

8 May 2018

**By email: [water@esc.vic.gov.au](mailto:water@esc.vic.gov.au)**

Water Team  
Essential Services Commission  
Level 37, 2 Lonsdale Street  
Melbourne VIC 3000

Dear Sir/Madam

### **Submission on standard draft decisions: 2018 Water Price Review**

The Consumer Action Law Centre (**Consumer Action**) welcomes the opportunity to comment on the draft decisions released by the Essential Services Commission (**Commission**) in late March as part of the 2018 Water Price Review.

Consumer Action has been an active participant throughout the 2018 Water Price Review, through written submissions, meetings with Commission staff, engagement with water retailers and attending public forums.

Consumer Action made an initial submission to the Commission on 16 November 2017 providing high level comment on the submissions put forward by the water businesses. We expressed concern with the steep price rises proposed by some companies and the negative impact this will have on low-income and vulnerable consumers including those in financial stress or who have an inability to pay for their water bills. We urge the Commission to ensure these customers are taken into account when assessing final price paths.

We are pleased to see a focus on improving hardship programs by many businesses in this Price Review. In the 2013 Price Review an allowance of \$5.25 million was allocated to metropolitan water businesses to expand existing hardship programs or introduce new ones. Given water bills are typically higher in regional Victoria and the specific challenges many regions are facing we recommend the Commission allocate funding to assist regional water businesses strengthen their hardship programs.

The customer engagement undertaken in this Price Review varied. We are supportive of genuine and meaningful engagement that seeks to empower and educate customers. We are more critical of engagement that is used to substantiate predetermined decisions. We believe the Commission could play a greater role in promoting good customer engagement and identifying areas that could be improved.

We strongly support the Commission's proposal to reduce the revenue requirement for some businesses where they deemed expenditure should be managed through other measures or where justification for certain projects was inadequate.

Businesses should endeavor to improve services over time and have incentives to ensure customers do not receive poor service. Service standards and guaranteed service level payments are areas where we believe the Commission should encourage businesses to strengthen or increase over time.



Following on from our submission dated 28 March 2018, we provide comment on the Commission's approach to costs of capital and debt. The report commissioned by Consumer Action on these issues is attached at Appendix A.

Introducing or trialing 'smart' or 'digital' meters is being explored by a number of businesses. We strongly support the Commission's requests for certain businesses to provide more information including defining 'success criteria'. Given the importance of safe access to water we are opposed to time of use pricing for residential customers.

We are of the view that regulatory periods should be uniform unless special circumstances necessitate otherwise. This would facilitate greater public awareness of the review processes and make it more likely that consumer organisations like ours can find resources to participate.

We conclude with a brief comment on the Commission's Customer Forums.

Our comments are detailed more fully below.

### **About Consumer Action**

Consumer Action is an independent, not-for profit consumer organisation with deep expertise in consumer and consumer credit laws, policy and direct knowledge of people's experience of modern markets. We work for a just marketplace, where people have power and business plays fair. We make life easier for people experiencing vulnerability and disadvantage in Australia, through financial counselling, legal advice, legal representation, policy work and campaigns. Based in Melbourne, our direct services assist Victorians and our advocacy supports a just market place for all Australians.

Our work in the 2018 Water Price Review was made possible through funding from the Victorian Government. The aim of the project is to provide a consumer voice in the process, independently assessing the price plans as they were presented to the Commission by the water companies and assessing the degree of rigour applied by the Commission itself. The nature and style of customer engagement undertaken by the water companies, which is itself a requirement of the PREMO model, has been a particular focus.

Consumer Action has been guided throughout the project by a reference group with representatives from the Victorian Council of Social Services, the Brotherhood of St Laurence, the Alternative Technology Association, St Vincent de Paul and the Consumer Policy Research Centre.

### **Prices and Customer Bills**

Victorians are finding it increasingly difficult to cover the costs of their essential services—every week Consumer Action's financial counsellors hear from people who are often at real risk from restriction or disconnection. This can be due to income insufficiency, or a combination of issues that result in inability to pay. The Commission's role through the Water Price Review plays a tangible and significant role in ensuring water bills take into account vulnerable and disadvantaged Victorians and we encourage an ongoing focus on this social aspect of price regulation.

We are pleased to see prices for the majority of water corporations decreasing or stabilising in this regulatory period. In the last Water Price Review (2013-18) many price paths contained significant price increases which continued a longer trend of rising water bills in Victoria.

In the last pricing period, higher bills were offset in part due to a government efficiency rebate announced in 2014 and implemented over 4 years. The rebate was applied inequitably across the state (some Victorians saw no reduction on their bill in real terms) and is due to end in June 2018. The end of the rebate has been addressed differently by each water corporation. In these draft decisions, the majority of businesses which paid a rebate to customers have adjusted their tariffs to ensure the end of the rebate has a minimal impact on typical bills. This is in line with the government's expectation that water bills will



remain stable, as outlined in *Water for Victoria*,<sup>1</sup> and the policy intention that efficiencies underpinning the rebate would be converted into permanently lower prices.

### *Price Paths*

We are concerned with the price paths proposed by some businesses and the impact this will have on low income and vulnerable customers. Each of Wannon Water, South Gippsland Water and Gippsland Water proposed varying price increases. The Commission has reduced the revenue requirements to different degrees for most businesses and requested a number of businesses submit updated prices based on the draft decisions. We urge the Commission to ensure updated prices avoid the possibility that customers might experience bill shock in accordance with section 11(d)(ii) of the Water Industry Regulatory Order (**WIRO**).

Many of the Victorians calling the National Debt Helpline financial counselling service are on fixed incomes and/or very tight budgets which are often managed meticulously. Our financial counsellors stress that even small increases to an individual's bill can have consequences that should not be underestimated.

On an emotional level it is also important that any bill increases are smoothed out—bill increases can create significant stress for those with little disposable income. This stress can be mitigated by avoiding price shocks. Smoothing bill payments is already common in the water sector. Many businesses—in essential services and elsewhere—recognise that breaking up payments into smaller increments benefits both the company (which are able to recover their costs without having to allocate staff to follow up unpaid or overdue bills) and customers who may face difficulty paying large bills in one transaction.

### **Hardship**

We are very pleased to see a greater awareness of customer hardship and vulnerability reflected in many of the pricing submissions and strongly encourage companies to improve and strengthen their existing programs or adopt new ones. Feedback from staff at water businesses we have engaged with indicate that many intend to.

The hardship practices of water businesses vary across the state. Regional corporations face specific challenges in this area including difficulty training up staff, finding and retaining staff skilled in hardship-related work and other issues associated with a small customer base (for example someone having trouble paying their bill may be wary of calling their retailer because they may know the individual that answers their call).

