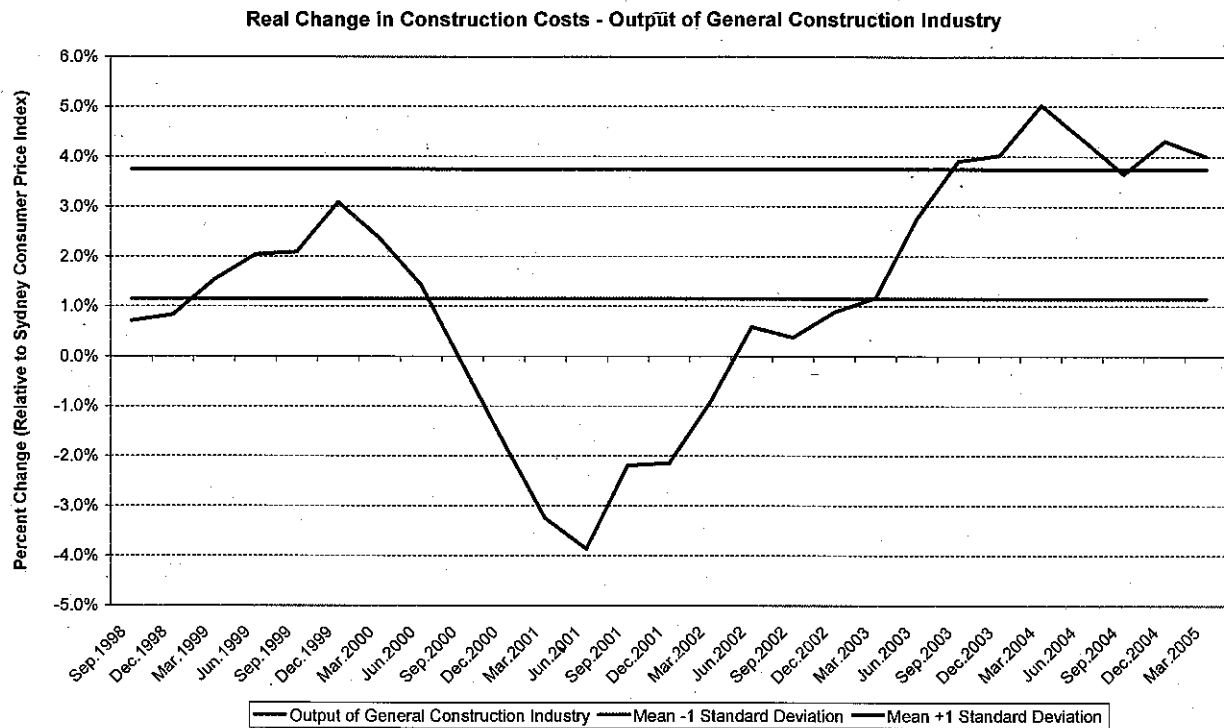
The following graph plots the above two indices, as well as the Sydney Consumer Price Index (CPI). The CPI series has been adjusted to remove the one-off price level increase caused the introduction of a 10% GST in the September quarter of 2000. The net impact of the GST has been estimated at 2.5% (NSW Treasury Circular TC 01/09).

Because it is based on work physically completed, changes in the engineering construction price index lag behind changes in the general construction industry output price index. The lag is between 6 and 12 months.



Real Change in the General Construction Industry Output Price Index

The following graph plots the real annual rate of growth in the general construction industry output price index, including the long-term standard deviation of this series.

