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Our Ref: DOC12/27735

Mr James Cox
Chief Executive Officer
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30 July 2012

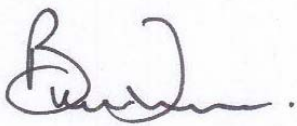
Dear Mr Cox

IPART Draft Recommendations - Review of rural water charging systems

State Water appreciates the opportunity to comment on IPART's draft recommendations. Please find attached State Water's submission in this regard.

If you wish to discuss the submission, please contact Joseph Caruana, Senior Regulatory Economist, on 02 8245 2074, joseph.caruana@statewater.com.au.

Yours sincerely



Brett Tucker
Chief Executive Officer



State
water

Taking care of it

Review of Rural Water Charging Systems

**State Water Corporation submission to the
Independent Pricing and Regulatory
Tribunal's draft recommendations**

30 July 2012

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**Review of Rural Water Charging Systems
State Water Corporation submission to IPART**

State Water reference: DOC12/27735

July 2012

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1. Executive summary

State Water is supportive of this review of rural water charging systems commissioned by the NSW Government and appreciates the opportunity to provide comment on both the discussion paper released 26 June 2012 and the draft recommendations released 23 July 2012. This review provides a transparent forum for stakeholders to discuss tariff design and Government contributions and potentially provides a position on NSW Government contributions prior to State Water's shift to the Australian Competition and Consumer Commission (ACCC) for future price determinations in the Murray Darling Basin.

1.1. Customer engagement

State Water congratulates IPART on the extent and quality of stakeholder engagement that has been undertaken as part of this review, particularly in the limited timeframe. In undertaking this engagement, State Water believes that IPART has given genuine consideration to the views of stakeholders and the terms of reference under which this review has been commissioned.

State Water had commenced customer consultation outside of the IPART review in the lead up to its pricing submission to the ACCC, including:

- Pricing presentation to Customer Service Committees (CSCs) in late 2011
- Pricing forum held in February 2012
- Written updates provided regularly to CSCs and other interested stakeholders

State Water made the decision to postpone formal customer engagement until the completion of the IPART review to allow stakeholders to engage in the independent process. State Water anticipates that customers will be broadly supportive of the final recommendations to be made by IPART as part of this review. Assuming that these recommendations are adopted by NSW Government and a directive is received by State Water, it is State Water's intent that this will conclude consultation with customers on tariff design for the upcoming price submission. Following the review, State Water intends to focus consultation with customers on other areas of the price submission to the ACCC, such as discretionary project decisions.

1.2. State Water's position on draft recommendations

- State Water is of the view that a 90:10 fixed to variable tariff structure is the most effective way to manage State Water's revenue risk as it more closely matches revenues to costs than the current tariff design. However, State Water acknowledges the terms of reference for the review require IPART to take into account business [customer] cash flows¹, as well as IPART's preference to maintain the current variable tariff structure.
- Given IPART's draft recommendation to maintain a high proportion of variable tariffs, State Water stresses the importance of an appropriate revenue volatility allowance that takes into account jurisdictional risk, to compensate State Water for revenue volatility.

¹ IPART 2012, *Review of Rural Water Charging Systems Discussion Paper* June 2012, p 3
July 2012

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- State Water agrees with IPART's conclusion on the need for a financiability allowance and contends IPART has an obligation to formally communicate this to the ACCC. State Water asserts the need for a financiability allowance is independent of the need for a volatility allowance.
- State Water supports in principle the draft recommendation on payment terms for the deferral of fixed charges, however proposes a rate of the Supreme Court rate plus 3.5%, rather than IPART's suggested 2.5%, to cover administrative costs of the deferral.
- State Water does not intend to further explore different charging arrangements for the Commonwealth Environmental Water Holder or similar customers for the 2014-17 submission due to resource constraints.
- State Water seeks clarification from IPART on recommended charging arrangements for customers of the Fish River Water Supply Scheme.
- State Water supports IPART's draft recommendation on review arrangements for Government cost shares, however does not intend to further investigate charging basic rights holders and the environment as this is a policy issue for NSW Government. State Water is of the view that sufficient information is available to IPART to undertake this review. Further review of these charging arrangements could form part of the review of Government cost shares to be undertaken by IPART or a similar independent body prior to State Water's 2017 pricing determination.
- State Water broadly supports IPART's recommendation on pricing arrangements in the Peel Valley, provided that commitment on the related Community Service Obligation is received from NSW Treasury.
- State Water agrees that its regulated asset base (RAB) should be revalued to reflect the change from a pre-tax to a post-tax WACC in the building block model.

1.3. Incorporation of review outcomes in future pricing submissions

As noted in its submission to IPART's discussion paper, State Water will endeavour to incorporate IPART's independent decisions into its 2014-17 pricing submission, if accompanied by a clear written Government directive. This directive should be provided in consultation with the Treasurer and Minister for Finance, with a commitment to fund any Customer Service Obligations resulting from this review. It is State Water's view that a Ministerial direction provides a higher likelihood the ACCC will accept a tariff design that encompasses volatility risk. However, it must be noted that State Water merely submits its pricing proposals to the ACCC, with the final decision resting with the new regulator.

2. Tariff structures

State Water appreciates the work undertaken by IPART as part of this review in exploring tariff structures that meet the interests of customers and State Water. In principle, State Water supports IPART's recommendation on tariff structures; however we note several concerns as detailed in this section.

