



PO Box 323 Penrith NSW 2751  
Level 4, 2-6 Station Street  
Penrith NSW 2750  
Tel 1300 722 468 Fax 02 4725 2599  
Email [info@sca.nsw.gov.au](mailto:info@sca.nsw.gov.au)  
Website [www.sca.nsw.gov.au](http://www.sca.nsw.gov.au)

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16 April 2012

Mr James Cox  
Chief Executive and Full Time member  
Independent Pricing and Regulatory Tribunal  
PO Box Q290  
QVB POST OFFICE NSW 1230

Dear Mr Cox,

A handwritten signature in black ink that appears to be "Jim".

**Draft Determination and Report on Review of Prices for the Sydney Catchment Authority**

Thank you for the opportunity to comment on the Independent Pricing and Regulatory Tribunal's (IPART's) draft determination and report on the review of SCA's prices.

In the draft determination, IPART has largely allowed the expenditure proposal that the SCA requested in its initial submission. The SCA welcomes IPART's recognition of the SCA's achievements in the current price path and believes that the proposed expenditure in the upcoming price path is, on the whole, prudent and efficient. The attached SCA submission provides the SCA's response to some specific elements of the draft determination.

Should IPART officers wish to discuss the SCA's response in further detail, please contact Mr Ed Chan on (02) 4724 2487.

Yours sincerely,

A handwritten signature in black ink that reads "Sarah Dinning".

Sarah Dinning  
**Acting Chief Executive**



Sydney Catchment Authority

# Submission to the Independent Pricing and Regulatory Tribunal

Response to Draft Determination  
and Draft Report on the Review of Prices  
for the Sydney Catchment Authority



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# 1. Introduction and Summary

The Sydney Catchment Authority (SCA) welcomes the Independent Pricing and Review Tribunal's (IPART's) draft determination as part of the end of term review of the operating licence and the price review. In the draft determination, IPART has largely allowed the expenditure allowance that the SCA requested in its initial submission. This suggests that IPART recognised the SCA's achievements over the 2009-2012 price path and that the proposed expenditure for the upcoming price path is prudent and efficient. The following sections provide a brief overview of the SCA's response to some specific elements of the draft determination. Detail responses are contained in subsequent chapters.

## 1.1. Tariff structure

The SCA welcomes and supports IPART's draft decisions on the SCA's prices. The move to an 80:20 fixed to variable recovery ratio and the introduction of an additional price schedule that accommodates the operation of the Sydney Desalination Plant (SDP) reduces the SCA's exposure to revenue volatility caused by demand fluctuation and SDP's operation.

The SCA also welcomes IPART's decision to set prices to councils on a 25:75 fixed to variable revenue recovery structure as this reflects the outcome of the SCA's consultation with council representatives prior to the SCA's submission in September 2011.

## 1.2. Revenue requirement

The SCA supports IPART's decision to allow for the cost recovery of Shoalhaven pumping based on expected cost. This decision allows the SCA to recover costs that are part of its operations and recognises the Shoalhaven as a fundamental component of the SCA's bulk water supply system.

The SCA notes that IPART has accepted the SCA's proposed operating expenditure but applied a cumulative 0.3% efficiency target per annum. The SCA argues that the proposed operating expenditure includes implicit efficiency savings as it is absorbing additional costs such as licence fees and additional maintenance efforts in relation to new capital assets that were brought into operation in recent years. The SCA would like to emphasise that measures undertaken in the current price path meant it is operating at an efficient level and argues against a blanket expenditure reduction.

In relation to capital expenditure, the SCA welcomes IPART's decision in classifying historic spending on the Upper Canal and Warragamba environmental flows as capital expenditure. The SCA has also provided comments and proposes a limited deferral of one year for the Warragamba Reliability Upgrade Project.

## 1.3. Other regulatory and economics issues

The SCA supports IPART's approach in separately accounting for the SDP's volume in Sydney Water's overall demand forecast as it complements IPART's approach in setting a separate variable price based on the SDP's operation mode. Consistent with the 2009 determination, the SCA requests IPART to use the latest demand forecast from Sydney Water in calculating the SCA prices for the final determination. This would further mitigate risks arising from changes in water demand.

