



**Submission in response to IPART's
draft report on prices to apply from
1 October 2005**

July 2005

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1 Introduction

The SCA made its main submission to IPART's current review of metropolitan water prices in November 2004. The SCA also made a supplementary submission in March 2005.

On 17 June 2005 IPART released its draft report and determination on the SCA's prices to apply from 1 October 2005 to 30 June 2009. IPART has invited comments in response. This submission raises the issues that the SCA would like IPART to consider in making its final determination.

2 Operating expenditure efficiencies

The SCA has previously detailed to IPART its reservations about the validity and robustness of Atkins/Cardno's approach to deriving its proposed operating efficiency targets¹.

It is the SCA view that it has set itself challenging efficiency targets by capping its core operating expenditure in real terms at the same time that the business is taking a very significant role in delivering major parts of the Government's Metropolitan Water Plan. The impact of major increases in insurance and security costs to the SCA do not seem to have been properly considered in framing these efficiency targets. For this reason further targets set by WS Atkins /Cardno in its Opex Capex review are not warranted.

The impact of the Atkins targets is to reduce allowed operating expenditure by a sliding scale reaching a maximum of 5.3% in the final year of the price path. These annual expenditure reductions assume that output will be little changed or unchanged in the SCA's business; thus giving an efficiency improvement.

The level of activity of the SCA's business and increasing complexity of its operations suggest cost increases, even given the benefits that will be delivered by technological improvements such as SCADA. IPART acknowledges that increasing water scarcity is driving up the Long Run Marginal Cost of water. By holding operating costs steady in real terms, even though its asset base is growing sharply, the SCA has already applied stringent efficiencies to its operating expenditure.

3 Yield Management

Atkins/Cardno recommended that the SCA be allowed additional operating expenditure totalling \$7 million over the price path for increased activity to enhance the SCA's yield management processes including the operation of the telemetry system, which is currently carried out by Sydney Water. In its draft determination, IPART has not allowed for this amount as the SCA had not provided a business case to support the additional expenditure. This appears to be the result of confusion as to the timing of SCA presenting its business case.

The SCA supports Atkins proposals to enhance the SCA's yield management processes. However, Atkins had also previously stated that the business case should form a measurable outcome target before the next review. To meet any desire of IPART to see the business case earlier a preliminary draft of the proposed scope of works is attached to this submission for IPART's consideration (commercial-in-confidence). The SCA can provide IPART with a timetable for completion (which itself requires some detailed analysis).

¹ IPART, *Capex, Asset Management and Opex review*, Sydney Catchment Authority, *Response to Atkins Final Report*, March 2005)

4 Capital expenditure efficiencies

IPART has accepted Atkins/Cardno's nominated cumulative capital expenditure efficiency gains totalling 9.5 per cent by 2008-2009. Atkins/Cardno's justification for these reductions is its professional judgement of the impact of improved processes that could be achieved². As in the case of the operating expenditure efficiencies above, the SCA has concerns regarding the robustness and validity of Atkins/Cardno's approach³.

SCA has instituted a completely revised asset strategy, which will provide efficiencies through more strategic investment in maintaining and acquiring assets. The SCA is also currently implementing a project management system to boost efficiency in program management. However, while these strategies will assist in significantly improving asset creation management they will not, of themselves, result in a reduction in capital expenditure. The SCA's cost estimating and business case processes, now being implemented, will improve the accuracy of SCA estimation. However, a likely result is an increase in budgeted capital expenditure to more realistic levels, not a reduction.

It is not envisaged that the combined effect of all the measures will reduce budget capital expenditure in the next four years to the extent proposed by Atkins/Cardno.

A feasible efficient result is an increase in capital expenditure to provide greater economies of scale and lower unit costs. SCA expects in the longer term that better asset management will reduce the cost-per-unit of water sold per dollar of SCA assets.

As detailed in the SCA's its supplementary submission of March 2005, IPART should also note price movements in the Australian construction industry are putting further upward pressure on tender prices in the short term. While the SCA accepts that there may be room for improvement in some the SCA's project estimation accuracy, recent experience in procurement for major projects has reinforced the difficulty in estimating, particularly in the fluid Australian construction sector

5 Capital expenditure forecasts

The IPART draft report is based on SCA's submission of November 2004. Since then, there have been substantial changes in capital expenditure estimates:

- In March 2005, SCA's Supplementary Submission updated estimates relating to Metropolitan Water Plan and other projects
- On 10 June, the NSW Government announced that it was accelerating the Shoalhaven Transfers. Depending on the dam and tunnel configuration adopted, this will significantly increase SCA expenditure in the current price path and, consequently, also locks in longer term expenditure increases.