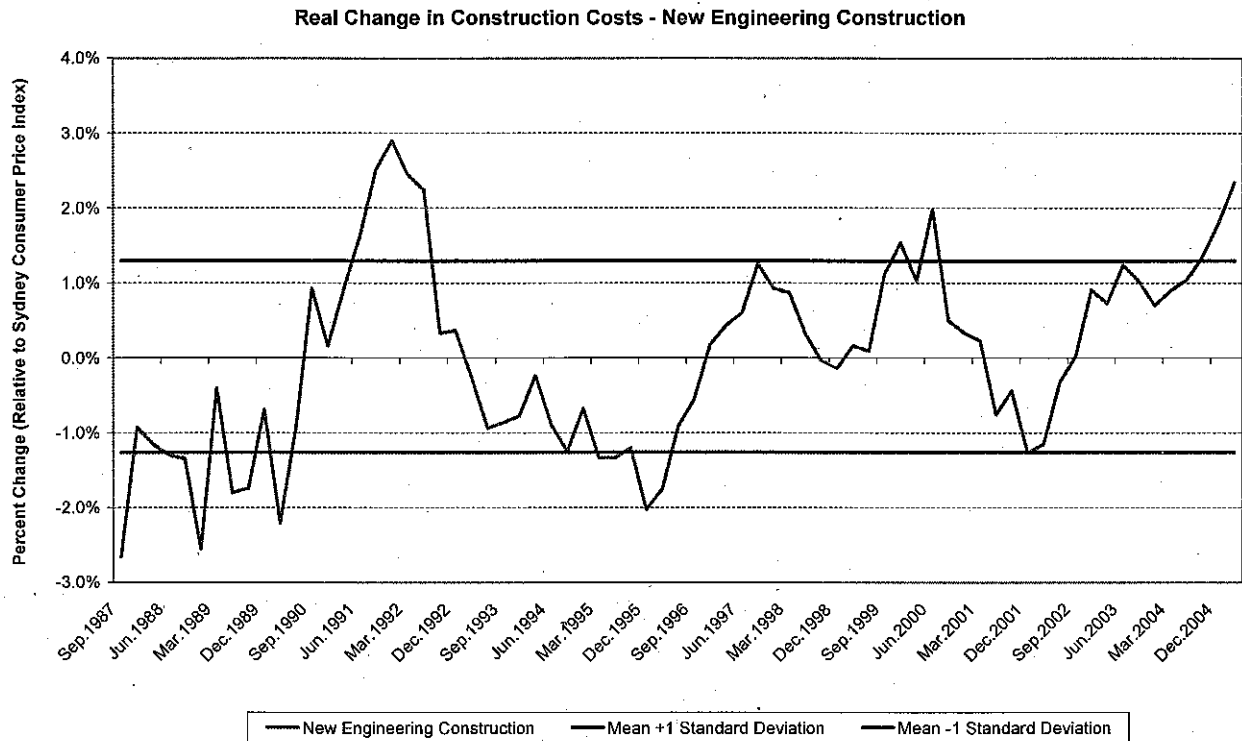


Since 1998, the real change in the construction industry output price index has averaged 1.3% per annum, with a standard deviation of 2.5%. As the graph indicates, there has been a significant real increase in the recent past, such that this price index has been tracking more than 1 standard deviation above its historical average for the past two years.

The fall in prices between June 2000 and June 2001, when prices fell more than one standard deviation below the long-term average, reflects the introduction of the GST, that is, there was a structural shift in the market.

Real Change in the New Engineering Construction Price Index

The following graph plots the real annual rate of growth in the engineering construction chain price index. Although the graph fluctuates around zero, on average the series has essentially been constant in real terms (0.02% growth per annum). This series excludes all building-related construction.



This price index is increasing at a rate that is more than one standard deviation above its long-term average, and has been doing so since September 2004. As mentioned, a comparison of the New Engineering Construction Index against the Output of General Construction Industry Index shows that changes in the former tend to lag changes in the latter by about 12 months. This suggests that the New Engineering Construction Index will continue to increase at a historically high rate for several more quarters.