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Impact of tariff structure on customers

State Water seeks clarification on IPART's comments on the impact on State Water customers from analysis of the first two options². IPART draws the conclusion that,

"...total annual water charges paid by customers in a valley is significantly less under a 90:10 tariff structure than under a 40:60 tariff structure, in times of low water availability. In some valleys where water availability is more variable, a 40:60 tariff structure is particularly beneficial."

State Water's analysis finds that in times of low water availability, customers will pay less under a 40:60 tariff structure, as they will pay less variable charges because they are using less water. Conversely, in times of high water availability and variability, customers would pay more under a 40:60 tariff structure than a 90:10 structure, as usage charges would be greater due to the higher water use. As such, State Water seeks clarification on IPART's conclusions.

Impacts of tariff structure on State Water's revenue

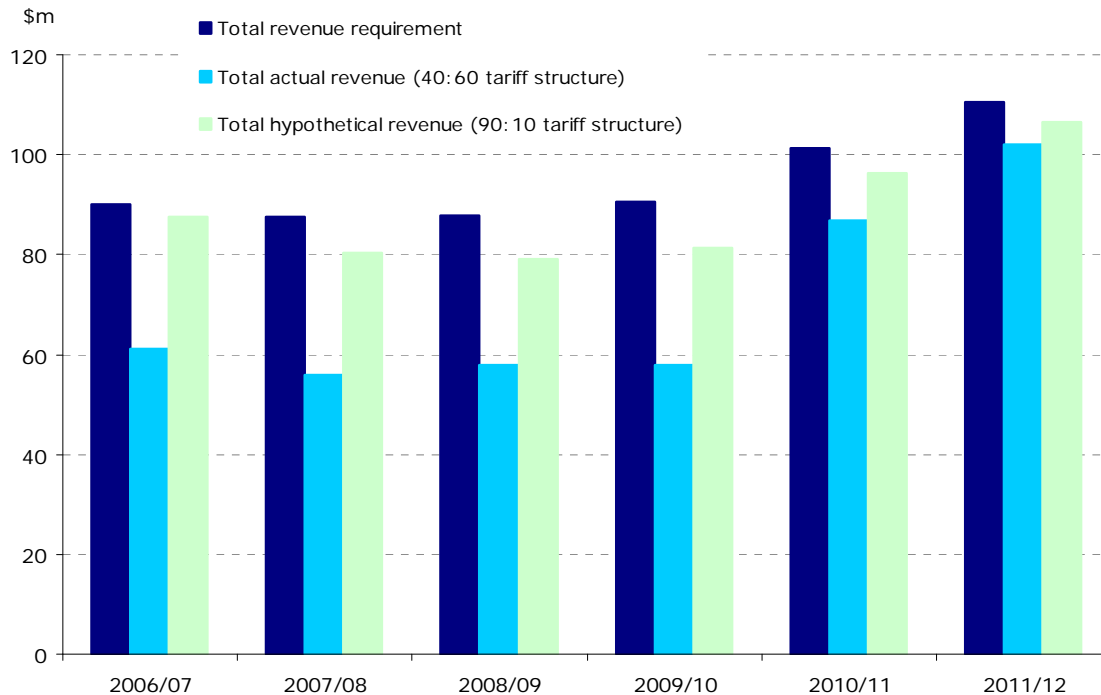
IPART's analysis finds that over a 20-year period, cumulative revenue would only differ by 2% between a tariff structure of 90:10 and 40:60, concluding that over the long term, there is no material impact on State Water's revenue from using either of the tariff options. State Water notes that since corporatisation in 2004, the annual allowed revenue requirement has never been fully recovered. Figure 1 shows State Water's actual revenue compared to the required revenue set by IPART over the last six years (2006/07 – 2011/12). Over this period, this amounts to an under recovery of revenue in the order of \$145 million in \$2012/13 terms. This significant shortfall can be attributed to a number of factors including:

- Extremely low water availability during the worst drought on record;
- High variable tariffs which exacerbated the impacts of low water sales on revenue;
- The imposition of a variable tariff structure which misaligns with State Water's fixed cost base; and
- IPART's overestimation of extraction forecasts.

Had State Water had a 90:10 fixed to variable tariff structure during this period, State Water estimates that whilst it would still have under-recovered revenue, it would have only been in the order of \$20 million in \$2012/13 terms. State Water contends that a variation of around \$125 million is indeed material, and clearly illustrates the impact tariff structure can have on State Water's revenue, particularly during times of low water extractions.

² IPART 2012, *Review of Rural Water Charging Systems Draft Recommendations July 2012*, p 7
July 2012

**Figure 1 State Water required v actual revenue
2006-07 – 2011-12**



2.1. IPART's current volatility allowance

As the above section demonstrates, the most direct method of mitigating State Water's risk would be to allow the tariff structure to reflect State Water's cost structure, for example with 90:10 fixed to variable tariffs.

State Water has costs which are largely invariant to the level of extractions. It is therefore important to ensure that the correct balance is struck in terms of the extent to which irrigation customers or State Water bear the risk of revenue volatility.

If nonetheless a 40:60 tariffs structure is regarded as essential to meet farmers' concerns, it is vital that an alternative means be found to mitigate State Water's revenue risk.