Water bills in regional Victoria are on average higher than Melbourne due to a range of factors including economies of scale and the large areas serviced by most regional businesses. Regional Victorians are also facing specific challenges in terms of employment and business opportunities, and the decline of particular industries which has flow on effects for individuals and families. Recognising these challenges, we strongly encourage the Commission to allocate specific funds to allow regional corporations to strengthen existing hardship programs or adopt new practices to assist their vulnerable customers, including those experiencing family violence. This funding could operate in a similar way to the \$5 million allocated to metropolitan water providers in 2013 with the Commission reporting on hardship statistics over the regulatory period.

### **Engagement**

Engagement practices for the 12 businesses covered in these draft decisions vary considerably. We observed in our previous submissions that there are many different forms of engagement and businesses have been guided by the Commission to choose engagement approaches that are best suited to each business's circumstances and customers.

---

<sup>1</sup> State of Victoria, *Water for Victoria*, available at: <https://www.water.vic.gov.au/water-for-victoria>, pg 163.



We note that the ESC has not set out to assess the effectiveness of a water corporation's customer engagement.<sup>2</sup> However, when evaluating the engagement of each water corporation, we believe the Commission could play a greater role to promote best practice customer engagement and identify areas for improvement through its draft decisions. The draft decisions provide a high-level overview of the engagement undertaken by each business and highlights some of the proposals resulting from that engagement. Only one draft decision contained feedback for the business. Given each water business is given a rating under the PREMO framework for its engagement we feel it is necessary for the Commission to substantiate the rating in more detail than is currently provided. This would increase transparency of the PREMO model and allow customers and stakeholders to more fully understand the reasons behind the Commission's grading system.

A range of factors can differentiate between meaningful and genuine engagement and poorer forms of consultation. On the whole, we were pleased to see water businesses accept the challenge put to them under the new Guidance and try things in this pricing period that may have challenged traditional ways of doing business in a positive way. The water companies that we have met with relayed encouraging stories regarding their customer engagement programs that uncovered things that might not have been expected.

Genuine engagement that involves boards and/or high-level management shines through when reading submissions: links between different parts of these submissions are strong. Moreover, these engagement processes are often perceived by participants to be more meaningful and genuine.<sup>3</sup>

Barwon Water demonstrated a robust customer engagement program. The 'Test Phase' used by Barwon Water (and many other businesses) is important to gauge what the community values and expects from their water company and begin to define the objectives and purpose of the consultation. At the other end of the spectrum, it is important to round off the engagement with a clear and transparent 'checking back in' phase. Barwon Water's document *Our proposed services and prices for 2018-2023* provided customers and stakeholders like us with a succinct, plain English document that allowed feedback prior to their submission going to the Commission. Providing feedback loops and opportunities for comment throughout an engagement program is good practice and ensures businesses get it right.

City West Water's customer engagement was strong and captured the views and opinions of its culturally diverse customer base in Melbourne's west. Going out into the community at events and festivals was a good way to overcome barriers to access when trying to tap into traditionally unrepresented sections of the community that might not engage with traditional forms of customer consultation. Additionally, leveraging the expertise of peak bodies or representative organisations can be helpful to gather knowledge and get advice on reaching the communities that they represent—many businesses did this which is promising. It is positive to hear that many water businesses intend to strengthen connections with different community-based organisations as a result of engagement activities conducted during this pricing review.

Goulburn Valley Water's engagement demonstrated a fit-for-purpose approach that recognised at the outset the different types of customers in their region and the range of services they receive and created a tailored engagement strategy as a result. The link between customer feedback and the proposed outcomes are clear.

We are critical of the engagement approaches undertaken by some water companies.

South Gippsland Water's undertook a 'Have Your Say' survey at the beginning of their engagement which was intended to measure customers' "willingness to pay"<sup>4</sup> for services. The interpretation of results from this survey were used by the business to identify "areas for investment"<sup>5</sup>. The results from this initial

---

<sup>2</sup> Essential Services Commission, *2018 Water Price Review Guidance Paper*, pg 25.

<sup>3</sup> Ibid.

<sup>4</sup> South Gippsland Water Pricing Submission, pg 9.

<sup>5</sup> Ibid.



survey show that there was only one area where customers may have supported increased investment. South Gippsland Water however note in their submission that “there was no one area of the business where customers supported reducing investment”<sup>6</sup>. This interpretation is problematic. The results demonstrate an overwhelming proportion of customers feel like the areas identified by the survey were “nice to have at current levels”.<sup>7</sup> This would imply that they also would like to see bills remain at current levels.

Genuine engagement clearly defines what aspects of the decision-making program are negotiable.<sup>8</sup> Comments by South Gippsland Water staff at the Customer Forum in Wonthaggi on 19 April 2018 indicated that the business had identified prior to undertaking customer consultation that prices would be increasing in this regulatory period. If this is accurate, then customers should have been informed during the engagement of what was already decided and what was up for negotiation. Similarly, Wannon Water’s customers’ expectations around affordability of water bills contrast with the revenue requirement proposed by Wannon Water and the impact that that would have on customer’s bills.

Using the engagement process to substantiate predetermined decisions (e.g. increases in operational expenditure or spending on particular projects for example) is tokenistic and not genuine. Gippsland Water’s engagement by contrast was clearer from the outset regarding what was and was not up for negotiation. Key projects for example did not form a key part of engagement. We were also supportive of Gippsland Water’s *Our five year plan 2018-2023* document which summarised their submission in a customer friendly way.

#### *Consultants*

We noted in our initial submission to the Commission that many water companies recruited consultants to undertake some or the majority of the customer engagement in this price review. For many businesses it appears to have worked well, but for some there is an evident disconnect between the customer engagement undertaken by external providers and any benefit derived by the water company from that work. This then flows through to the pricing submission. While some submissions read coherently—intertwining risk, outcomes, pricing, engagement and management—so those elements speak to one another, others do not. We do not want to discourage companies from improving and embedding great customer engagement in their day to day operations (as there are clear advantages from doing so) however we do need to raise these points to encourage future improvement. Water companies should be alive to the risk that consultants often produce a product that fits within pre-determined boundaries, rather than taking an inquiring and open approach.

#### **Revenue Requirements**

We support the Commission’s role in assessing and rigorously analysing each water business’s proposed operating and capital expenditure. The Commission is well placed to carry out this technical role and ensure water businesses charge no more than is necessary for the efficient running of each business. Incorporating performance and outcomes based incentives into the Price Review process is vital and the PREMO model should ensure that water businesses improve productivity and performance over time.

Reducing the revenue requirement for companies that proposed to increase prices significantly above CPI will result in a reduction to household bills and ensure low income and vulnerable consumers do not experience bill shock or struggle to afford to pay for their essential services. Consumer Action supports these determinations as they will ensure bills remain affordable for all customers.

#### *Operating Expenditure*

---

<sup>6</sup> Above, n 4.

<sup>7</sup> This is also supported by analysis work undertaken by InSync Surveys Pty Ltd who were contracted by South Gippsland Water to assist with the development and evaluation of this part of their engagement.