A3 Estimated costs of implementing step pricing

Step tariff	Additional cases per annum	Transaction rate	Cost per annum 2005/2006	Cost per annum 2006/2007	Cost per annum 2007/2008	Cost per annum 2008/2009
Current functions requiring expansion						
Increase in customer inquiries about high water bills	18,000	\$4	\$72,000	\$72,000	\$72,000	\$72,000
Following inquiries, increase in number of bills needing adjustment	3,600	\$100	\$360,000	\$360,000	\$360,000	\$360,000
Increase in complaint management	1,800	\$80	\$144,000	\$144,000	\$144,000	\$144,000
Resolution of complaints going to Electricity and Water Ombudsman NSW	180	\$200	\$36,000	\$36,000	\$36,000	\$36,000
New functions						
Customer inquiries to clarify type of property (residential/ non residential)	3,600	\$4	\$14,000	\$14,000	\$14,000	\$14,000
Inspections to clarify property type (residential/ non residential)	3,600	\$100	\$360,000	\$360,000	\$360,000	\$360,000
Business analyst to manage, test and maintain step-pricing component of bill output system, including overseeing implementation of annual price increases.			\$100,000	\$100,000	\$100,000	\$100,000
TOTAL			\$1.1M	\$1.1M	\$1.1M	\$1.1M

A4 Notional Credit Rating Calculations

Draft Determination	2006	2007	2008	2009	Total
Cost of Debt	6.55%				
Assumed Dividend Payout Ratio	75%				
Opening Gearing	33.0%				
Opening RAB	7,977				
Opening Debt	2,632				
Regulated PROFIT & LOSS					
Regulated Revenue	1,340	1,422	1,509	1,530	5,801
Operating Costs	(903)	(899)	(889)	(891)	(3,583)
Regulatory Depreciation	(110)	(114)	(119)	(124)	(467)
EBIT	327	408	501	514	1,751
Interest	(172)	(198)	(220)	(245)	(836)
Pre Tax Profit	155	211	281	269	915
Corporate Tax Expense	(47)	(63)	(84)	(81)	(275)
Post Tax Profit	109	147	196	188	641
Dividend Payable	(81)	(111)	(147)	(141)	(481)
Retained Earnings	27	37	49	47	160
Regulated CASH FLOW					
Receipts From Customers	1,340	1,422	1,509	1,530	5,801
Payments to Employees & Suppliers	(903)	(899)	(889)	(891)	(3,583)
Tax Paid	(47)	(63)	(84)	(81)	(275)
Cash Flow From Operations	391	459	536	558	1,943
Sale of Assets	25	56	34	1	116
Purchase of Assets (net of cap cons)	(546)	(552)	(587)	(522)	(2,207)
Cash Flow From Investing	(521)	(496)	(553)	(521)	(2,091)
Interest Paid	(172)	(198)	(220)	(245)	(836)
Dividends Paid	(81)	(111)	(147)	(141)	(481)
Cash Flow from Financing	(254)	(308)	(368)	(387)	(1,316)
NET CASH FLOW	(384)	(345)	(385)	(350)	(1,464)
Regulated BALANCE SHEET					
Reg Assets	8,388	8,770	9,204	9,601	
Loan Debt	3,016	3,362	3,747	4,096	
Equity	5,372	5,409	5,458	5,505	
Regulated RATIOS					
FFO	218.1	261.7	315.5	312.3	
Net Cash Flow	136.7	151.0	168.1	171.2	
EBIT Interest Cover	1.90	2.07	2.27	2.10	
Notional Rating	BBB+	BBB+	A	BBB+	
FFO Interest Cover	2.27	2.32	2.43	2.27	
Notional Rating	BBB+	BBB+	BBB+	BBB+	
FFO / Total Debt	7.2%	7.8%	8.4%	7.6%	
Notional Rating	BB	BB	BB	BB	
Internal Financing Ratio	26%	30%	30%	33%	
Notional Rating	BB	BB+	BB+	BB+	
Overall Notional Rating	BB+	BB+	BBB	BB+	