The SCA also requests IPART to allow a modest increase of \$0.3 million in operating expenditure to cover additional costs incurred in implementing changes in the revised operating licence.

## 2. Tariff Structure

### 2.1. Prices to Sydney Water

#### 2.1.1. Tariff structure

The SCA welcomes and supports IPART's draft decision on the SCA's price structure to Sydney Water. The draft decision sets prices to Sydney Water so that 80% of revenue is recovered from the fixed charge and 20% of revenue is recovered from the variable charge. IPART also introduced a price structure where the volumetric charge differs depending on the SDP's operation mode. As the SCA indicated in its original submission, an 80:20 fixed to variable price structure is a better reflection of the SCA's cost structure and reduces the SCA's exposure to revenue volatility caused by demand fluctuation and the SDP's operation.

As IPART indicated in the draft report, the SCA considers the SDP price schedule is administratively feasible and is consistent with the way the SDP's prices are set<sup>1</sup>. The combination of a higher fixed charge and introduction of a variable volumetric charge based on the SDP's operation mode would reduce significant over- or under-recovery should water sales differ significantly from forecast.

#### 2.1.2. Preparing for potential competition

In its submission to the Issues Paper<sup>2</sup>, Sydney Water requested IPART to amend the SCA's determination to require the SCA to recover fixed payments across all potential retailers in proportion to the volume of water sold to each retailer. Sydney Water argued that this arrangement in preparation for potential competition in the bulk water and final retail markets would present a more equitable outcome where all water retailers purchasing dam water from the SCA would share the SCA's fixed cost.

The SCA supports this position and notes that it is consistent with IPART's 2011 SDP Determination that all water retailers share SDP's full operation and shutdown cost based on the proportion of the volume of desalinated water they receive.

### 2.2. Prices to Councils

IPART's draft decision is to apply a 25:75 fixed to variable recovery ratio to the three local councils that the SCA supplies with raw water. The draft determination also implements fully distributed cost pricing for the councils. The SCA supports this decision and notes that the price structure and cost allocation is supported by the Councils<sup>3</sup> and reflects the outcome of SCA's consultation with the councils prior to its September 2011 submission.

### 2.3. Prices to bulk raw and unfiltered water customers

The SCA welcomes IPART's acceptance of the SCA's proposed prices for raw and unfiltered customers. As indicated in the SCA's original submission, the SCA's proposed prices are administratively efficient and better align with the price structure of the retail network.

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<sup>1</sup> IPART draft determination report, p.35

<sup>2</sup> Sydney Water submission to IPART's SCA Issues Paper, dated 20 October 2011.

<sup>3</sup> Shoalhaven and Goulburn-Mulwaree Council provided written submission to IPART supporting the 75:25 fixed to variable price structure. Wingecarribee Council attended the public workshop and indicated its support to the Tribunal.

## 3. Revenue Requirement

### 3.1. Weighted Average Cost of Capital (WACC)

The SCA welcomes IPART's selection of a WACC that is the upper bound of the WACC range in recognition of market uncertainty and low parameter estimates. However, the SCA notes that as a result of IPART's decision to apply a post-tax WACC from December 2011 onwards, the SCA's return is calculated on a different basis to SDP Ltd<sup>4</sup>, which is the other bulk water supplier to Sydney Water. The SCA submits that this is not consistent with the principle of competitive neutrality as both the SDP and the SCA supplies the same product market and both of the organisations' determinations cover largely the same period of time. As a result of this difference, SCA's shareholders are expected to receive lower cash returns than investors of SDP Ltd.

IPART requested comments on the method for calculating debt margin in the draft determination. The SCA's view is that the methodology employed needs to accurately reflect forward debt margins consistent with providing an accurate estimate across the other WACC components. The SCA agrees with IPART that uncertainty with debt margins is a risk that needs to be taken into account. The use of a range for debt margin rather than a point estimate can allow the volatility and uncertainty to be taken into account, but ultimately, the WACC chosen by IPART implicitly has within it a point estimate debt margin. This is an inevitable requirement of IPART determining a point estimate WACC. Techniques such as option pricing that allow for the volatility and risk to be priced into the point estimate for debt margin could be more effective.