IPART intends to base its final determination on the SCA's March 2005 supplementary submission. However, these estimates will be superseded because of the Government's decision to accelerate the Shoalhaven transfer scheme. These costs will not be known with reasonable certainty before IPART's final determination suggesting that IPART will need to consider some form of cost-pass through mechanism (see next section) to meet these expenditures. In its draft report, IPART has proposed a method for the clawback of capital *underspend* on the Shoalhaven transfer scheme.

² Atkins/Cardno *IPART, Capex, Asset Management and Opex review, Overview report*, February 2005 page 33

³ *IPART, Capex, Asset Management and Opex review, Sydney Catchment Authority, Response to Atkins Final Report*, March 2005)

6 Cost pass through

The SCA had raised with IPART, the possibility of having certain unforeseeable costs to be automatically passed through contingent upon preset triggers occurring.

The SCA supports IPART's approach that it will consider re-opening the 2005 determination under the IPART Act in the event that "there are changes in certain taxation, Government policy or regulatory obligations that give rise to costs or cost savings that are significantly greater than allowed for in this determination" (page 20).

In the case of the SCA, expenditure on the acceleration of the Shoalhaven transfer scheme, which falls in to this category, will not have firm costs available for inclusion in the revenue requirement prior to IPART's final determination. The SCA will use IPART's suggested mechanism for inclusion of costs greater than allowed in the determination on the basis of changes to Government policy.

7 Water demand forecasts

For consistency, the SCA submissions to IPART use Sydney Water's demand projections. (In doing so, the SCA allows for approximately 7 gigalitres of Sydney Water's demand to be sourced from its supply at North Richmond). The following table details the revised forecast water demand estimates.

Table 1 – Sydney Water demand projections

| Date of revised estimates (GL) | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
|---------------------------------------|----------------|----------------|----------------|----------------|----------------|
| November 2004 (Sydney Water) | 558 | 587 | 579 | 569 | 557 |
| March 2005 (Sydney Water) | 513 | 517 | 573 | 570 | 560 |
| July 2005 (Sydney Water) | 519 | 515 | 526 | 570 | 560 |
| IPART July 2005 | N/A | 591 | 591 | 586 | 577 |

In its draft report IPART, has determined revenues based on demand projections that do not allow for the impact of water restrictions. IPART states in its draft report that "consumers... should not face increased prices because of temporary restrictions"(page 27), and accordingly "restrictions should not be factored into these agencies' forecasts" (page 28).

The table below compares IPART's the draft outcomes with those based on Sydney Water's latest forecast demands (which include the impact of restrictions).

Table 2 – Comparison of IPART and Sydney Water demand projections July 2005

| | 2005-06 | 2006-07 | 2007-08 | 2008-09 | Total |
|---------------------------------------|----------------|----------------|----------------|----------------|--------------|
| Difference in demand (GL) | 76 | 65 | 16 | 17 | 174 |
| Total revenue reduction (\$ millions) | 11.7 | 10.9 | 3.0 | 3.5 | 29.1 |

The above table indicates that the SCA's revenue over the period could fall short by some \$30 million than estimated by IPART in its draft report. This shortfall places further downward pressure on the SCA's credit rating which IPART projects to decline over the price path. The SCA requests that IPART address this issue in the final determination. The SCA recommends that IPART consider including a revenue volatility adjustment.

SCA has previously proposed a revenue adjustment mechanism for managing forecast risk. This mechanism will be increasingly important as a greater proportion of SCA revenue is derived the volumetric component of its charges, and therefore subject to demand fluctuations. The SCA proposed that the adjustment be based on cumulative sales over the price path, and a trigger of 2 to 3 percent variation of actual sales to forecast sales.

In its draft report IPART has stated that “it may consider adjusting the revenue requirement for the subsequent determination to account for the effect of the difference” and “the manner in which this adjustment is made will be determined during the subsequent determination period” (page 19).

IPART’s approach does not provide regulatory certainty with regard to the likelihood that revenue volatility will be addressed, or the quantum of the risk that would be covered in the event that IPART does decide to allow adjustment.

IPART does suggest however, that the starting point for consideration of the “manner of this adjustment” is more likely to be a 10 per cent ‘deadband’ than a 2 to 3 per cent deadband (draft report, page. 20). Moreover, as discussed above, IPART has excluded allowance for water restrictions in the forecast demand for regulatory purposes. This makes it more likely that the SCA’s revenue will be less than adopted by IPART.

A deadband of 10 per cent amounts to about a \$60 to 70 million reduction in revenue to the SCA over the price path. This is a major risk exposure to the SCA, especially in times of drought as the SCA incurs additional operating expenditure for pumping from the Shoalhaven.

8 Return on Assets

The rate of return on assets underpinning the IPART’s draft determination of prices for the SCA ranges from 5.9 to 6.1 per cent (to be achieved in 2008-09). This is less than the commercial return of 6.5 per cent modelled by the SCA for its submission.