State Water appreciates the work undertaken by IPART with regards to how a revenue volatility allowance could be implemented under the ACCC's review process, to compensate State Water for revenue risk that arises with IPART's recommended 40:60 fixed to variable tariff design. However, State Water reiterates its concern that IPART's recommended revenue volatility allowance is based on that implemented by IPART for the 2010 State Water determination, and does not reflect the regulatory framework State Water will face for its next pricing determination.

IPART's calculation of the revenue volatility allowance uses the WACC to derive the financing costs associated with a prolonged period of under-recovery. The holding costs (WACC) used to cover revenue volatility under the Commonwealth/ACCC

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framework is lower than that calculated by IPART's methodology in 2010 due to the different views on risk (equity beta) by the two regulators.

With a real pre-tax cost of capital of 7.4%, IPART calculated the revenue volatility allowance to be \$2.4m (in 2012/13 prices). With a lower cost of capital the amount of the volatility allowance would necessarily be lower, as shown in Table 1. With a real pre-tax cost of capital of 5.9%, the allowance would be \$1.85m in 2012/13 prices and \$1.53m for a 5.1% real pre-tax cost of capital. See attachment 1 for an explanation on the assumed WACC parameters.

Table 1 Calculated revenue volatility allowance: nominal \$m

	2013	2014	2015	2016	2017	2018
40:60 tariffs, 5.9% WACC	1.85	1.89	1.94	1.99	2.04	2.09
40:60 tariffs, 5.1% WACC	1.53	1.57	1.61	1.65	1.69	1.74
40:60 tariffs, 7.4% WACC	2.43	2.49	2.55	2.61	2.68	2.75

State Water also disagrees that the annual review process reduces the amount of revenue volatility allowance required in a determination period. See section 2.3 for further details on this.

As such, IPART's revenue volatility allowance, as it currently stands, will not compensate State Water for financing costs for revenue risk under the Commonwealth/ACCC regulatory regime.

One of the main reasons the ACCC implemented a lower risk parameter is because they argue State Water is exposed to non-systematic risk due to a highly variable tariff design.

"The equity beta in the WACC only compensates an operator for bearing risk that is by nature systematic. That is, risk that a firm cannot efficiently address through other means. Revenue volatility on the other hand mainly arises for water infrastructure operators because variable charges have been levied. This form of volatility can be addressed by altering the tariff structure or through other mechanisms available to the regulator³"

In summary, the ACCC has reduced State Water's revenue requirement associated with risk compensation, as they argue State Water can avoid this risk via higher fixed charges. However, IPART's recommendations in this review prevent that risk mitigation from occurring. That is, volatility risk has not decreased; instead State Water is exposed to the same volatility risk as well as new jurisdictional risk.

³ ACCC 2011, Pricing principles for price approvals and determinations under the Water Charge (Infrastructure) Rules 2010 July 2011, 71

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IPART must be cognisant of this new jurisdictional risk and redesign the revenue volatility allowance to accommodate the ACCC's assumed diversification strategy.

2.2. Alternative volatility allowance

The appropriate distribution of risk between State Water and customers can be examined using the outcomes under alternative climate scenarios. To this end, it is useful to consider scenarios that comprise both fluctuations in extractions around a stable average as well as discrete shifts in the level of average extractions.

The scenarios chosen for this paper include:

1. the average extractions used by IPART as the basis of its 2010 price determination;
2. a hypothetical example of regular fluctuations around that average level;
3. average extractions over the last 10 years;
4. actual extractions follow those experienced in the period 2001/2 to 2005/6;
5. actual extractions follow those experienced in the period 2006/7 to 2011/12;
and
6. actual extractions follow those experienced in the period 1994/5 to 1999/2000

See attachment 2 for a further explanation of the hypothetical extraction scenarios.

The purpose of this section is to identify an alternative definition of the volatility allowance that:

- affords State Water a level of revenue protection which is more robust across varying climate scenarios;
- does not diminish in effectiveness as the cost of capital declines; and
- can be implemented in conjunction with a 40:60 fixed to variable tariff structure.

One such approach is the loss capitalisation approach which calculates an implied revenue premium based on potential revenue shortfalls that might be experienced by State Water. The shortfalls are then capitalised into the RAB. Thus the revenue allowance would provide a return on and of the capitalised shortfalls.

The approach is similar in concept to IPART's revenue volatility allowance, in that potential losses due to future volatility are identified in advance. However instead of an allowance for holding costs, the allowance is based on the return on and of the shortfalls notionally capitalised into the RAB.

To calculate the amount of allowance, it is assumed that the potential volume shortfalls due to climate variability are the same as that used to calculate the IPART revenue volatility allowance. Thus volumes are assumed to equal 3,444 GL per annum rather than 4,627 GL per annum. The notional revenue losses associated with these reduced volumes are calculated, and converted to an assumed loss of profit by deducting the assumed savings in operating costs associated with the lower extractions. This serves to increase the RAB by some \$12m to \$15m each year,

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assuming a cost of capital of 5.9% and that the capitalised revenue losses are depreciated at a rate of 2% per annum. The implied revenue allowance increases over time, as it is not annuitized, and is equal to an average of \$3.2m in nominal terms. This compares to the average IPART allowance of \$1.97m in nominal terms.

The amount of the revenue allowance would be reduced slightly with a lower cost of capital, to an average of \$3.1m with a cost of capital of 5.1%.