### 3.2. Operating expenditure

#### 3.2.1. Efficiency adjustment

IPART's draft decision is to apply a cumulative efficiency saving of 0.3% per annum on the SCA's proposed operating expenditure. IPART based this decision on Halcrow's expenditure review assessment. While Halcrow acknowledged that the SCA achieved efficiency gains in the current price path, it also noted that the SCA did not propose a blanket reduction in operating expenditure to reflect additional efficiency savings for the 2012 determination and therefore recommended an annual cumulative efficiency target on SCA's proposed operating expenditure<sup>5</sup>.

The SCA disagrees with this approach and argues that by holding core operating expenditure at 2008-09 level (as proposed in its original submission), it is achieving efficiency savings by absorbing additional cost such as the \$1.1 million in additional licence fees to the NSW Office of Water. Over the past three years, the SCA has also brought into operation a number of new assets such as environmental flows works and the introduction of SCADA which require an increase in maintenance effort. Despite the increase in maintenance work effort, the SCA is undertaking to keep its maintenance expenditure at current levels through efficiency gains. Further, IPART provided explicit carbon cost allowance for base energy cost and energy cost associated with Shoalhaven pumping but did not provide an explicit allowance for indirect cost increases due to the carbon pricing scheme in the draft determination. As IPART also proposes to use an adjusted CPI<sup>6</sup> to index SCA prices in the forward years, this implies that the SCA will

<sup>4</sup> SDP's returns were calculated using the pre-tax WACC approach as its determination was issued prior to IPART's decision to apply post-tax WACC in December 2011. SDP's pre-tax WACC was determined at 6.7%. IPART estimated the equivalent post-tax WACC for SDP would be around 5.6%. Source: IPART Determination, Review of water prices for Sydney Desalination Plant Pty Ltd, December 2011

<sup>5</sup> Halcrow expenditure review final report, p.47

<sup>6</sup> IPART proposed to remove the impact of carbon pricing from the CPI used to index SCA prices to avoid possible double counting. IPART Draft Report, p.66



need to absorb any economy wide price increase as a result of the implementation of the carbon pricing scheme.

The SCA submits that measures undertaken in the current price have meant that it is operating at an efficient level and argues against blanket expenditure reduction.

### 3.2.2. Shoalhaven Pumping

The SCA supports IPART’s decision to include the expected cost of pumping as part of the SCA’s operating allowance. This decision allows the SCA to recover costs that are part of its operations and mandated under the Metropolitan Water Plan. However, the SCA is concerned that should expected pumping cost be higher in future determinations due to increased pumping requirements, the cost recovery would not be allowed on the basis that it would increase volatility to customers. The SCA urges IPART to make clear in its final determination that there will be an equivalent regulatory certainty for the recovery of Shoalhaven pumping costs as there is for the SDP Ltd’s provision of desalinated water under the same operating rules.

As requested in the draft report, Table 3-1 below contains the updated cost in relation to Shoalhaven pumping and core energy use.

\$M 2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
<b>Core energy cost</b>					
Base cost	1.8	1.8	1.8	1.8	1.8
Carbon cost	0.5	0.5	0.5	0.6	0.6
<b>Total core energy cost</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<b>2.4</b>	<b>2.4</b>
<b>Expected pumping cost</b>					
Base cost	0.4	1.4	1.7	1.8	2.1
Carbon cost	0.2	0.9	1.1	1.2	1.4
<b>Total expected pumping cost</b>	<b>0.6</b>	<b>2.3</b>	<b>2.8</b>	<b>3.1</b>	<b>3.5</b>

Table 3-1 Updated pumping and energy cost

## 3.3. Capital Expenditure

As part of the determination process, IPART engaged Halcrow to conduct a review on the SCA’s capital projects. The following sections detail the SCA’s comments on Halcrow’s conclusion and IPART’s draft decision.

### 3.3.1. Upper Canal replacement and refurbishment

The SCA welcomes IPART’s decision in allowing spending in relation to both the replacement and refurbishment project as capital expenditure. As IPART noted in the draft report, the SCA’s treatment of historic expenditure relating to these projects were consistent with previous accounting treatment which were independently audited by the NSW Auditor-General.

