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- 7 MAR 2005

Ref: D2005/01731

Dr M Keating  
Chairman  
Independent Pricing and Regulatory Tribunal of NSW  
PO Box Q290  
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Dear Dr Keating

I am pleased to provide you with the Sydney Catchment Authority's (SCA) response to the *Capex, Asset Management and Opex Review* (February 2005), by Atkins in association with Cardno.

In its final report, Atkins appears to have accepted, to a degree, many of the issues raised by the SCA in responses to Atkins' draft findings. That said, there is still a considerable difference of view between Atkins and the SCA related to the timing and quantum of expenditure efficiencies.

I acknowledge Atkins' finding that in a broad sense the SCA has now matured as an organisation since its creation in 1999. However, the SCA is continuing to examine and rectify a legacy of catchment management and asset management issues as well as deliver our component of the Government's Metropolitan Water Plan. Given the significant yet variable levels of expenditure this might entail, and the unique nature of the SCA's legislated functions, I consider that the level of operating and capital expenditure efficiencies proposed by Atkins would seriously limit the SCA's ability to achieve all that it must over the next four years. The SCA's Chief Executive, Lisa Corbyn, and I will discuss this position during our presentation to the public hearing for the 2005 Review of Metropolitan Water Prices, on 10 March 2005.

Yours sincerely

A handwritten signature in black ink that reads "Graeme Head". The signature is written in a cursive style and is positioned above the printed name and title.

**GRAEME HEAD**  
**Managing Director**

**04 MAR 2005**

**IPART, Capex, Asset Management and Opex Review  
 Sydney Catchment Authority  
 Response to Atkins' Final Report**

Issue raised by Atkins	SCA response										
<p><b>Page 4</b>  <b>Operating efficiency Methodology</b></p> <p><i>Our assessment is consistent with a methodology developed and applied by the Ofwat in England and Wales for the 1999 Periodic Review and also used in the 2004 Periodic Review. The method was independently scrutinised by the UK Competition Commission. The limited extent of data available from agencies in New South Wales does not allow the application of a detailed quantitative approach. Our opinion is therefore based on an assessment of operating cost processes against best practice, the potential for savings identified from our detailed reviews and a comparison with the level of efficiencies achieved by water utilities in England and Wales.</i></p> <p><b>Page 5</b>  <i>For this study we have followed the concept of continuing and catch-up efficiency that has been established within the Ofwat methodology. However, there is insufficient cost information available to allow us to undertake a detailed review such as Ofwat's, which uses extensive econometric modelling and analyses. We have therefore made an assessment of efficiency based on the information currently available, combined with the experienced judgement of our project team.</i></p> <table border="1" data-bbox="289 1206 1108 1294"> <thead> <tr> <th></th> <th>2006</th> <th>2007</th> <th>2008</th> <th>2009</th> </tr> </thead> <tbody> <tr> <td>Net Efficiency (cumulative)</td> <td>0.8</td> <td>2.6</td> <td>4.0</td> <td>5.3</td> </tr> </tbody> </table>		2006	2007	2008	2009	Net Efficiency (cumulative)	0.8	2.6	4.0	5.3	<p>The SCA has reservations about the validity of Atkins approach to the derivation of efficiencies. The SCA is a unique bulk raw water wholesaler in Australia. Water agencies in England and Wales (and Scotland) do not necessarily have to address the range of issues faced by the SCA in managing 16,000 square km of catchment (eg bushfires), and storing approximately four years supply of water for a population of over 4 million. The SCA considers that the proposed combined cumulative efficiency target of 5.3% by 2008-09 is not justified.</p> <p>There is obviously a need to compare like business with like. Thus, there are a number of underlying uncertainties in Atkins' approach that undermine the level of confidence with which the efficiency levels have been quantified. The SCA is a bulk water supply <i>and</i> catchment management business; a type of business that does not exist in the UK. The efficiency gains in the UK may relate to the distribution portion of these businesses (where technology such as IT can reduce staff costs eg account processing). Alternatively, the gains may relate to the different scale and weather conditions applying to UK businesses. Overall, the approach taken (in Scotland and applied by Atkins in its report, see references 30, 31,36,37) may be inappropriate.</p> <p>A major difference between the SCA and, say, Melbourne Water as a local comparison is the condition of their respective catchments. A large part of the SCA's outer catchment area contains new and historical development as</p>
	2006	2007	2008	2009							
Net Efficiency (cumulative)	0.8	2.6	4.0	5.3							

(\$M 04/05)	2006	2007	2008	2009
SCA Proposed	79.7	81.1	81.3	80.2
Recommended expenditure	80.1	80.5	79.0	76.9

opposed to Melbourne Water's more pristine and closed outer catchment distinct from the Metropolitan areas. For example, in the case of Sydney's largest dam Warragamba, 70% (6,000 sq km) of the catchment is open to development, so there are additional costs incurred. This means that a greater quantity and variability of OpEx is incurred by the SCA in Catchment Management to ensure that it abides by its water management licence and maintains the current quality of raw drinking water.