A loss capitalisation model has been implemented in an ex post form by the ARTC for sections of its Hunter Valley Rail Network.

In a proposed 2008 Access Undertaking, the ARTC proposed that the access provider be able to capitalise any “economic losses” and roll these into the Regulatory Asset Base (RAB). Economic losses were defined as the difference between allowed and outturn revenues and operating costs, in other words the difference between actual returns and WACC times the opening RAB.

Thus ARTC proposed that the RAB be rolled forward as follows:

$$RAB^{t \text{ start}} = RAB^{t-1 \text{ end}} = (1 + WACC) * RAB^{t-1 \text{ start}} - \text{Out-turn Revenue}^{t-1} + \text{Out-turn Opex}^{t-1} + \text{Net Capex}^{t-1}$$

In addition, the RAB would be subject to a specified lower limit, based on the standard roll forward method, as follows:

$$RAB \text{ Floor Limit}^{\text{start}} = RAB \text{ Floor Limit}^{t-1 \text{ end}} = (1 + CPI^{t-1}) * RAB \text{ Floor Limit}^{t-1 \text{ start}} + \text{Net Capex}^{t-1} - \text{Depreciation}^{t-1}$$

The application of RAB floor limit means that once any capitalised losses have been recouped, the roll forward of the RAB reverts to the standard approach.

In its draft decision of ARTC’s access undertaking proposal, the ACCC concluded that a loss capitalisation was likely to be appropriate, on the basis that it should

result in a relatively efficient allocation of risk; help ensure ARTC earns a return commensurate with the regulatory and commercial risk associated with its rail investments in the Hunter Valley; and facilitate efficient investment and use of infrastructure, thereby promoting effective competition in upstream and downstream markets⁴.

The slightly higher revenue allowance implied by this approach (compared to the IPART allowance) serves to improve State Water’s position marginally. In particular, State Water’s credit ratings would be improved under Scenarios 2 and 5, but remain unaffected under the alternative outcomes.

⁴ ACCC, March 2010, *Australian Rail Track Corporation Limited: Hunter Valley Coal Network Access Undertaking: Draft Decision*, p477

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This is shown in Table 2.

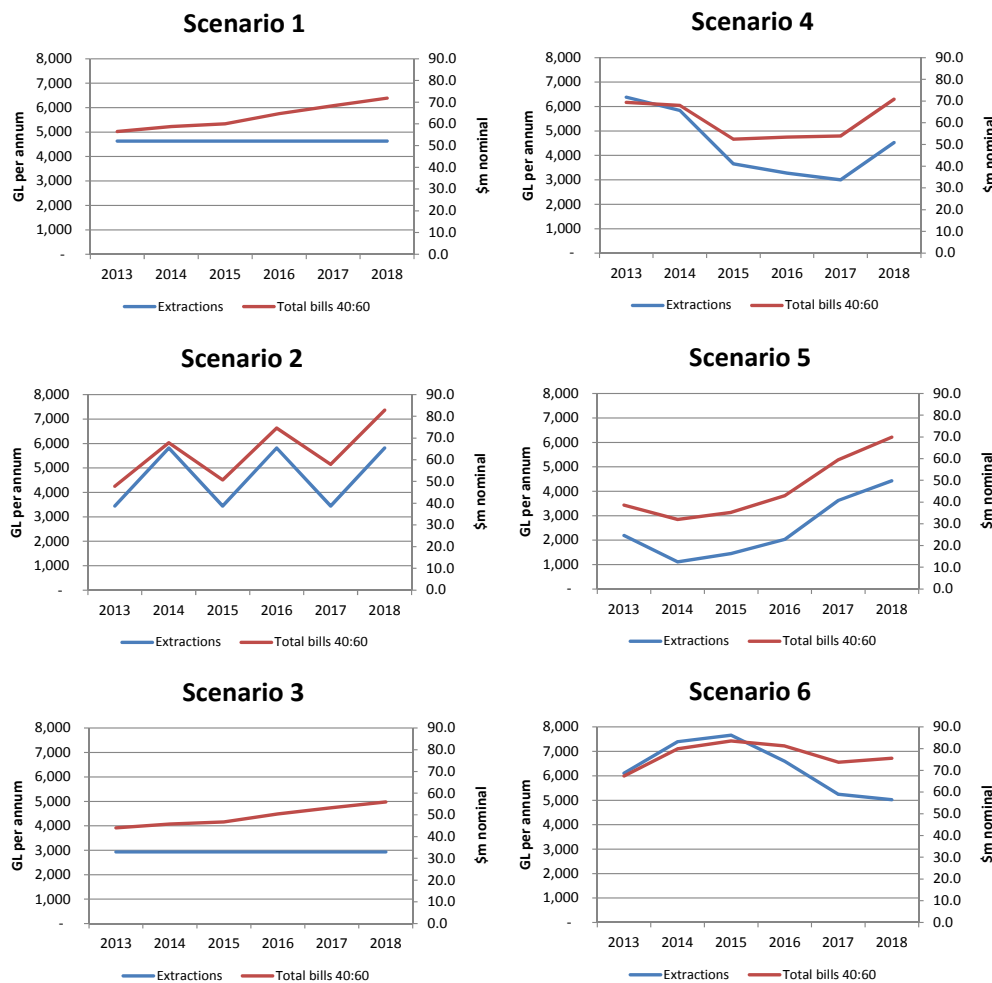
Table 2 Overall credit ratings under 40:60 tariffs: Lost capitalisation approach