<sup>8</sup> Consumer Utilities Advocacy Centre, *Meaningful & Genuine Engagement: Perspectives from consumer advocates*, November 2013, pg 12.



We welcome the Commission's proposal to adjust controllable operating expenditure for the majority of draft decisions. It is incumbent on water businesses to expend no more than is efficient or necessary to run the business. This sentiment also came through in much of the customer engagement undertaken for the price submissions. We note variations in efficiency targets on controllable operating expenditure proposed by the businesses—ranging from 1% for Wannon Water and South Gippsland Water (equivalent to the mandated rate set by the Commission in the last price review) to 3.1% as proposed by Goulburn Valley Water.

Businesses are required to respond to the respective draft decisions and we expect that some businesses may seek to challenge the Commission's decisions around operating expenditure. We support the Commission's position to adjust forecast electricity costs and to limit all wage increases and for businesses to manage these costs through other means. Ensuring businesses satisfy the WIRO requirements for prudent and efficient expenditure, amongst other things, is in the long-term interests of consumers.

We strongly support the Commission removing allowed costs for businesses that are required to prepare a new price submission prior to 2023. Customers should not be charged for a business's mistakes.

One aim of the WIRO is to ensure customers can 'easily understand prices charged by' the water businesses.<sup>9</sup> A significant amount of operating expenditure relates to non-controllable expenditure such as licence fees and the environmental contribution. Passing on these costs through water bills is not progressive. There should be greater transparency around these fees so that customers know how much of their bill is comprised of government levies.

#### *Capital Expenditure*

We are satisfied that many water businesses excluded projects from revenue forecasts where there is uncertainty in timing, cost, scope or benefits. We also support the Commission in identifying projects that do not satisfy certain threshold standards—customers should not be expected to foot the bill for projects that are not essential, do not have a robust business case or are unlikely to be completed within a regulatory period.

#### **Service Standards and Guaranteed Service Levels (GSLs)**

We note a range of ambitions when comparing the service standards proposed by water businesses. Businesses should be encouraged to improve service standards over time and we are encouraged by those corporations that have strengthened existing standards or introduced new standards often in response to outcomes from customer engagement.

As stated previously by our organisation, we believe the regulatory regime should continually encourage businesses to improve service standards and efficiencies over time, rather than continuing to meet existing service standards alone.

We support the operation of the Guaranteed Service Levels (GSL) payments, as they can provide redress for customers receiving poor service while also providing incentives for businesses to improve services. Some businesses have specified that allowances for GSL payments are not included in the operating costs as they should not be funded by the customer base. We support this approach and hope the ESC can confirm this is standard across all the businesses.

#### **Weighted Average Cost of Capital (WACC) and Debt**

As part of the 2018-23 Water Price Review, Consumer Action commissioned an independent report by CME Australia to examine the cost of debt and allowed return on equity in the Commission's 2018 Water Price Review Guidance Paper which applies to the Commission's draft decisions. CME Australia's report is attached at Appendix A.

---

<sup>9</sup> WIRO 11(d)(i).



Water corporations are state-owned entities that exist to serve all Victorians. The Victorian government's interest in water companies is not purely financial—water companies serve a range of functions that allow all of us to enjoy a standard of living that comes with having access to clean and affordable water. The Government benefits from this in turn: access to water plays a crucial role in people's lives and is a key determinant in health, well-being and social participation.

The importance of water services is recognised in Victoria's constitution, the state's founding document. In 2003, the *Constitution Act 1975* (Vic) was amended to entrench the public ownership of water authorities.<sup>10</sup> This recognises that provision of water services, at reasonable cost, is of primary importance to the community.

In determining revenue requirements for returns on equity and costs of debt, Consumer Action is of the view that the ESC should not charge water consumers more for the equity or debt than it costs the Government to provide it.

### Revenue Requirements

CME's report analyses the cost of debt and allowed return on equity in the 2018 Water Price Review Guidance Paper as estimated in the ESC's draft decisions. The report uses the figures in the early draft decisions as a basis to calculate debt costs noting that the 17/18 figure will be updated before the final decisions are released. Analysing actual borrowing costs from the Treasury Corporation of Victoria the report considers risks borne by Victoria's government-owned water corporations compared to risks borne by water consumers in coming to its conclusions.

The report calculates that over 5 years, Victorians could be saving \$770 million off their water bills. The bulk of these savings come via the metropolitan water providers. Regional providers are affected to a lesser extent due to their lower regulatory asset bases. Table 1 below summarises the potential savings that could flow through to customers by way of lower water bills.

Table 1. Impact of suggested return on and debt and equity on regulated revenues over five years

Company	Regulatory Asset Value (\$m)	Change in allowed charges over 5 years (\$m)	Change in allowed charges over 5 years (\$m)	Total change in allowed charges over 5 years (\$m)
		Debt	Equity	Equity + Debt
Barwon Water	\$ 1,313	\$ 41	\$ 30	\$ 71
City West Water	\$ 1,874	\$ 59	\$ 43	\$ 102
South East Water	\$ 3,359	\$ 105	\$ 77	\$ 182
Yarra Valley Water	\$ 4,058	\$ 128	\$ 93	\$ 221
Gippsland Water	\$ 664	\$ 21	\$ 15	\$ 36
Central Highlands Water	\$ 342	\$ 11	\$ 8	\$ 19
Coliban Water	\$ 496	\$ 16	\$ 11	\$ 27
East Gippsland Water	\$ 147	\$ 5	\$ 3	\$ 8
Goulburn Valley Water	\$ 351	\$ 11	\$ 8	\$ 19
Grampians Wimmera Mallee Water	\$ 402	\$ 13	\$ 9	\$ 22
Lower Murray Water - Urban	\$ 156	\$ 5	\$ 4	\$ 9
North East Water	\$ 265	\$ 8	\$ 6	\$ 14
South Gippsland Water	\$ 148	\$ 5	\$ 3	\$ 8

<sup>10</sup> Section 97, *Constitution Act 2003* (Vic). The Victorian Premier, when introducing this stated: Honourable members will agree that the provision of water service, at reasonable cost, is a matter of primary importance to our community. It was for this reason that, at the last election, this government made a commitment to ensure that our water authorities remain publicly owned and directly accountable to the people of Victoria.



Wannon Water	\$ 330	\$ 10	\$ 8	\$ 18
Westernport Water	\$ 120	\$ 4	\$ 3	\$ 7
Lower Murray Water - Rural	\$ 74	\$ 2	\$ 2	\$ 4
Southern Rural Water	\$ 62	\$ 2	\$ 1	\$ 3
<b>TOTAL</b>	<b>\$ 14,161</b>	<b>\$ 446</b>	<b>\$ 324</b>	<b>\$ 770</b>

### *Cost of Debt*

The Commission's role includes determining revenue requirements for Victoria's water corporations. In this price review a building blocks approach to calculate returns on equity and costs of debt has been used.