The SCA considers that the underlying 6.1% real pre-tax Weighted Average Cost of Capital (WACC) determined by IPART does not reflect the commercial return required to invest in water infrastructure. The parameters supporting a real pre-tax WACC of at least 6.5% for the Final Determination are discussed in Appendix A.

Appendix A - Weighted Average Cost of Capital

IPART's *Draft Determination*⁴ highlights the significant capital expenditure required to meet increasing regulatory obligations and customer expectations in relation to service and environmental outcomes, given an expanding and ageing asset base and current supply/demand imbalance.

The draft WACC of 6.1% for NSW metropolitan water businesses compares to an equivalent WACC of 7.0% adopted by IPART in recent gas⁵ and electricity⁶ determinations. IPART's *Draft Determination* does not attempt to justify the differential returns provided on water versus gas and electricity infrastructure.

The relative risks of the water and electricity sectors was discussed in the ACT's Independent Competition and Regulatory Commission's (ICRC's) 2004 Determination for ACTEW:

*"In the past, there has been a general view amongst practitioners that asset betas in the water industry are less than those in energy industries such as natural gas and electricity. The comparison of historic asset betas in these industries in the United Kingdom and the United States tends to support this view, although the differences appear small. However, recent droughts, the imposition of restrictions on water use, greater trends towards pay-for-use pricing, and the emergence of environmental issues, together mean that the water industry may not be as immune to movements in the general economy and volatility in returns as has previously been the case. Unfortunately, as noted above, at present there is no empirical evidence in Australia to prove or disprove this theory. Nevertheless, recent asset betas awarded by regulators in the gas and electricity industries are not inconsistent with the range of asset betas in the water industry, suggesting that this theory has some broader support."*⁷

Based on this evidence, ICRC adopted a common asset beta of 0.40 and real pre-tax WACC of 7.0% for both ACTEW/AGL's electricity and water businesses.

The SCA supports the majority of WACC parameters adopted in IPART's *Draft Determination*. However, the SCA does not believe that the proposed equity beta range of 0.65 to 0.90 (0.775 mid-point) reflects the systematic risk of NSW water businesses, especially given IPART's underlying 60% debt gearing assumptions.

NSW water agencies potentially face significant earnings risks associated with:

- *Regulatory Regime* – NSW water agencies are regulated under a price cap. This form of price regulation is considerably riskier than revenue cap and rate of return regulatory regimes where regulated revenue and / or earnings are effectively assured. Under a price cap, regulated earnings will be subject to fluctuations in both revenue and costs.
- *Price Smoothing* – IPART's *Draft Determination* adopts a transitional price path that can delay full cost recovery until the final year of the determination. As a result, ex-

⁴ IPART, Prices of Water Supply, Wastewater and Stormwater Services, Sydney Water Corporation, Hunter Water Corporation, Sydney Catchment Authority, Draft Report, June 2005

⁵ IPART, Revised Access Arrangement for AGL Gas Network, Final Decision, April 2005

⁶ IPART, NSW Electricity Distribution Pricing 2004/05 to 2008/09, Final Report, June 2004

⁷ ICRC, Draft Report: Prices for Water and Wastewater Services in the ACT, December 2003, Page 93

ante earnings targets in years other than the final year, may vary significantly to the benchmark return. Further, 2005/06 price increases have been delayed by 3 to 4 months, exacerbating revenue shortfalls in that year.

- *Revenue Volatility* - IPART's Issues Paper identified the potential revenue volatility associated with consumption forecasting and medium term price setting in the current environment of continued drought and water restrictions. Future demand management initiatives (including changes in price structures to incorporate step pricing) will only further increase revenue volatility over the next regulatory period.
- *Operating Leverage* – this reflects the proportion of fixed operating costs to total operating costs. NSW water agencies have high levels of operating leverage reflecting the largely fixed cost nature of their operations. This results in a higher variability of earnings relative to the underlying revenue stream.
- *Financial Leverage* – higher levels of assumed gearing and resultant fixed interest costs further magnifies the variability of the net income stream relative to the underlying EBIT stream. IPART has assumed 60% gearing levels for the purposes of determining WACC.

While NSW water businesses are generally considered 'low risk' regulated monopolies, regulated revenue and earnings are not guaranteed. There is the potential for significant volatility in actual earnings relative to the ex-ante target determined by IPART, especially given the significant forecasting uncertainty associated with the current supply-demand imbalance, magnified by the high levels of operating and financial leverage faced by NSW water businesses.

These risks are considered at least equal to that faced by regulated gas and electricity network businesses. Given identical gearing assumptions, IPART should adopt an equity beta at least equivalent to the 0.90 mid-point adopted in recent gas and electricity determinations.