	2013	2014	2015	2016	2017	2018
1: Volumes assumed for review period	BBB	BBB	BBB	BBB	BBB	BBB
2: Fluctuating volumes GL	BBB	BBB	BBB	BBB	BB+	BBB
3: Average last 10 years	BBB	BBB	BB+	BB+	BB	BB
4: 2001 to 2006 outturns	BBB+	BBB	BBB	BB+	BB	BBB
5: 2007 to 2012 outturns	BBB	B+	BB	BB+	BB	BB+
6: 1996 to 2001 outturns	BBB+	BBB+	BBB+	BBB+	BBB	BBB

Farmers' bills would be slightly higher than under IPART's current approach, due to the slightly higher allowance. However, the bills would retain their relationship to extractions given the retention of the 40:60 tariff structure.

This is shown in Figure 2 below.

Figure 2 Bills to customers with loss capitalisation method



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2.3. Volatility allowance and annual reviews

State Water questions IPART's conclusion that the annual review of prices under the Commonwealth/ACCC regime requires State Water to only be compensated for annual holding costs, rather than holding costs over four years. State Water believes that the Annual Review Process outlined in the ACCC pricing principles will not materially reduce volatility risk given:

- the overarching requirement for price stability;
- the extreme levels of volatility in annual water sales (consumption); and
- the potential to accentuate the fluctuations in revenue that arise from the use of high volumetric tariffs

The Annual Review Process may be effective in reducing revenue risk for businesses with relatively stable demand growth such as electricity networks. However, it is unlikely that the Annual Review Process will materially mitigate revenue risk for rural bulk water operators given the extreme volatility in annual bulk water extractions and requirement to maintain price stability.

The Commonwealth *Water Charge (Infrastructure) Rules 2010* stipulate that the regulator's function is to adjust determined charges for changes in demand or consumption forecasts, subject to the condition that those changes must maintain price stability. However, no definition of price stability is offered in the ACCC pricing principles. State Water notes previously determined nominal network price increases of 29% in the first year, followed by 4.6% in subsequent years by the Australian Energy Regulator (AER) in its final decision on the Queensland distribution determination for Ergon Energy⁵. State Water also notes the network charge increases for retail customers of 15% on average in nominal terms in the first year, followed by 8.4% in the subsequent years of the regulatory period as determined by the AER in its final decision on the South Australian distribution determination for ETSA Utilities⁶.

Whatever the eventual practical application of price stability, it is highly unlikely that the approach advocated by the ACCC will overcome the circumstance of a bulk water operator significantly under recovering efficient revenue due to large decreases in water sales and the need to increase prices to maintain the businesses' financial viability. State Water's annual sale volumes have varied dramatically over the past 20 years, with year on year changes averaging over 20% per annum (in absolute terms) and in excess of 35% per annum over the past five years.

State Water's annual consumption halved in 2006/07, and then halved again in 2007/08. Volumetric charges would have had to increase by **400%** over these two years for State Water to recover its regulated revenue allowance. State Water under recovered approximately \$145 million dollars over the period 2006-2012 as a direct result of lower than IPART forecast extractions. State Water estimates the under recovery experienced in the first two years of the current determination (2010-2012)

⁵ Australian Energy Regulator 2010, News releases - AER's final decision on the Queensland distribution determinations for Energex and Ergon Energy <http://www.aer.gov.au/content/index.phtml/itemId/736388>

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would require a 19% increase in annual variable charges in 2010-11 and an 8% increase in 2011-12. Given the overarching objective of price stability (what ever its ultimate definition), it is difficult to envisage that price increases of this magnitude would be approved under the proposed Annual Review Process.

Further, the use of an Annual Review Process in conjunction with highly variable tariffs has the potential to accentuate the fluctuations in revenue, where State Water exhibits extraction volatility around a stable mean. This is because the upwards adjustment to price for a previous year of low demand could coincide with an above average level of actual demand. Thus the price increase would apply to a year of high volumes. The extent to which such accentuation would arise in practice depends on the future pattern of extraction volatility. To the extent that it did arise, it would pose difficulties for State Water. It is not clear the extent to which it would pose an issue for irrigators.

Paradoxically, the proposed Annual Review Process may expose State Water to additional asymmetric regulatory risks by requiring State Water to reduce prices during periods of higher than forecast demand, but preventing price increases during periods of lower than forecast demand in order to avoid price shocks.

2.4. Financeability

Revenue volatility compensation aims to provide greater certainty that State Water will recover its efficient revenue requirement. This differs to the issue of financability, which endeavours to ensure the revenue requirement is sufficient to cover the costs of State Water's operations and maintain financial viability.

IPART comments in the draft recommendations⁷ that based on its analysis, under ACCC pricing principles, State Water's notional revenue would reduce by about 17%. The cumulative impact of this notional revenue reduction together with high variable charges places significant financial risk on State Water which needs to be addressed. State Water is of the view that IPART has a regulatory obligation to communicate this concern to IPART, particularly as State Water is a product of past regulatory decisions made by IPART.

One such approach to address this issue is the inclusion of a financeability allowance in the building blocks to ensure State Water maintains investment grade credit rating under given extraction scenarios.