Borrowing costs are applied to 60 per cent of a corporation's asset base. The Commission uses a 10-year trailing average approach to determine the allowed revenue requirement. The cost of debt for Victorian water businesses have been based on the 10-year Reserve Bank of Australia's published BBB-rated bonds including some adjustment mechanisms—currently estimated to be 6.05 per cent in 2017-18.

The report commissioned by Consumer Action recommends that the Commission set the cost of debt at around 5 per cent. This is 100 basis points lower than the levels proposed in the Commission's draft decisions.

The report by CME notes that because Victorian water companies—government owned entities—present less risk than a private corporation and deliver societal benefits through their operations, they should be able to borrow on terms that reflect this reality.

### *Return on Equity*

Under the PREMO framework, the ESC has placed a degree of responsibility on water corporations as to how the return on equity will be determined. Companies must self-assess their performance with the assessment corresponding to the allowed return on equity.

We support this approach as it is transparent and directly links a business's customer engagement, risk allocation, outcomes and performance to the allowed return. It is also helpful from a comparison and reputational perspective—to see which companies are performing well and which businesses have room to improve. This is ultimately good for customers as it means water companies will be held to account through the PREMO framework spanning into the next regulatory period.

The return on equity levels under the PREMO framework range from 5.3 per cent to 3.9 per cent depending on the quality of a business's price submission and whether the ESC agrees with the businesses own self-assessment.

CME's report provides a comparison between the ESC and Ofwat—the regulator in Britain and Wales. It finds that Ofwat's 'standard' allowed return on equity proposal (7.13%) for their upcoming PR19 is marginally lower than the ESCs lowest possible return on equity (7.17%).

CME also analyses the risk borne by Victoria's tax payers through ownership of Victoria's water businesses and concludes the allowed returns are higher than required. The report recommends a reduction to the allowed return on equity of around 100 basis points.

Consumer Action encourages the Commission to take the findings of CME's report into account as part of the 2018 Price Review to ensure the prices Victorians are paying for water reflect actual borrowing costs and, in terms of equity, an appropriate balancing of risk.

## **Digital/Smart Meters and Time of Use Tariffs**

### *Digital Meters*

A number of water businesses have allocated expenditure to trial or roll-out digital meters in this regulatory period. We remind both the Commission and the water businesses that many in the community



remember the controversial implementation of smart meters in the energy sector and that a poorly designed roll-out that fails to address customer concerns or preferences may have detrimental consequences. Innovation should not be a goal in itself—new technology must deliver tangible benefits for water customers and be backed by a comprehensive business case. Smart energy meters were touted as a game changer for Victorian households but have so far failed to deliver on this promise for the energy market or customers.<sup>11</sup>

We strongly support the Commission’s draft decisions requiring water businesses to define “success criteria” before any digital meter rollouts beyond initial pilots and that a full rollout should be expected to “deliver a positive net present value” for water corporations.<sup>12</sup>

Digital meters and other digital technologies have potential to assist water companies manage their operations with benefits including greater capturing of data and early leak detection. All customers should benefit from any rollout of digital meters and how these benefits are to be realised should be fully articulated by water businesses. The Commission must ensure that all customer segments—for example, those with special requirements, older Victorians, or less tech-savvy individuals—are adequately considered. We are encouraged that community concerns are being taken into account by the regulator.<sup>13</sup>

We hope the Commission will continue to work with water corporations outside of the price review to develop principles that will guarantee digital meter roll outs are in the long-term interests of customers. In particular, regard to the needs of vulnerable consumers during any rollouts must be taken into account. We want consumers in vulnerable situations to feel supported and comfortable throughout any meter installation process.<sup>14</sup> We venture to suggest that the water sector can learn much from the manner in which smart meters were rolled out in the energy sector, and should actively seek to avoid the backlash that can arise in the absence of poor communication.

#### *Time of Use (ToU) tariffs*

The price of water impacts on access to water. Water is vital to human life and effective participation in society and should not be priced so as to exclude universal access. Consumer Action is opposed to ToU pricing for residential customers because of the potential adverse impacts it might have, particularly on low income and vulnerable consumers. Coliban Water raised the possibility of exploring ToU tariffs in their price submission.

The Productivity Commission has found that “[g]enerally, water use is relatively unresponsive to changes in price, indicating that consumers place a high value on water consumption.”<sup>15</sup> Low income households have less capacity to absorb price increases where they are already using water efficiently. Conversely, high income households, whose water bills make up a smaller percentage of household expenditure, are better able to adjust to price fluctuations and therefore may have less incentive to curb their water use as a result. We think it is unfair to price water in a way that potentially makes it unaffordable to vulnerable consumers, those on low incomes, large families or individuals who use above average water due to health reasons.

---

<sup>11</sup> Victorian Auditor-General's Office, *Realising the Benefits of Smart Meters*, 16 September 2015, available at: <https://www.audit.vic.gov.au/sites/default/files/20150916-Smart-Meters.pdf>. Also see: Victorian Government, *Review of Electricity and Gas Retail Markets in Victoria*, pp. 37-38, available at: <https://engage.vic.gov.au/review-electricity-and-gas-retail-markets-victoria>

<sup>12</sup> For example, see, Essential Services Commission *Coliban Water Draft Decision*, pg 22.

<sup>13</sup> *Ibid.*

<sup>14</sup> Although facing slightly different circumstances than Victoria, Citizens Advice in the UK published this article detailing how water companies can support people before, during and after the installation of smart meters: <https://wearecitizensadvice.org.uk/everyone-should-be-offered-a-smart-meter-by-2020-b3bb7cd2d600>

<sup>15</sup> Productivity Commission, *Australia’s Urban Water Sector*, 2011, p. XXI, available at: <https://www.pc.gov.au/inquiries/completed/urban-water/report/urban-water-volume1.pdf>



## Regulatory periods

Consumer Action recommends that regulatory periods should be the same for all water corporations unless special circumstances necessitate allowing a different regulatory period—as has happened with Western Water and South Gippsland Water. There are a number of reasons for this.

Water Price Reviews affect all Victorians but awareness of these processes is not widely known. Community awareness is more likely to be generated when a state-wide price review is underway rather than smaller rolling reviews for each corporation. Media interest, and therefore wider public interest, is also greater when a review process is state-wide.

There are a limited number of people working at the intersection of consumer advocacy and water policy both in Victoria and Australia. Effective consumer representation in water is currently constrained by a lack of resources and has been this way for a number of years. Compared to the energy sector, there are very limited funding sources for consumer advocacy in water policy and advocacy.

Consumer advocates provide expert knowledge and vital representation of consumer issues to inform and improve policy development and engagement across a range of policy areas, including water. The challenges facing urban water provision, including the impacts of climate change through more severe and frequent droughts, means Victorians will be increasingly affected by water policy decisions, including through Water Price Reviews.

## The Commission's Public Forums

Consumer Action attended a number of public forums held by the Commission in April 2018. The purpose of these forums is to hear customer feedback on the respective Commission draft decision. We see great value in holding these forums and commend the Commission for travelling around the state to meet with customers and water businesses.