### 3.3.2. Warragamba Dam environmental flows assessment

The SCA also welcomes IPART decision in classifying spending on the Warragamba environment flows investigation as capital expenditure. As IPART indicated in the draft report, this expenditure is a requirement under the 2010 Metropolitan Water Plan and directly contributes to the capital works project once a decision is made by the NSW Government.

### 3.3.3. Warragamba Dam reliability upgrade

The capital expenditure relating to the Warragamba Reliability Upgrade Project (the Upgrade Project) is to carry out works to address dam safety issues identified by the Warragamba Dam Reliability and Risk Investigation (the Investigation Project), which is currently in progress. In its final expenditure review report, Halcrow considers that it is not appropriate to allow for significant capital allowance in the price path for the Upgrade Project until the scope of works has been defined by the Investigation Project. IPART reflected this recommendation in its draft determination and deferred the majority of the proposed capital expenditure beyond 2016-17.

The SCA understands the basis of Halcrow's recommendation and agrees the investigation project needs to be completed in order to inform the scope of works to improve the Dam's ability to withstand the updated Probable Maximum Flood (PMF) and seismic loading. However, the SCA argues that part of the Upgrade Project will address the more pressing requirement of the integrity and reliability of the crest gates and associated gate operating equipment. This need was highlighted in the recent flood event where the SCA experienced some issues with the operation of the gates. It is the SCA's view that the crest gate component of the Upgrade Project should not be deferred to the next price path. Early upgrade works to the gates and their operating systems would ensure they are code compliant and provide an adequate level of reliability in the longer term.

The SCA therefore recommends a revised expenditure profile that defers the Upgrade Project by one year so that capital expenditure commences in 2014-15. The revised expenditure profile is provided in Table 3-2 below. The expenditure in this price path would be fully expended in addressing gate associated issues and would only add approximately \$3 million to the capital allowance proposed by IPART in the draft determination. The more costly components relating to the adequacy of the dam against latest seismic loading estimates would be dealt with in the following price path (i.e. 2016/17 onwards).

\$M 2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
SCA original submission	-	1.005	5.024	15.073	9.044
Halcrow proposed expenditure	-	-	1.000	2.000	2.000
SCA revised expenditure	-	-	1.005	5.024	15.073
<b>Difference: Halcrow proposed vs SCA revised</b>	-	-	<b>0.005</b>	<b>3.024</b>	<b>13.073</b>

Table 3-2 Revised expenditure profile for the Warragamba Dam reliability upgrade project

### 3.3.4. Minor Assets Renewals program; Hydrometrics Renewals Program

The Minor Asset Renewals Program and Hydrometrics Renewals Program are programs that provide a sustainable and ongoing approach for minor assets<sup>7</sup> and hydrometric equipment that are beyond their economic useful life. The Minor Assets Renewal Program is delivered through the SCA Civil, Mechanical and Electrical Maintenance (CME) contract while the Hydrometrics Renewals Program is delivered by two Hydrometric Monitoring and Sampling Field Services (HMSFS) contractors. Halcrow reviewed these programs and proposed a nominal reduction of 2% per annum for the Minor Asset Renewals Program and a 3% per annum reduction for the Hydrometrics Renewals Program.

The SCA understand the basis of Halcrow's recommendation but urges IPART to reconsider its position. The SCA contends that the current model delivers the most efficient outcome as it uses a risk based approach where assets are renewed based on mandatory requirements and risk-cost analysis. The SCA would emphasise that the current CME and HMSFS contracts were awarded to the current contractors as a result of a competitive tender process. While each individual asset programmed for replacement is sent to the contractors for quoting, only the hours of work and material for the renewal is quoted on as the contract contains a schedule of rates that the contractor can charge the SCA on work performed.

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<sup>7</sup> Minor assets are defined as minor civil, mechanical and electrical assets

## 4. Other Regulatory Issues

### 4.1. Forecast Water Sales

In the SCA's original submission, the SCA's forecast water sales to Sydney Water assumed that the SDP would be in full operation for the whole determination period. IPART's draft decision is to separately account for water that would be provided by the SDP should it be in operation mode (i.e. 90GL per year). This approach in setting forecast sales is complementary to IPART's decision in setting a separate variable price in SCA's price schedule to allow for the SDP's different operation modes. The SCA supports this method in accounting for forecast water sales as it is part of IPART's overall approach in providing SCA with improved revenue certainty over the determination period.