This approach is focused directly on the implications for State Water's finances of the allocation of risk being made between State Water and its customers. Such financeability considerations are a proper element of any price determination.

For example, OFWAT identifies two "strands" to price setting:

⁶ Australian Energy Regulator 2010, News releases - AER's final decision the South Australian distribution determination for ETSA Utilities <http://www.aer.gov.au/content/index.phtml/itemId/736389>

⁷ IPART 2012, *Review of Rural Water Charging Systems Draft Recommendations July 2012*, p 14

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One is to secure that if a company is efficiently managed and financed, it is able to earn a return at least equal to the cost of capital. The second is that its revenues, profits and cash flows must allow it to raise finance on reasonable terms in the capital markets. We refer to this second strand as financeability⁸.

Financeability concerns the ability of a business to maintain any financial covenants and be able to raise new finance at reasonable cost - which in turn entails maintaining an investment grade credit rating. A broad range of financial indicators are typically used to assess the financial position of a business. However these can be usefully summarised by the scoring system used to generate credit ratings. This scoring system takes a number of key ratios, defines a graduated score for each ratio and then derives an overall credit rating based on a weighted average of the scores for the individual ratios. Thus the credit rating provides a convenient method of encapsulating quite a range of financial information into a simple metric, and one that is directly related to the ability of the business to raise finance on reasonable terms.

One such approach to facilitate financial viability is to set the allowance such that State Water achieves an investment grade credit rating similar to that experienced with stable extractions, consistent with IPART's 20 year average. This approach seeks to ensure that State Water's finances are robust enough to cope with fluctuating revenues without needing recourse to new equity finance.

State Water's modelling indicates that a financeability allowance in the order of \$9.4m per annum (in 2012/13 prices) is required to maintain investment grade credit rating.

State Water notes IPART's State Water 2010 determination argued investment grade credit ratings are the responsibility of the shareholders and as such they should provide an equity injection⁹. However, State Water notes the question whether to raise new debt or equity finance arises primarily when a business is expanding. A business supplying a stable customer base, with no change in the quantity or quality of service provision, would expect to cover replacement capital expenditure without recourse to new finance.

However, this is not the case for State Water, for whom the low level of initial RAB implies that new finance is needed to support the replacement of assets. In this situation, it is important that any pricing decision allow State Water to undertake such replacement expenditure without the need for an equity injection. Otherwise, prices to users are insufficient to support the continued supply of services; contradicting the requirement of the National Water Initiative charging principles for a user pays approach.

⁸ OFWAT, Dec 2004, Future water and sewerage charges 2005-10: Final determinations, p217

⁹ IPART 2010, *Review of bulk water charges for State Water Corporation – Final Report*, p. 186

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State Water appreciates that an equity injection may be warranted where new capital expenditure is driven partly by an improvement in the quality of service, such as expenditure to meet new dam safety requirements. However, State Water notes that in such a situation, there is a requirement for consistency across the parameters used to set prices. Thus on the basis of the allowed prices, State Water should be able to maintain a credit rating consistent with the assumption used to determine the debt premium. However, State Water has experienced decreases in credit ratings despite exhibiting gearing ratios well below the assumed 60%.

For a business that remains below the 60% gearing benchmark assumption, therefore, consistency needs to be maintained between the assumption of a given debt margin and the maintenance of the underlying credit rating which supports that margin.

State Water notes that explicit reference has been made to financial ratios within regulatory price determinations. For example, the price determination made for the UK water businesses at the time of privatisation, and the subsequent price review undertaken by OFWAT, made consideration of acceptable financial ratios and credit ratings a key determinant of the profile of prices. Thus in its 1994 Price Review, OFWAT stated

In judging the speed, and extent, of the reduction in returns [to a lower cost of capital], financial projections of each of the companies have been prepared which show the financial position of each company on a number of assumptions of the future state of the economy. ... On the basis of such work, the Director has made judgements on the appropriate size of such headroom in determining K factors, and the need for a higher K factor in the first 5 years¹⁰.

Similarly, the determination of the initial regulatory values for the rural Victorian water businesses involved detailed consideration of their future financial position. Thus

In supporting their proposed revenue requirements, each business should present its projected financial position as a consequence of implementing the Water Plan, including a forecast of the operating statement, balance sheet and cash flow statement, together with key financial ratios derived from those forecasts.

...

Provision has also been made for businesses to include any other financial ratios they consider relevant¹¹.

Table 3 shows the implication for State Water of applying a financeability allowance of \$9.4m. It shows that for a cost of capital of 5.9%, and associated nominal cost of

¹⁰ OFWAT, July 1994, Future charges for water and sewerage services: The outcome of the periodic review.

¹¹ ESC, June 2004, Guidance to urban water businesses on assessment of Water Plans, pp25 and 26

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debt of 8.1%, State Water's credit ratings are improved for all scenarios compared with the IPART allowance. However, the ratings remain below investment grade for those scenarios involving low extractions.