We feel, however, that the Commission's public consultation could be strengthened. Advertising and promotion of the public forums for example should be done jointly with the water business which has stronger connections to the local community than the Commission which is Melbourne based. Water regulation and Price Reviews are complex issues and not something the community is likely to have a strong grasp on. The presentations by the Commission and water businesses are informative but we believe the information could be conveyed in a way that acknowledges the level of understanding in the community and builds on this foundation.<sup>16</sup>

Please contact Patrick Sloyan on 03 9670 5088 or at [water@consumeraction.org.au](mailto:water@consumeraction.org.au) if you have any questions about this submission.

Yours Sincerely,

**CONSUMER ACTION LAW CENTRE**



Gerard Brody  
Chief Executive Officer



Patrick Sloyan  
Policy Officer

---

<sup>16</sup> For example, see Chapter 4 'Strategies for Consulting on Complex Issues', Consumer Utilities Advocacy Centre, *Meaningful & Genuine Engagement: Perspectives from consumer advocates*, November 2013.





Examination of the allowed cost of capital for  
Victoria's regulated water companies

March 2018

## Executive Summary

This report has examined the cost of debt and allowed return on equity in the ESC's 2016 guidelines and as implemented in the four draft decisions already made pursuant to these guidelines. Our analysis is guided by evidence of borrowing costs and in respect of equity, consideration of the risks borne by tax-payers as the owners of the water companies (via the Government) relative to the risks borne by water consumers. We are also mindful of the importance of not providing incentives for inefficient expansion of the regulated asset base in response to allowed rates of return above the cost of financing.

We conclude that a reduction in the allowed cost of debt of 100 basis points and a reduction of the same magnitude in the allowed return on equity would be appropriate, to bring these into line with observed costs (in respect of debt) and the allocation of risks (in respect of equity). The impact of these recommendations over a five year regulatory period assuming unchanged regulated asset values (based on the 2017/18 values) is shown in Table 8 below.

**Table 1. Impact of suggested return on and debt and equity on regulated revenues over five years**

Company	Regulatory Asset Value (\$m)	Change in allowed charges over 5 years (\$m)	Change in allowed charges over 5 years (\$m)	Total change in allowed charges over 5 years (\$m)
		Debt	Equity	Equity + Debt
Barwon Water	\$ 1,313	\$ 41	\$ 30	\$ 71
City West Water	\$ 1,874	\$ 59	\$ 43	\$ 102
South East Water	\$ 3,359	\$ 105	\$ 77	\$ 182
Yarra Valley Water	\$ 4,058	\$ 128	\$ 93	\$ 221
Gippsland Water	\$ 664	\$ 21	\$ 15	\$ 36
Central Highlands Water	\$ 342	\$ 11	\$ 8	\$ 19
Coliban Water	\$ 496	\$ 16	\$ 11	\$ 27
East Gippsland Water	\$ 147	\$ 5	\$ 3	\$ 8
Goulburn Valley Water	\$ 351	\$ 11	\$ 8	\$ 19
Grampians Wimmera Mallee Water	\$ 402	\$ 13	\$ 9	\$ 22
Lower Murray Water - Urban	\$ 156	\$ 5	\$ 4	\$ 9
North East Water	\$ 265	\$ 8	\$ 6	\$ 14
South Gippsland Water	\$ 148	\$ 5	\$ 3	\$ 8
Wannon Water	\$ 330	\$ 10	\$ 8	\$ 18
Westernport Water	\$ 120	\$ 4	\$ 3	\$ 7
Lower Murray Water - Rural	\$ 74	\$ 2	\$ 2	\$ 4
Southern Rural Water	\$ 62	\$ 2	\$ 1	\$ 3
TOTAL	\$ 14,161	\$ 446	\$ 324	\$ 770

The determination of allowed return on equity for a government owned business is inevitably controversial. The value of equity, by definition, is the claim on profits after all liabilities and expenses have been met. While this concept is ownership-invariant, as set out in this paper the liabilities, risks and expenses of a Victoria government owned business are quite different (and lower) than those of an investor-owned company. Furthermore Government's interest in its water companies is not just pecuniary: water companies are important institutions in the execution of Government's social and environmental policies and the Government obtains dividends albeit not pecuniary, through water companies' delivery of these social and environmental policies.

We do not think that the Competition Principles Agreement or economic theory provides a rationale for regulating the water companies as if they are investor owned. But charging water consumers more for the equity or debt that the Government provides than it costs the Government to provide it, may be sensible economic policy taking account particularly of the low price elasticity of demand for water and the generally robust willingness and ability to pay for it, particularly in metropolitan areas. This is a matter for policy, not regulation and appropriate for Government to decide. In the estimates that we present for the cost of debt and return on regulated equity we make no allowance for any impost on either that the Government may decide to be appropriate.

# Table of Contents

<b>Executive Summary .....</b>	<b>2</b>
<b>1 Introduction .....</b>	<b>6</b>
<b>2 Debt.....</b>	<b>7</b>
<b>2.1 ESC's Draft Decision.....</b>	<b>7</b>
<b>2.2 Analysis.....</b>	<b>7</b>
2.2.1 Water company actual borrowing costs.....	8
2.2.2 TCV borrowing costs .....	8
2.2.3 Should the TCV's cost of debt be used as the benchmark cost of water debt ?....	9
2.2.4 Competitive neutrality arguments.....	10
<b>2.3 Summary and implications.....</b>	<b>12</b>
<b>3 Equity.....</b>	<b>15</b>
<b>3.1 ESC decision.....</b>	<b>15</b>
<b>3.2 Analysis.....</b>	<b>16</b>
3.2.1 Benchmarking PREMO rates against Ofwat's proposals .....	18
3.2.2 Risk allocation.....	19
<b>3.3 Summary and implications.....</b>	<b>20</b>

## Table of Tables

Table 1. Impact of suggested return on and debt and equity on regulated revenues over five years .....	2
Table 1. Water company actual borrowing costs.....	8
Table 2. Average yield over last 10 years on TCV bonds of various terms.....	9
Table 3. Impact of 100 basis point reduction in debt costs on regulated revenues over 5 years.....	13
Table 4. Allowed return on regulated asset values real and nominal post tax.....	16
Table 5. Comparison of allowed return on equity in Victoria with Ofwat proposals for its 2019 review in Britain (pre tax nominal for Victoria and post tax nominal for Ofwat) .....	18
Table 6. Suggested post tax real return on equity .....	20
Table 7. Impact of the suggested return on equity on regulated revenues over five years .....	20

# 1 Introduction

In the context of their advocacy of Victoria's water consumers' interests, the Consumer Action Law Centre asked us to prepare a report that examines the return on equity and cost of debt that is included in the calculation of the regulated revenues of Victoria's water companies. The report examines in turn debt and then equity and a concluding section summarises the main points and quantifies the impact of the suggested changes.