Consistent with the 2009 determination, the SCA requests IPART to use the latest demand forecast from Sydney Water in calculating SCA prices for the final determination. This would further mitigate risks arising from changes in water demand.

### 4.2. Indexing of prices – competitive neutrality between SCA and SDP

As discussed in section 2, IPART proposes to remove the impact of carbon pricing from the CPI used to index SCA price to avoid the double counting of the carbon pricing scheme's impact. In the 2011 SDP Determination, IPART determined two price schedules for the SDP, one for when the carbon pricing scheme is in place, and one without the carbon pricing scheme. Prices in both schedules are escalated by CPI that are not adjusted for carbon pricing. For consistency and competitive neutrality, the SCA requests IPART to apply the carbon adjusted CPI in escalating the SDP's prices.

### 4.3. New Operating Licence requirements

As part of the operating licence review, IPART has proposed a number of changes to the operating licence. These changes include the development of management systems for areas such as asset management, environmental management and water quality management. The implementation of these systems will impose cost on the SCA which was not factored into the SCA's initial submission in September 2011.

As IPART has stated in the draft determination that it will consider recovering these costs through a price change, the SCA therefore proposes that an additional \$0.3 million be included in the SCA's expenditure allowance. The additional allowance would cover the additional direct unavoidable financial costs. The SCA would absorb the remaining portion of ongoing maintenance cost by reprioritising other development and management programs in the organisation.

## 5. Output Measures

IPART developed a set of draft output measures after consulting Halcrow's advice. Table 3-1 Table 5-1 overleaf details the SCA's response.

Output Measure	IPART Draft Determination	SCA Response
<b>Continuation/adjustments to existing output measures</b>		
1	Deliver a strategy for the future of the Upper Canal by June 2013	Accept.
2	Complete the Prospect Reservoir upstream embankment stabilisation upgrade by June 2014.	Complete the Prospect Reservoir <b>downstream filter trench upgrade</b> by June 2014. Note: This is changed to reflect the dam safety project that is being carried out. The previous words related to a non-mandatory upgrade ('upstream embankment stabilisation')
3	Complete the Wingecarribee Dam safety upgrade project by June 2013	Accept.
4	Complete the Metropolitan Dams electrical system upgrade project by June 2017.	Accept.
<b>Additional output measures</b>		
5	Upper Canal refurbishment – complete refurbishment works by June 2016	Accept.
6	Warragamba Dam Environmental Flows – confirm a means of cost-effectively delivering the required environmental flows specified by the NSW Government in the 2014 Metropolitan Water Plan by June 2014, with construction to begin in 2015/16	Warragamba Dam Environmental Flows – confirm a means of cost-effectively delivering any environmental flows specified by the NSW Government <b>by December 2014</b> . Note: construction commencement date will depend upon future government direction.
7	Warragamba Dam Pipeline Valves and Controls – establish and deliver a 5-year capital program to refurbish, modify and replace all existing valves and associated infrastructure (including controls) on the Warragamba pipeline by December 2012.	Accept.
8	Warragamba Dam Reliability Upgrade – complete investigations associated with the reliability of Warragamba Dam to sustain the latest estimates of Probable Maximum Flood and seismic impact by June 2013.	Warragamba Dam Reliability Upgrade – complete investigations associated with the reliability of Warragamba Dam by June 2013. <b>[Words removed]</b> Note: See section 3.3.3. The Warragamba Dam reliability upgrade project contains works in addition to PMF and seismic impact
9	Shoalhaven Transfers Works – complete preparation and gain approval of a business case for the preferred option specified by the NSW Government in the 2014 Metropolitan Water Plan for the transfer of water from the Shoalhaven River to Sydney by June 2015	This output measure should be removed as it pre-empts the next round of Metropolitan Water Planning. Current modelling suggests that the transfer works are not required until around 2018. Cost estimates contained in a business case that is completed well ahead of the requirement would not be accurate.

Table 5-1 The SCA's response to IPART's proposed output measures