Similarly, the SCA is a type of business whose productivity-change may not align with Australia wide industry benchmarks. Examining the Australian Productivity Commission's figures shows that, although Australian industry as a whole has experienced productivity improvements close to 1%, the water/gas/electricity sector has had falls over the last couple of years.

Other studies on the water industry productivity show that the continuing improvement of a similar magnitude may be overly optimistic.

Catch-up productivity gains must take full account of the starting conditions faced by the SCA for example state of catchments and infrastructure condition, which were poor.

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**Capital efficiency Methodology**

*This concept was developed and applied by the Office of Water Services (Ofwat) in England and Wales for the 1999 Periodic Review and also used in the 2004 Periodic Review and subject to independent scrutiny by the UK Competition Commission. Ofwat was able to collect and analyse extensive data sets on costs and performance to allow a quantitative assessment of catch-up efficiencies to be made. In New South Wales, the extent of data is not sufficient to carry out a quantitative analysis. We have therefore applied a qualitative assessment of the capital processes currently in use, or recently developed, by each agency to manage capital expenditure, and the methods and costs used to prepare the capital expenditure proposals in the SIR.*

**Catch-up efficiency**

*We applied our judgement to determine the level of catch-up efficiency that could be achieved by 2009, based on our detailed experience of best practice applied in England and Wales and our qualitative assessment of each agency's capital processes.*

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**Continuing efficiency**

*We have assumed a continuing capital efficiency of 0.5% per annum over the period 2006 to 2009 to reflect the impact of new technology and innovation which all agencies, including a frontier agency, should achieve. This figure is factored down from the identified potential for continuing efficiency to reflect other factors which may affect these comparisons. This assumption is informed by productivity information in Australia and assumptions by Ofwat in 1999 and 2004.*

	Efficiency (%)			
	2006	2007	2008	2009
Recommended Efficiency	3.5	5.5	7.5	9.5

(\$M 04/05)	2006	2007	2008	2009
SCA Proposed	165	126	137	85
Recommended expenditure	152.2	29.2	57.7	102.6

As in the case of OpEx above, the SCA's capital expenditures are also unique. Examples of 'one off' SCA projects are the Warragamba Spillway, Prospect Raw Water Pumping Station, Warragamba Valve Refurbishment etc. Given that the SCA already uses open competitive procurement for the design and construction of capital works it is unclear how further efficiency gains can be achieved in cost estimation and procurement processes. Nevertheless, the SCA is currently reviewing its cost estimation process and resourcing. Strong construction demand, competition for scarce skilled labour and rising material costs in the Australian construction industry may serve to put further upward pressure on tender prices. The SCA considers that Atkins proposed cumulative capital efficiency of 9.5% is unwarranted.

**Operating Expenditure Efficiencies**

*The SCA is at the forefront of implementing scientifically based catchment management activities aimed at optimising the quality of surface water harvested for drinking water purposes. Current catchment activities include providing grants and subsidies for community schemes within the catchment. We consider that economic rationality should be applied to this area of expenditure to assess the costs and benefits of catchment management activities to derive an economic level of catchment management. A rigorous methodology should deliver efficiencies in the medium term.*

As required by its legislation, the SCA manages the catchments to achieve water quality improvement. Under the funding/legislative model, where there are water quality benefits which Sydney Water's consumers receive, it is appropriate for those consumers to bear the associated costs. IPART's 2000 price determination and 2003 mid term determination (which was informed by Halcrow's opex/capex review of the SCA) accepted this approach.

The business function delivered by the grants programs is primarily protecting water quality. This issue has been reviewed and endorsed by the international expert panel that recommended that further works should be accelerated, as this is the single-most effective way of improving water quality within the catchments. The SCA's Water Quality Risk Management Framework is underpinned by a cost benefit analysis. It is intended to revisit this analysis iteratively as future benefits are delivered.

**Operating Expenditure Efficiencies (Cont.)**

*The SCA owns a large real estate portfolio including land and heritage buildings. We consider there is scope for operating cost savings through more effective management of the estates and, where appropriate, the recovery of some costs from third parties.*

In its submission the SCA has asked IPART to consider this 'legacy/heritage' matter particularly in the context of the SCA's Braidwood landholdings. In the context of recreational areas, the SCA has specific obligations to provide amenity as compensation for lost amenity from its water use (in particular, dam construction). For example the Bendeela recreation area replaces amenity lost by the impoundment of Tallow Dam when it was constructed in 1976. Therefore these items are direct costs associated with the SCA's core business of water extraction and the SCA considers these expenditures are justified. Ongoing management of houses etc is a legacy of the metropolitan water supply in Sydney. To consider this expenditure as being non-core ignores the reality of how the water supply system was previously built maintained and managed. The SCA accepts that these assets need proper management, including where appropriate disposal, market rate leasing, etc.