SW Proposed	2006	2007	2008	2009	Total
Cost of Debt	6.55%				
Assumed Dividend Payout Ratio	75%				
Opening Gearing	33.0%				
Opening RAB	7,977				
Opening Debt	2,632				
Regulated PROFIT & LOSS					
Regulated Revenue	1,389	-1,457	1,565	1,611	6,022
Operating Costs	(903)	(899)	(889)	(891)	(3,583)
Regulatory Depreciation	(110)	(114)	(119)	(124)	(467)
EBIT	376	444	557	595	1,972
Interest	(172)	(197)	(219)	(244)	(832)
Pre Tax Profit	203	247	337	351	1,139
Corporate Tax Expense	(61)	(74)	(101)	(105)	(342)
Post Tax Profit	142	173	236	246	797
Dividend Payable	(107)	(130)	(177)	(184)	(598)
Retained Earnings	36	43	59	61	199
Regulated CASH FLOW					
Receipts From Customers	1,389	1,457	1,565	1,611	6,022
Payments to Employees & Suppliers	(903)	(899)	(889)	(891)	(3,583)
Tax Paid	(61)	(74)	(101)	(105)	(342)
Cash Flow From Operations	424	484	574	614	2,097
Sale of Assets	25	56	34	1	116
Purchase of Assets (net of cap cons)	(546)	(552)	(587)	(522)	(2,207)
Cash Flow From Investing	(521)	(496)	(553)	(521)	(2,091)
Interest Paid	(172)	(197)	(219)	(244)	(832)
Dividends Paid	(107)	(130)	(177)	(184)	(598)
Cash Flow from Financing	(279)	(327)	(396)	(428)	(1,430)
NET CASH FLOW	(376)	(339)	(375)	(335)	(1,425)
Regulated BALANCE SHEET					
Reg Assets	8,388	8,770	9,204	9,601	
Loan Debt	3,008	3,347	3,722	4,057	
Equity	5,380	5,423	5,482	5,544	
Regulated RATIOS					
FFO	252.0	287.0	355.2	370.0	
Net Cash Flow	145.2	157.4	178.1	185.6	
EBIT Interest Cover	2.18	2.25	2.54	2.44	
Notional Rating	BBB+	A	A+	A	
FFO Interest Cover	2.46	2.46	2.62	2.52	
Notional Rating	BBB+	BBB+	A	A	
FFO / Total Debt	8.4%	8.6%	9.5%	9.1%	
Notional Rating	BB	BB+	BB+	BB+	
Internal Financing Ratio	28%	32%	32%	36%	
Notional Rating	BB+	BB+	BB+	BBB	
Overall Notional Rating	BB+	BBB	BBB	BBB	

A5 Sydney Water's comments on the Tribunal's proposed output measures and schedules to the determination

Appendix 2 of the Tribunal's draft determination details 33 output measures related to Sydney Water's capital investment program.

These draft measures have been predominantly derived from Sydney Water's November 2004 submission. Sydney Water's March 2005 submission set out a revised capital investment program of some \$256 million less than the initial submission. As a result of this revision, there are some minor inconsistencies between twelve of the Tribunal's proposed output measures and the associated capital programs. These inconsistencies and the recommended measures are outlined below.

Water services

Renewal of critical water mains

The program output has been reduced from a 41km to 34km following a more gradual ramp up of the program as recommended by WS Atkins. The March 2005 submission included a revised cashflow and program-rephasing to reflect this change.

Pumping Station substantial renewals

The draft determination refers to the renewal of 40 pumping stations and seems to have counted the renewals at Ryde pumping station as five separate projects from the SIR. The actual number of renewals is 36.

Bulk water meters refurbished/new

The draft determination lists the output measure for bulk water meters as 85 refurbished and 50 new meters. In line with the leakage reduction program, Sydney Water will be installing 135 bulk water flow meters, however this will be a mix of both new and refurbishments depending on the need. Sydney Water therefore request that this output is detailed as just 135 bulk water flow meters.

Renewal of customer water meters

The draft determination refers to the replacement of 406,000 water meters. Sydney Water's program is to replace 100,000 per year, or 400,000 over the four-year determination period. Sydney Water requests that the output measures be altered to reflect the program.

Pressure control areas established

This is a 10-year program with a total of 100 zones to be established in the determination period as detailed in Sydney Water's November 2004 submission and a further 155 zones established by 2014/15. The draft determination states that 165 zones will be established during the determination period and should be changed to show the establishment of 100 zones.