## **2 Debt**

This section examines borrowing costs which are applied to 60 % of the regulated asset base and included as part of the “return on assets” component of allowed revenue. It starts by describing the ESC’s approach as set out in its Guidelines and their Draft Decision and then proceeds to analyse the issue from various perspectives. A summary covers the main points and quantifies the impact on regulated revenues of the suggested cost of debt.

### **2.1 ESC’s Draft Decision**

In its November 2016 guidelines, the ESC said it would determine the cost of debt based on water company borrowing costs. To implement this it decided a 10 year rolling average of the yield to maturity of BBB rated corporate (non-financial) debt.

In the four draft decisions available at the time of this report, the implementation of this approach resulted in an average over the 10 years from 2008-09 of 6.05%. This is based on the yield on non-financial corporate BBB-rated bonds with 10 year target tenor (data series ID FNFYBBB10M) published by the Reserve Bank of Australia. The ESC adjusted this, we understand, for deviations during the global and Greek financial crises. The 10 year average of the daily yield in this bond index from the start of January 2008 to the end of December 2017 is 6.9%. This suggests the ESC’s estimates reflect a downward adjustment of around 90 basis points relative to the 10 year average of the daily yields.

### **2.2 Analysis**

We examine here different perspectives on the allowed cost of debt, looking in turn at the actual water company borrowing costs, the Treasury Corporation of Victoria’s (TCV) borrowing costs, competitive neutrality arguments and private versus government borrowing rates.

## 2.2.1 Water company actual borrowing costs

Table 1 establishes the interest rate and Financial Accommodation Levy rate of borrowing from the TCV by three large Victorian water companies as reported in their latest financial reports:

**Table 2. Water company actual borrowing costs**

	Melbourne Water 2017	South East Water 2017	Yarra Valley Water 2017
Interest expense (\$m)	\$171	\$61	\$98
Financial accommodation levy (\$m)	\$42	\$20	\$29
Borrowings (\$m)	\$3,847	\$1,460	\$2,448
Interest rate (%)	4.45%	4.18%	4.00%
FAL rate (%)	1.09%	1.37%	1.18%
Total rate (%)	5.54%	5.55%	5.19%

Comparing this to the ESC's cost of debt draft determination, in 2017 the water companies incurred borrowing costs that are 155 to 200 basis points lower than the borrowing costs that the ESC will authorise them to charge their customers before the Financial Accommodation Levy (FAL), and 46 to 81 basis points higher after the levy.

## 2.2.2 TCV borrowing costs

TCV supplies the debt that funds Victoria's water businesses. TCV sell bonds of various terms to provide the finance. Based on data that they supplied to us for the preparation of this report, we calculate the 10 year average yield on these bonds as shown in Table 2.

**Table 3. Average yield over last 10 years on TCV bonds of various terms**

Term (years)	10	7	5	3	1
Yield (%)	4.77	4.56	4.37	4.13	3.89

Also, based on the volume of bonds in TCV's portfolio and the term to maturity of those bonds (TCV also supplied the data for this calculation) we calculate the weighted term to maturity of TCV's portfolio at the time of writing is 6.2 years. Based on the yield data in Table 2, this gives a weighted average cost of TCV debt of around 4.4%, which is approximately consistent with the interest rate that TCV charges the water companies as shown in Table 1.

On this measure, the ESC has determined a cost of debt that is around 160 basis points higher than TCV's cost of borrowing before inclusion of the FAL and around 40 basis points higher than TCV's cost of borrowing after the FAL.

### **2.2.3 Should the TCV's cost of debt be used as the benchmark cost of water debt ?**

The theoretical arguments on the appropriate cost of capital for government-financed projects are complex. The Arrow-Lindt Theorem (Arrow and R.C, 1970) holds that when an investment project yields socio-economic net benefits that are uncertain but independent of the systematic risk of the economy, these benefits should be discounted at the risk free rate if they are disseminated among a large population of stakeholders. This may be the case of a public project whose benefits are distributed within the large population of taxpayers.

Arguably the investments made by Victoria's water companies fit the requirements of the Arrow-Lindt Theorem – their socio-economic net benefits are uncertain, they are independent of the systematic risk of the Victoria economy and their benefits are widely shared. On this argument, the appropriate cost of debt (and equity) that Victoria's water customers should be charged is the weighted average cost of TCV debt, a suitable estimate of a Victoria-specific risk free rate.

There are however plausible arguments against the use of this measure. In particular, Baumstark and Gollier (2014) argue that many public sector investments

are not independent of the systematic risk of the economy. This is likely to be true for at least some investments made by Victoria's water companies (whose motivation will depend on the growth of the Victorian economy). They also argue, following Laffont and Tirole (1991) that the goals of public servants are rarely aligned with the general interest so that some risky rent should be allocated to them in order provide a discipline on investment<sup>1</sup>. The implications of these arguments is that some suitable premium to TCV's cost of debt should be added to reflect the correlation of water investments with the systematic risk of the Victorian economy and to improve incentives.

These arguments provide no insight into the amount of such premium and the argument for a premium is susceptible to the counter-argument, per Averch and Johnson (1962), that allowing returns above the cost of capital will provide incentives to wasteful over-spending. The evidence of this by the government owned distributors in Australia is widely accepted (Mountain, 2017).

#### **2.2.4 Competitive neutrality arguments**

Victoria was a signatory to the Competition Principles Agreement in the mid 1990s. This agreement sought to ensure that governments in Australia do not protect or prefer businesses that they own relative to investor-owned competitors. This is often referred to as "competitive neutrality". The application of this approach impacts the ESC's determination in two respects:

---

<sup>1</sup> There is a subtle but important point here. Gollier and Baumstark argue for a higher cost of capital on the basis that this will set a higher investment hurdle rate and hence discipline technocrats and bureaucrats who they assume have tendency to spend. But in the regulatory arrangement here (and for other monopolies in Australia) the determination of the return on debt sets the charge that consumers pay for the capital (as valued by the regulator) of their service providers. This need not be the same as the hurdle rate for investment that the companies apply. Setting a higher regulatory cost of capital incentivises investment – investment is more profitable. Therefore Gollier's argument that a higher cost of capital will discipline investment in fact works the other way around when regulators use that higher cost of capital to set returns on regulated assets.

- Firstly whether to assume a private sector debt benchmark for the water companies;
- Second how to treat the Government's Financial Accommodation Levy in the calculation of debt allowances.

On the first issue, the practice in the regulation of government-owned electricity monopolies in Australia (unlike elsewhere) is to assume the government owned companies are privately financed. The Australian Energy Markets Commission (see (Australian Energy Markets Commission, 2012) has defended this approach on the basis of the competition principles agreement and what it considers to be good economic practice. We do not agree with either of these arguments:

- On the CPA, this agreement specifically relates to government businesses that provide services in competitive markets, and protecting against private sector competitors being crowded out of the market by the governments. The CPA does not provide a rationale for treating government-owned monopolies as if they are privately financed, though this is how state governments (but not the Commonwealth) have applied the Agreement.
- On good economic practice, we disagree with the argument that good economic practice assumes government-owned businesses should be regulated as if they are privately financed. To the contrary, economists invariably recognise differences that arise from ownership. This is one of few threads that economic frameworks as different as Marxist at the one end and Austrian at the other agree on.