<p><b>Page 31</b> <b>Operating Expenditure Efficiencies (Cont.)</b></p> <p><i>The SCA proposed operating cost increases from the Deep Storage scheme and environmental flow monitoring. We found that both of these scheme costs were based on preliminary estimates. We reduced the fixed operating cost estimate for the Deep Storage scheme. The scope of the environmental monitoring scheme was preliminary with little supporting data; we included a realistic estimate for these costs.</i></p>	<p>This is an area that captures a significant proportion of Atkins proposed cuts in OpEx and will need to be worked through in greater detail by the SCA with IPART as the detailed planning of the metropolitan Water Plan projects proceed. The operating costs in the SCA's submission for the deep water pumping stations are preliminary and based on a revision (downwards) of estimations by the SCA's consultants. The further reduced allowances made by Atkins may be appropriate, but until the scheme design is finalised no more accurate estimates can be made. It should be noted that the Government has agreed that the SCA will collect data, analyse and report on the quantity and quality of inflows to and outflows from dams and the environmental and socio-economic outcomes achieved from the new environmental flow regimes</p>
<p><b>Page 31</b> <b>Operating Expenditure Efficiencies (Cont.)</b></p> <p><i>Table 19 outlines the recommended opex projection for SCA net of efficiency. This assumes that SCA is able to provide a business case to support additional expenditure of \$1m in 2006 and \$2M per annum in subsequent years for managing and maximising resource yield.</i></p>	<p>The SCA already has a sophisticated approach to yield management that has been peer reviewed. However, Atkins proposals to enhance the SCA's yield management processes are acknowledged. A detailed business case will be prepared.</p>

**Future Capital expenditure**

*The Shoalhaven Transfer Scheme is the largest component of the SCA's proposed capital expenditure program. This major scheme has now to go through detailed technical studies, economic and environmental evaluations and community consultation. A detailed project program needs to be prepared. It is essential that any abstraction from the Shoalhaven scheme is sustainable and further environmental studies are needed to ascertain the safe level of such an abstraction; this in turn impacts on the scope of the phase 1 works. The outcome of these studies and consultations, and a decision on the method and staging of the scheme are not expected to conclude until part way through the upcoming price control period. We have reviewed the information provided by SCA and taken into account the time needed to study the scope, timing and cost of this major scheme, consult with communities and environmental bodies, and prepare detailed construction plans. We have proposed a level of expenditure which assumes that studies are completed during 2007; and that construction starts in the latter part of 2007 (FY 2007/08) continuing through to the latter part of 2009 (FY 2009/10). These dates are generally consistent with the Metropolitan Water Plan. This recommendation results in expenditure on the preparation and construction of the scheme being spread over a slightly longer period than proposed by the SCA, with more of the expenditure falling into the years beyond the price control period. Should additional expenditure be needed during the price control period this can be considered at the next price path review.*

The SCA acknowledges that there are many environmental and social issues to be addressed, and work on this has already started in line with meeting the Government's commitment to complete the consultation and preliminary design by the end of (calendar year) 2006. The SCA is working together with the Department of Infrastructure Planning and Natural Resources to complete this environmental assessment and consultation through a high-level steering committee. A draft timeline for this process has been developed. There are however at this stage unlikely to be particular technical difficulties in the proposed stage 1 construction works, which involves modifying Tallowa dam, installing two pumps in vacant slots in an existing pumping station, and the construction of a pipeline. This will be confirmed when SCA complete full options studies and assessments.

Including the Tallowa Dam raising (\$35M) the total expenditure for the twin pipeline proposal to IPART was \$280M (derived from the estimated cost of constructing a single pipeline). Atkins has reduced this total amount on the basis of scale economies (for two pipelines instead of one).

Given the preliminary nature of the suggested costs and project planning issues yet to be resolved, it is premature to be reducing total cost expectations at this stage. The SCA will work with IPART and CMA's, as they are known, to deliver the Metropolitan Water Plan project. Current pumping cost arrangements are based on operating the Shoalhaven Scheme as a drought response mechanism.

**Charging Arrangements between SCA and SWC**

*The SCA is only able to recover average costs from Sydney Water, which does not recognise the higher marginal cost of pumping from the Shoalhaven River in times of drought. In 2004 this pumping cost the SCA an additional \$6M which was absorbed by the agency. In the short term pumping costs will increase to recover from the drought situation. In the long run the costs will increase with the implementation of the Shoalhaven augmentation scheme. The SCA could not continue to absorb these additional costs without a detrimental impact on other activities. Under the current arrangements no price signals are given to Sydney Water when demand requires additional pumping. We recommend that a more cost reflective tariff be developed.*

The SCA has addressed this issue in its Submission to IPART under *Section 6.1.1 Cost pass through mechanism* whereby it is proposed that IPART agree to pass through certain costs if the trigger event leads to a material change in costs. A possible materiality threshold may be an event that leads to a 2 percent change in the level of average costs. In its submission the SCA has indicated a level of pumping costs (see Table 8, p 27) arising from normal operations that might be incurred with the introduction of the Shoalhaven Transfers in 2009-10.

In this context it should also be noted that the SCA has proposed that all future increases in its prices should be applied through the volumetric component only. This will result in the volumetric component of the SCA's revenue from Sydney Water progressively increasing, as a proportion of the SCA's total revenue. The SCA's proposal is in response to IPART's findings in its recent investigation into alternative price structures.