New recycled mains laid by Sydney Water

The draft determination refers to 51km of new recycled water mains laid, however Sydney Water's program includes the delivery of 35km of recycled water mains for Greenfield areas (growth) and 54km to existing customers (non-growth). The draft determination should be updated to reflect this higher target.

Wastewater services

Repair collapsed sewers

The November 2004 submission stated that 24km of mains would be replaced, which was based on an assumed amount of main replaced over 150 jobs detailed in Sydney Water's asset management plans. As there is some uncertainty in the amount of main that would require replacement, Sydney Water believes a measure more reflective of the actual output is the number of jobs and requests that the output table is updated to this revised measure.

Rehabilitate sewers at properties subject to repeat overflows

The draft determination includes an output measure of 320km, which is Sydney Water's rehabilitation program from 2005/06 to 2009/10, one year past the determination period. The draft determination should therefore be updated to the four-year target of 256km.

Refurbish wastewater treatment works (WWTWs)

The draft determination output measure includes Richmond, which has already been completed and therefore should be deleted from the outputs table.

Increase capacity at WWTWs

The draft determination includes Winmalee in this output measure, however there is no capacity upgrade planned at this plant, only a renewals and reliability project. Winmalee should therefore be deleted from the output measure.

Stormwater Services

Pipe and channel renewal and rehabilitation by 2009

The draft determination target value is 4km, however Sydney Water's program is to renew and rehabilitate 11km of stormwater pipes and channels during the determination period. It is recommended that the output for this measure be changed to 11km.

Complete SEIP and Install Gross Pollutant Traps

This is the effectively same measure that has been included twice in the outputs table. It is recommended that one of these measures be deleted.

Comments on the schedules to the Tribunal's draft determination

Schedule 1 - Water Supply Services

- ☐ point 3.1 (a) remove the word 'for each Meter'
- ☐ point 7.5 Title should include 'Multi premises'
- ☐ the current wording does not cover Dual occupancies or flats.

Schedule 2 – Sewerage services

- ☐ point 4(a) (i) include 'times discharge factor'
- ☐ point 4.(b) amend to 'the sewerage usage charge in Table 8 for the meter reading period applies to discharges greater than 500kls per annum.'
- ☐ Table 11. Amend sewerage charge for exempt lands – incorrect price in 2005/2006

Schedule 4 – Rouse Hill Development Area

- ☐ Table 17
- ☐ properties with land size > 1000m2

- add – this only applies to non residential properties.

Schedule 5 – Trade Waste

- Table 18 (Industrial Agreement Charges)
 - insert "... will be at a standard hourly rate plus analytical costs incurred by Sydney Water in assessing the wastewater to be discharged."; and
 - \$108 per hour should read \$105 per hour.
- Table 20 (Threat level based acceptance standard...)
 - threat level charge (\$/kg) for threat level 1 should read \$0.005 (not \$0.01)
- Table 23 (Volumetric charge for commercial customers)
 - where the volume of trade waste water is assessed, a minimum annual charge (all codes) applies.
- Sydney Water has also prepared a response to the Tribunal's questions on clause 3.3(b) and 3.4(b), which it will provide separately for information.

Schedule 6 – Ancillary and Miscellaneous Services

- new item that has been omitted
- hourly Rate – Civil Maintenance \$75.00
- item 50(a) Trade Waste miscellaneous charges
- with one Sydney Water representative from \$60.00 to \$68.70
- with two Sydney Water representatives from \$120.00 to \$137.40
- minimum increment from \$30.00 to \$34.35
- new item – Late payment fee \$5.00 (excludes GST)

Schedule 8 – Definitions and Interpretations

- Multi premises – reinstate the 2003 multi premise definition
- Property – reinstate the 2003 property definition
- Premise – reinstate the 2003 premise definition
- Tier 1 - The Tier 1 price will apply up to and including 400kl per annum applied on a daily basis.
- Tier 2 - The Tier 2 price will apply above 400kl per annum applied on a daily basis.
- Point 2.4 Billing – *Unresolved issue*