Table 3 Overall credit ratings under 40:60 tariffs: Financeability allowance

	2013	2014	2015	2016	2017	2018
1: Volumes assumed for review period	BBB+	BBB	BBB	BBB	BBB	BBB
2: Fluctuating volumes GL	BBB	BBB+	BBB	BBB+	BBB	BBB
3: Average last 10 years	BBB	BBB	BB+	BB+	BB	BB+
4: 2001 to 2006 outturns	A	BBB+	BBB	BBB	BB+	BBB
5: 2007 to 2012 outturns	BBB	BB	BB+	BB+	BB+	BBB
6: 1995 to 2000 outturns	A	BBB+	A	BBB+	BBB	BBB

State Water will explore this issue further and discuss with the ACCC. However, State Water contends IPART also has an obligation to formally communicate this issue to the ACCC as State Water is a product of previous regulatory decisions made by IPART.

2.5. Payment terms

State Water supports in principle IPART's recommended payment terms for the conditional deferral of fixed charges at times of low water availability. State Water considers the trigger for deferral and deferral period to be reasonable and that it satisfies the objective of better meeting the needs of customers during difficult times.

Since making its submission to IPART's discussion paper, State Water has undertaken analysis to ascertain an estimate of holding costs to guide the determination of an appropriate rate of interest at which deferral payments will be charged. Based on high level analysis, State Water believes that a rate of 3.5% (instead of 2.5% as suggested by IPART) would provide appropriate compensation for financial holding costs (approximately 2.5%) and administrative costs (1%) associated with payment deferral on a large scale. The administrative costs include the cost of appointing temporary employees which would be required to make the required manual account adjustments and administer the deferral policy.

It is appropriate to recover the administration costs via the interest rate rather than regulated OPEX as:

- Costs will not be incurred unless the deferral trigger occurs; and
- Larger numbers of customer deferral (increased \$ value of deferrals) will increase the amount of manual processing required.

For clarification and transparency, the 'Supreme Court' rate referred to in IPART's papers and State Water's submission to the discussion paper is in accordance with Rule 36.7 of the Uniform Civil Procedure Rules 2005 on the post-judgement rate under section 101 of the *Civil Procedure Act 2005*. Rule 36.7 states:

(1) The prescribed rate at which interest is payable under section 101 of the Civil Procedure Act 2005 is:

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(a) in respect of the period from 1 January to 30 June in any year—the rate that is 6% above the cash rate last published by the Reserve Bank of Australia before that period commenced, and
*(b) in respect of the period from 1 July to 31 December in any year—the rate that is 6% above the cash rate last published by the Reserve Bank of Australia before that period commenced*¹².

This rate is currently 9.5%¹³. Therefore, based on the current rate, State Water is suggesting a total interest rate of 13%.

State Water notes that approval from the NSW Treasurer is required to increase State Water's borrowings in the case of a payment deferral policy being offered to and taken up by a large number of customers.

Exploring higher fixed charges for the Commonwealth Environmental Water Holder

Whilst State Water supports the intent of negotiating a higher fixed charge tariff structure, say 90:10, with certain licence holders that meet a set criteria, such as the Commonwealth Environmental Water Holder, we share IPART's view that more work is needed to scope the implementation of this option.

Firstly, it would be necessary to identify any legislative constraints associated with this option, as State Water is bound by several Acts and the legislative instruments which support these. If and only if it could be established that State Water could legally negotiate a separate agreement with select customers, criteria would need to be set and negotiations undertaken with these customers. As State Water has already committed significant resources to this review, we do not currently have resource capacity to commission the requisite legal and regulatory review and undertake the work required to explore this option further. Therefore, State Water contends that any final recommendation to further explore this issue should be undertaken IPART as part of this review of rural water charging systems, or be deferred to the 2017 determination.

Tariff structure for Fish River Water Supply Scheme customers

State Water notes that whilst Fish River is included in the Murray Darling Basin and therefore within the scope of this review, the structure of prices for these customers differs significantly to that of prices for other regulated valleys. State Water therefore seeks clarification from IPART on whether the recommended tariff structure principles resulting from this review are intended to apply to Fish River prices.

¹² Uniform Civil Procedures Rule 2005

See: <http://www.legislation.nsw.gov.au/fragview/inforce/subordleg+418+2005+pt.36-div.1-rule.36.7+0+N?tocnav=y>

¹³ See: http://www.localcourt.lawlink.nsw.gov.au/localcourts/interest_rates.html

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3. Cost shares

3.1. Government cost shares

State Water supports IPART's draft recommendation regarding Government cost shares. We agree that IPART's proposal to review cost shares every second pricing determination provides a suitable balance between ensuring the Government cost shares remain appropriate and the additional costs imposed by undertaking such a review.

State Water notes the concerns raised by stakeholders regarding users imposing costs on State Water's systems but who are not subject to water charges. State Water is of the view that this is a policy issue and therefore should be resolved by NOW, taking into account IPART recommendations. Contrary to IPART's comment in its draft recommendations paper¹⁴, State Water contends that publicly available information such as water balances together with the Annual Information Return data submitted to IPART provides sufficient information to allow IPART to undertake analysis and make recommendations on this matter. As such, State Water does not intend investigate this matter further, but will implement any Government policy decisions to charge basic rights holders and the environment. State Water suggests that further review of these charging arrangements could logically form part of the review of Government cost shares to be undertaken by IPART or a similar independent body prior to State Water's 2017 pricing determination.

3.2. Under recovery of user shares of costs

State Water accepts IPART's recommendation to progressively increase the average Peel Valley bill by 5% (real) per annum until full cost recovery is achieved, with the remaining efficient costs to be funded by a Community Service Obligation (CSO). Upon receipt of a Ministerial direction endorsing this recommendation, State Water will calculate prices and the required CSO based on this direction and include these in its pricing submission to the ACCC following Government approval.