For these reasons a benchmark based on the borrowing costs of investor-owned companies is not appropriate. While the ESC has not suggested that investor-owned companies should be used as the benchmark it has nonetheless chosen as its

benchmark – BBB corporate debt – a benchmark of borrowing costs by investor-owned corporations.<sup>2</sup>

### **2.3 Summary and implications**

On the basis of the evidence and argument in this section, we do not believe that the Competition Principles Agreement provides a rationale for the assumption that the water companies are privately financed. Also there is no basis in theory or good economic practice for such an assumption. Accordingly it is not appropriate to look to a private sector corporate bond index as a suitable benchmark for Victorian water company's borrowing costs.

However we side with Baumstark and Gollier (2014) against the application of the Arrow-Lindt Theorem to Victoria's water businesses and suggest that some premium to the cost of TCV debt is appropriate to reflect the correlation of at least some water company investment to the systematic risk of the Victorian economy.

Taking these arguments into account, our estimate is that a suitable premium above TCV's cost of debt (which is effectively a risk free rate for Victoria) is around 60 basis points. This would give a cost of debt based on a weighted average maturity of TCV's debt of 4.4 % plus 60 basis points. i.e. 5 %. This is roughly 100 basis points lower than the amount that the ESC has decided.

---

<sup>2</sup> Albeit, as explained earlier the ESC's proposed debt cost – 6.05% - is below the 10 year average of the daily BBB rates, and more comparable at this point to the 10 year average daily rate of A rated corporate debt (data series FNFYA10M). However over the course of the regulatory period the effect of the *rolling* 10 year calculation will mean that the allowed return on debt will increasingly approximate the yield on BBB debt, not A rated debt.

This approach is materially different to the approach that the ESC decided in its November 2016 guidelines. As a practical matter, taking account of the ESC's approach, we suggest that a 100 basis point reduction in the cost of debt but using the rolling BBB index mechanism that the ESC has decided would provide a practical way to deliver approximately similar outcomes during this regulatory control period.

The cost of debt is applied to the regulated asset value. Based on data in Pawsey and Crase (2014) we calculate that asset revaluations decided by the Victorian Government in 2005, i.e. the aggregate upward revaluation above historic cost, (\$5,650m), of Victoria's metropolitan water companies matches approximately the aggregate write down (\$5,765m) of the values of the rural and regional water companies in 2005.

Accordingly, for the metropolitan companies, a reduction in the allowed cost of debt would have a bigger impact on prices than for the rural or regional companies. The approximate impact on regulated revenues (over a five year regulatory control period) of a 100 basis point reduction in debt costs, based on the 2017 regulatory asset value of each water company, is shown in Table 3 below:

**Table 4. Impact of 100 basis point reduction in debt costs on regulated revenues over 5 years**

Company	Regulatory Asset Value (\$m)	Change in allowed charges over 5 years (\$m)
		Debt
Barwon Water	\$ 1,313	\$ 41
City West Water	\$ 1,874	\$ 59
South East Water	\$ 3,359	\$ 105
Yarra Valley Water	\$ 4,058	\$ 128
Gippsland Water	\$ 664	\$ 21
Central Highlands Water	\$ 342	\$ 11
Coliban Water	\$ 496	\$ 16
East Gippsland Water	\$ 147	\$ 5
Goulburn Valley Water	\$ 351	\$ 11
Grampians Wimmera Mallee Water	\$ 402	\$ 13
Lower Murray Water - Urban	\$ 156	\$ 5
North East Water	\$ 265	\$ 8
South Gippsland Water	\$ 148	\$ 5
Wannon Water	\$ 330	\$ 10
Westernport Water	\$ 120	\$ 4
Lower Murray Water - Rural	\$ 74	\$ 2
Southern Rural Water	\$ 62	\$ 2
TOTAL	\$ 14,161	\$ 446



## 3 Equity

This section examines the rate of return on equity. It starts with a summary of the ESC's decision and then proceeds to an analysis of their approach, considers the allocation of risks, benchmarks the ESC's decisions against the latest proposals by Ofwat in Britain to apply from 2019. It then revisits some aspects of the theoretical considerations in the previous section in consideration of the appropriate return on equity. Finally it summarises and quantifies the impact in terms of regulated revenues.

### 3.1 ESC decision

The ESC has determined estimates of the allowed return on equity (assumed to be 40% of the balance sheet) as a function of performance in four measures (risk, engagement, management and outcomes) and how the companies have self-assessed their performance (basic, standard, advanced and leading) in those outcomes. Over-estimation of their performance is penalised by reducing the allowed return on equity by 60 basis points, while under-estimation is not rewarded. Each increment in performance is rewarded with a 40 basis point increment in the allowed return on equity. The lowest possible allowed return on regulatory equity is 3.9% (if the company rates itself "standard" and the ESC rates it "basic") and the highest possible allowed return on regulatory equity is 5.3% (if the company rates itself "leading" and the ESC agrees).

At the time of writing the ESC had made four draft decisions. In all of these, the ESC agreed with the companies' aggregate self-assessment, although for two of the four companies, it rates performance against one of the four measures lower than the companies had themselves assessed. The allowed return on equity (post tax, real) for two companies is 4.9% and for the other two 4.5%. The ESC has estimated inflation at 2.25%. The possible highest, lowest and the allowed return on regulatory equity in the draft decisions for the four companies' stated as post tax real and post-tax nominal is summarised in Table 4 below:

**Table 5. Allowed return on regulated asset values real and nominal post tax**

	Real, post tax	Nominal, post tax
ESC Highest	5.3%	7.67%
ESC Lowest	3.9%	6.24%
Yarra Valley	4.9%	7.26%
East Gippsland	4.5%	6.85%
South East water	4.9%	7.26%
Western port	4.5%	6.85%

### **3.2 Analysis**

The approach to the determination of the return on equity in PREMO is an excellent innovation in Australian monopoly utility regulation. Tying the allowed return on equity to the measures that the ESC considers to be most important provides incentives for the delivery of those measures. Though the penalty for over-estimation might be criticised as an incentive to agree with the ESC, it does provide incentives for honest and self-critical assessment.

The financial incentives provided by this approach will be less significant for the rural and regional companies, relative to the metropolitan water companies, as a result of the differences in the value of their regulatory assets. Nonetheless this approach helpfully decouples the consideration of the return on equity from arcane arguments over the Capital Asset Pricing Model, and provides a way to compare and contrast the performance of the companies.