4. Regulated Asset Base

State Water strongly supports the principles underlying the case for a revaluation of its regulated asset base (RAB) resulting from the move from a pre-tax to a post-tax WACC in the building block model. This is consistent with State Water's submission to IPART's September 2011 draft report, *the incorporation of company tax in price determinations*¹⁵. In this submission, State Water argued that the traditional use of a pre-tax WACC by IPART resulted in the establishment of an initial RAB value for State Water that would have been higher, had IPART adopted a post-tax WACC when first moving from an annuity to RAB (i.e. building block) regulatory approach. That is, the RAB revaluation is premised on maintaining revenue neutrality and not a request for a higher return on capital.

¹⁴ IPART 2012, *Review of Rural Water Charging Systems Draft Recommendations* July 2012, p 11

¹⁵ State Water 2011, *Submission on the incorporation of company tax in price determinations*, October 2011.

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State Water understands this is a complex issue given our impending move to the ACCC for economic regulation in the Murray Darling Basin valleys. However, this complexity should not result in a substantial reduction in regulated revenue due to the unintended financial consequences of regulatory changes beyond State Water's control.

State Water asks that in its final report, IPART provide details of the calculations it has undertaken to arrive at a potential adjustment to State Water's RAB, and the value IPART deems a reasonable revaluation, given this change to a post-tax framework.

5. Concluding remarks

State Water appreciates IPART's consideration of its comments throughout this review process and looks forward to the release of IPART's final recommendations.

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Attachment 1

Assumed WACC parameters

The analysis undertaken for this paper assumes that the real pre-tax WACC is 5.88%. This WACC uses the ACCC's proposed cost of capital parameters for the equity beta, gearing, the market risk premium and the effective tax rate (assumed to be zero). The WACC has been updated for the risk free rate and inflation expectations as at March 2011, and is shown as column 1 in Table 4.

The reason for choosing to measure the cost of capital at this date rather than using more a recent risk free rate and debt margin is that nominal and real risk free rates are currently at an all time low, in a period of considerable uncertainty and instability in financial markets. The use of market parameters as at March 2011 are more reflective of a longer term historical picture and provide greater confidence that the market premium, the risk free rate and the debt premium are consistent with a stable financial market and with each other.

Since March 2011, the real risk free rate has sunk from 2.62% in March 2011, to 1.67% (as determined by the AER in April 2012) and to 0.51% in June 2012.

Table 4 WACC parameters

	Base WACC, March 2011 market parameters	IPART June 2010 determination	ACCC April 2012 determination	June 12 market parameters adjusted debt premium
Gearing	60.0%	60.0%	60.0%	60.0%
Risk Free Rate (nom)	5.60%	5.80%	4.21%	3.02%
Inflation	2.90%	3.00%	2.60%	2.50%
Market Risk Premium	6.0%	6.0%	6.0%	6.0%
Tax Rate	0.0%	30.0%	0.0%	0.0%
Debt Margin	2.78%	2.80%	4.03%	5.09%
Gamma	0.50	0.40	0.50	0.50
Asset Beta	0.280	0.363	0.280	0.280
Debt Beta	0.000	0.000	0.000	0.000
Vanilla WACC nominal	8.95%	9.64%	8.31%	7.75%
Pre-tax nominal	8.95%	10.62%	8.31%	7.75%
Pre-tax real	5.88%	7.40%	5.56%	5.13%

The March 2011 cost of capital of 5.88% is lower than the 7.4% real pre-tax cost of capital determined by IPART in its June 2010 pricing decision, as a result of the lower beta, the absence of a tax wedge, and some decline in the risk free rate.

The AER provides a recent assessment of cost of capital parameters in its April 2012 draft determination for APT Petroleum Pipeline. As shown by column 3 of Table 4, the fall in the real risk free rate has been more than compensated by a rise in the debt

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margin to 4.03%. Thus by April 2012 the real cost of debt is higher than that implied by the March 2011 parameters.

We do not have information on the current debt premium, and do not believe that in current conditions the recent further fall in the real risk free rate would translate into a fall in the real cost of debt from the level determined by the AER. For this reason, we assume that a WACC which incorporates the current very low risk free rate would see a further rise in the debt premium to (at least) maintain the real cost of debt. On this basis, column 4 provides our assumption as to what a WACC based on current market conditions might be. Of course, this is subject to discussion with the ACCC closer to the finalisation of State Water's pricing submission.

Attachment 2

Demand scenarios

The six extraction scenarios used in this paper comprise:

1. Actual extractions are as predicted, namely 4,627 GL per annum
2. Actual extractions fluctuate around an average of 4,627 GL with the extent of the fluctuation corresponding to the average absolute fluctuation calculated by IPART over the last 20 years
3. Actual extractions drop to the average over the last 10 years, namely 2,926 GL per annum
4. Actual extractions follow those experienced in the period 2001/2 to 2005/6 (representing an average of 4,443 GL per annum)
5. Actual extractions follow those experienced in the period 2006/7 to 2011/12 (representing an average of 2,470 GL per annum)
6. Actual extractions follow those experienced in the period 1994/5 to 1999/2000 (representing an average of 6,337 GL per annum)

Figure 3 illustrates the extraction levels under each of the chosen scenarios.