The effectiveness of this approach will however depend on ensuring that the companies' ranking cover the range so that the exceptional and less exceptional companies are clearly distinguished.

The analysis that follows in the rest of this section focuses on the level of the return on equity in PREMO having regard firstly to benchmarking against Ofwat's proposals for the forthcoming 2019 review and secondly to the allocation of risks between consumers and the investor (the Government).



### 3.2.1 Benchmarking PREMO rates against Ofwat’s proposals

Ofwat determined a nominal post tax rate of return, which it also stated in real terms using two different measures of inflation. In Britain water companies are investor-owned and so don’t receive the income tax on their profits, unlike the situation in Victoria. For the purpose of comparing the return on shareholders’ equity between Victorian and British water companies it is necessary to add back the tax included in the determination of regulated revenues for the Victorian companies since the Government of Victoria collects this income. This calculation is done here using the Australian corporate tax rate but assuming (as the ESC has) that 50% of dividends receive imputation credits. Using these assumptions allows an approximate like-for-like comparison (in Table 5 below) of the allowed return on regulated equity in Britain<sup>3</sup> and Victoria:

**Table 6. Comparison of allowed return on equity in Victoria with Ofwat proposals for its 2019 review in Britain (pre tax nominal for Victoria and post tax nominal for Ofwat)**

ESC Highest	8.82%
ESC Lowest	7.17%
Yarra Valley	8.35%
East Gippsland	7.88%
South East water	8.35%
Western port	7.88%
Ofwat	7.13%

*Source: ESC Draft Decision and Guidance and Table 10.2 of Ofwat 2017 “Delivering Water 2020: Our final methodology for the 2019 price review”*

On this measure, the lowest possible allowed return on equity in Victoria is about the same as the same as the central estimate allowed by Ofwat. It might be suggested that the revaluation of statutory asset values of many of the Victorian water companies means that they do not actually pay tax and so adjusting for tax in considering the allowed return on regulatory equity is not valid. However, while the treatment of statutory values does affect actual tax payments, in establishing the

---

<sup>3</sup> Like the ESC, Ofwat also proposed various incentives that can significantly affect the return on equity that the company actually receives.

return on regulatory equity it is necessary to take account of the tax allowed (and recovered from consumers through regulated charges).

### **3.2.2 Risk allocation**

The Arrow-Lindt Theorem discussed earlier suggests the return on regulated equity should be the risk free rate – in other words the cost of borrowing from TCV – for government water companies. While we agree that much of the water companies' investment is not correlated with systematic risk in the Victorian economy, we accept the arguments set out in Baumstark and Gollier (2014), that at least some of the investment is correlated with the economy, and so some allowance for a premium to the risk free rate is reasonable. In the CAPM framework, the middle of the ESC's range (before tax) is about consistent with a beta of around 0.8 assuming a Market Risk Premium of 6%, a commonly used estimate in Australian regulatory decisions.

First principles consideration suggests to us that this is a generous return even leaving aside consideration of tax. Specifically, the regulatory regime provides investors with low demand risk (partly as a result of tariff structures with large fixed charges and partly as a result of the dominant revenue-cap structure of the price control). The companies face no tax risk (the Government collects the tax), and little risk from change in law (a government can not expropriate itself, though the water companies may have more limited ability to hedge federal law changes).

The regulatory regime also provides insulation against monetary inflation (through the inclusion of inflation in the determination of returns and the indexation of asset values at the consumer price index). While investors face some operating and capital expenditure risk, the evidence of historic expenditure relative to regulatory allowances suggests this risk is not excessive. On the basis therefore of both the design of the regulatory regime and additionally also the impact of government ownership, we suggest it is difficult to conclude that the ESC's decision on the allowed return on equity is commensurate with the risks that Victoria's tax payers bear through their ownership of Victoria's water businesses.

### 3.3 Summary and implications

The PREMO approach is an excellent innovation and promises a meaningful discussion of the allowed return on regulatory equity and a useful way to assess comparative performance. However, benchmarking the return on equity against Ofwat’s and taking account of a first principles’ consideration of the regulatory regime and the consequence of government ownership suggests that allowed returns are more generous than needed to compensate tax payers for the risks they bear in owning Victoria’ water businesses.

We suggest a reduction to the allowed return on regulatory equity of around 100 basis would be appropriate. This results in post tax, real returns as set out in Table 6 below:

**Table 7. Suggested post tax real return on equity**

		Company proposal			
		Leading	Advanced	Standard	Basic
ESC Assessment	Leading	4.3%			
	Advanced	3.7%	3.9%		
	Standard	3.1%	3.3%	3.5%	
	Basic			2.9%	3.1%

This will affect the allowed regulated revenues for an “Advanced” company as shown in Table 7 below:

**Table 8. Impact of the suggested return on equity on regulated revenues over five years**

Company	Regulatory Asset Value (\$m)	Change in allowed charges over 5 years (\$m)
		Equity
Barwon Water	\$ 1,313	\$ 30
City West Water	\$ 1,874	\$ 43
South East Water	\$ 3,359	\$ 77
Yarra Valley Water	\$ 4,058	\$ 93
Gippsland Water	\$ 664	\$ 15
Central Highlands Water	\$ 342	\$ 8
Coliban Water	\$ 496	\$ 11
East Gippsland Water	\$ 147	\$ 3
Goulburn Valley Water	\$ 351	\$ 8
Grampians Wimmera Mallee Water	\$ 402	\$ 9
Lower Murray Water - Urban	\$ 156	\$ 4
North East Water	\$ 265	\$ 6
South Gippsland Water	\$ 148	\$ 3
Wannon Water	\$ 330	\$ 8
Westernport Water	\$ 120	\$ 3
Lower Murray Water - Rural	\$ 74	\$ 2
Southern Rural Water	\$ 62	\$ 1
TOTAL	\$ 14,161	\$ 324





## References

- ARROW, C. K. & R.C, L. 1970. Uncertainty and the evaluation of public investment decision. *American Economic Review*, 60, 364-378.
- AUSTRALIAN ENERGY MARKETS COMMISSION 2012. Final Position Paper, National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012. Sydney.
- AVERCH, H. & JOHNSON, L. 1962. Behaviour of the firm under regulatory constraint. *The American Economic Review*, 52, 1052-1069.
- BAUMSTARK & GOLLIER 2014. The relevance and the limits of the Arrow-Lind Theorem. *Journal of Natural Resources Policy Research*, 6.
- LAFFONT, J.-J. & TIROLE, J. 1991. The Politics of Government Decision-Making: A Theory of Regulatory Capture. *The Quarterly Journal of Economics*, 106, 1089-1127.
- MOUNTAIN, B. R. 2017 *Ownership-invariant Regulation of Electricity Distributors in Australia: A Failed Experiment*. Phd, Victorian University.
- PAWSEY, N. & CRASE, L. 2014. Review of the Statutory Asset Values of the Victorian Water Businesses. La Trobe University: Centre for Water Policy and Management.